ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

OSC

The 4th Open Society Conference

PROCEEDING BOOK

Perspectives and Impacts of Metaverse on Sustainable Development Goals

Online International Conference

Thursday, July 7, 2022

Faculty of Law, Social and Political Sciences
Universitas Terbuka - Indonesia

Proceeding Book
Open Society Conference
Perspective and Impact of Metaverse on Sustainable Development Goals Online International Conferences

ISBN: 978-602-392-329-8 e-ISBN: 978-602-392-330-4

FOREWORD

The theme of the 4th Open Society Conference is "Perspectives and Impacts of Metaverse on Sustainable Development Goals". This conference is organized by the faculty of Law, Social and Political Sciences (FHISIP) – Universitas Terbuka. This conference is the continuation of the previous conferences which were scheduled as an annual international conference held by FHISIP-UT. This year's OSC agenda focuses on seven sub-themes, namely: 1) Cyber Security Challenges in Law Perspective; 2) Digital Transformation and The Changing Social Lifestyle; 3) Human Capital Development Through Metaverse; 4) Library and Information System in Metaverse Society; 5) Creative Digital Economy Through the World of Metaverse; 6) Trends and Directions of Translation in Metaverse; and 7) The Future of Governance in The Metaverse World.

To answer the curiosity of the public and researchers about the metaverse, we invite the participation of conference guest speakers, academics, researchers, and practitioners from various scientific and institutional backgrounds. The institutions are from Universitas Terbuka, Universitas Indonesia, Universitas Negeri Surabaya, Universitas Singaperbangsa Karawang, Universitas Bina Nusantara, Balikpapan University, SMAN 2 Malang, Institut Bisnis dan Informatika Kwik Kian Gie, Universitas Mulawarman, Universitas Sriwijaya, Universitas Hasanuddin, Universitas Trunojoyo Madura, Universitas Negeri Semarang, Universitas Al Azhar Indonesia, Universitas Islam Negeri Alauddin Makassar, IKIP Budi Utomo Malang, Universitas Sebelas Maret, Universitas Halu Oleo, Universitas Al-Muslim, Universitas Negeri Yogyakarta, Universitas Pertahanan, Universitas Bakrie, MAN 6 Jakarta Timur, STIKOM Interstudi, UNIKA Atma Jaya, Adam Mickiewicz University, Universitas Islam Malang, Indonesia National Armed Forces, Universitas Udayana.

We hope this OSC Program book can provide information about the activities and materials presented in the conference.

Finally, we express our highest appreciation and gratitude to all committee members and other parties who have contributed their thoughts, time, and contribution for this conference. We also hope that this 4th OSC International conference can give benefit and contribution to the use of technology particularly metaverse on Sustainable Development Goals.

Tangerang Selatan, 7 July 2022

Signed

Megafury Apriandhini, S.H., M.H.
Chair of 4th OSC

DEAN OF FACULTY OF LAW, SOCIAL AND POLITICAL SCIENCES REMARKS

The 4th Open Society Conference
"PERSPECTIVE AND IMPACT OF METAVERSE ON SUSTAINABLE DEVELOPMENT GOALS ONLINE INTERNATIONAL CONFERENCES"

Excellency Johnny Gerard Plate, S.E., Minister of Communication and Information of the Republic of Indonesia, The Honorable Spokesperson of The Minister of Communication and Information of the Republic of Indonesia, Mr. Deddy Permadi, S.I.P., M.A., Ph.D.
Excellency Mr. Dr. Liew VK, Chief Business Officer of Centriverse/Malaysia
Excellency Mr. Utz Johann Pape, Senior Economist, Poverty & Equity Global Practice Global Lead for Data for Operational Impact (D4OI) World Bank
Excellency Mr. Dr. Indrawan Nugroho, CEO & Co-Founder at CIAS/Indonesia

Excellency Mr. Prof. Dr. Daryono, Professor in Property Law and Law Technology Universitas Terbuka/Indonesia
Excellency Mr. Prof. Dr. Ojat Darojat, M.Bus., PhD., Rector of Universitas Terbuka
Distinguished guest and participant of the 4th Open Society Conference

Ladies and gentlemen,

Bismillahirrahmanirrohim
Assalamualaikum Wr. Wb.
Good Morning Everyone
May the peace and blessings of Allah be upon you

First of all, let us deliver our thankful to the Almighty Allah who has given us the wonderful opportunity so today, we could gather in "The 4th Open Society Conference 2022".

I am pleased to welcome you to the annual conference held by the Faculty of Law, Social, and Political Sciences entitled "Perspectives and Impacts of Metaverse on Sustainable Development Goals" held virtually at Jakarta, Indonesia.

Ladies and Gentlemen,

The announcement of Facebook rebranding itself as Meta has aroused public enthusiasm for the "metaverse". The metaverse is where the physical and digital worlds collide, and it is regarded as the next evolution of the internet. The metaverse is a social technology that allows digital representations of individuals, known as avatars, to communicate with one another in a range of situations. The metaverse provides a space for endless, interconnected virtual communities using virtual reality (VR) headsets, augmented reality (AR) glasses, smartphone apps, or other devices, whether at work, in an office, attending concerts or sporting events, or even trying on clothes. Now, the public is questioning what the metaverse is and how the metaverse affects them.

Not only Meta, big tech companies like Apple and Microsoft are also working on their own metaverse. Data shows that, as of October 2021 the total market capitalization of Web 2.0 metaverse companies was 14.8 trillion USD. This number will continue to grow and make metaverse a promising issue that offers markets and opportunities in the future.

This issue becomes very interesting to discuss from various perspectives and see how this can impact society. According to a Work Trend Index Survey by Microsoft in 2022, there are 52% of workers who's ready to use digital space in metaverse for meeting or teamwork next year. Gen Z and millennials are the generations that most often imagines being able to work through the metaverse.

The phenomenon of metaverse can give rise to anomalies that occur in social life. Issues related to data privacy, unlimited creativity, anti-social, to business investment in the metaverse are other challenges that may arise because of the metaverse. Thus, it is necessary to take advantage of the opportunities that can be obtained and minimize the risks that arise from the metaverse.

To answer the curiosity of the public and researchers about the metaverse, the Faculty of Law, Social and Political Sciences (FHISIP) of the Open University took the initiative to gather all of us; academicians, lecturers, practitioners, and business circles in this conference.

Distinguished Audiences,

The conference has 3 main objectives:
First, is to enhance the knowledge of academics and practitioners regarding the multiple perspectives of metaverse.
Second, is to discuss the impacts of metaverse.
And third, is to share research progress, output, and analytical thought among the academics, practitioners and policymakers on perspectives and impact of a metaverse on SDG's.
I hope by joining this conference, we will have a broad new knowledge from all the experts coming from national and international institutions. I also hope, through this conference, we will have a new perspective and preparing for a forthcoming impacts of metaverse on SDG's.

Ladies and Gentlemen,

I would like to convey my sincere gratitude to the organizing committee who has done a great job in hosting this event. The conference was very well organized. May Allah bless you and reward you with goodness.

Last but not least, I once remembered SpaceX and Tesla founder, Elon Musk said:
"If you get up in the morning and think the future is going to be better, it is a bright day. Otherwise, it's not."

And right now, in this moment, all of us are working on what Elon's said as the Bright Day. We are working for the bright future of our world.

Thank you very much for your attention. Have a great conference!

Wassalamualaikum Wr. Wb.
Tangerang Selatan, 7 July 2022

Signed

Dr. Sofjan Aripin, M.Si.
Dean of Faculty of Law, Social and Political Sciences

RECTOR REMARKS

The 4th Open Society Conference
"PERSPECTIVE AND IMPACT OF METAVERSE ON SUSTAINABLE DEVELOPMENT GOALS ONLINE INTERNATIONAL CONFERENCES"

Bismillahirrahmaanirrahiim,
Assalamualaikum wr wb.

Distinguished speakers,

- Mr. Deddy Permadi, S.I.P., M.A., Ph.D. Minister's Special Advisor for Digital Policy and Human Resources Development of the Ministry of Communications and Informatics, Republic of Indonesia
- Dr. Utz Johann Pape, Senior Economist, Poverty & Equity Global Practice Global Lead for Data for Operational Impact (D4OI) World Bank
- Dr. Indrawan Nugroho, CEO & Co-founder at CIAS/Indonesia
- Dr. Liew Voon Kiong, Chief Business Officer of Centriverse/Malaysia
- Prof. Dr. Daryono, Universitas Terbuka/Indonesia
- Dr. Sofjan Aripin, M.Si., Dean of Faculty of Law, Social and Political Sciences, Universitas Terbuka
- Deputy Deans and Lecturers at the Faculty of Law, Social and Political Sciences, Universitas Terbuka
- And all participants of the seminar,

Peace, God's mercy, and blessings be upon you.

First of all, I would like to invite all of you to thank God the Almighty for His blessings so that today we can meet and gather virtually in good health, to attend and participate in THE 4th OPEN SOCIETY CONFERENCE organized by the Faculty of Law, Social, and Political Sciences, Universitas Terbuka, with the theme of "Perspective and Impact of Metaverse on Sustainable Development Goals".

On behalf of Universitas Terbuka, I would like to express my highest gratitude and appreciation to the speakers from World Bank, Corporate Innovation Asia (CIAS), Centriverse, and Universitas Terbuka, for their willingness to be speakers at this conference. Hopefully, the knowledge you shared will benefit us all, both academics and the wider community in general.

Honorable ladies and gentlemen,

It has not been too long since we experienced the pandemic phase when life is harder than it used to be. Everyone must stay indoors 24/7 due to the lockdown policy. All public places are closed or have limited operating hours. Everyone is not allowed to get near each other due to the social distancing policy. A life like this is quite hard to live.

However, as we are now entering the post-pandemic era, some things have changed. People are changing their way of living. More trends are emerging, either to improve the existing ones or to change the old ways. The pandemic has accelerated digital transformation across multiple domains, including the metaverse.

Metaverse is not a new concept yet the announcement of Facebook rebranding itself as Meta has aroused public enthusiasm for the term "metaverse". The public is questioning what the metaverse is and how it affects them. It is considered a promising issue that offers opportunities and challenges in the future. It is intrigued to explore how this can impact society, especially on Sustainable Development Goals. In the 2030 Agenda for Sustainable Development, there are 17 Sustainable Development Goals (SDGs) which include aspects like innovation, health and well-being, economic growth, education, equality, sustainable cities, and climate action.

The phenomenon of metaverse can give rise to anomalies that occur in social life. Issues related to data privacy, antisocial, and business investment in the metaverse are some challenges that may arise because of the metaverse. On the other side, it provides opportunities for several aspects like quality education and climate action. If we consider the benefits and opportunities of the metaverse, without neglecting the potential negative impacts of technology, we can carry out many studies on the metaverse to ensure sustainability.

Moreover, with the understanding of the Metaverse and SDG relationship, the public sector, the private sector, and the academicians must work together to raise awareness in this area. When all these activities come together, they create a more substantial impact. Thus, it is necessary to take advantage of the opportunities that can be obtained and minimize the risks that arise from the metaverse.

Distinguished ladies and gentlemen,

As mentioned before that quality education is one of the important goals of SDGs. It is crucial because the lack of equal opportunities in education is one of the biggest obstacles we face when providing quality education. If we provide the technological infrastructure and meet the need for technological devices, the education modules that we will adapt to the metaverse may enable us to make this SDG possible.

As our tagline stated, “Making Higher Education Open to All”. Universitas Terbuka is heading towards a cyber university in part of our means to provide accessible quality education open to all. Even more, the Covid-19 pandemic has been a blessing in disguise for Universitas Terbuka. The existence of Universitas Terbuka has been increasingly recognized since the pandemic hit Indonesia. Open and Distance Higher Education implemented by UT is increasingly in demand by the public. The pandemic conditions that limit face-to-face learning activities make us also work hard to improve ourselves.

In response to the increased demands of society during the pandemic, we continue to innovate and develop our program. We commit to conducting continuous improvement of elearning methods for both asynchronous and synchronous programs. Some existing programs include Online Tutorial (Tuton), Webinar-Based Tutorial (Tuweb), Course Assignments or Tugas Mata Kuliah (TMK), and Take-Home Exams (THE). Some of the programs have been implemented prior to the pandemic and others during the pandemic. Universitas Terbuka strives to regularly monitor the policies and programs to best cater to the needs of our students. The academic quality of graduates is one of our priorities.

Our commitment to continuous improvement is what makes the public still trust Universitas Terbuka from 1984 until now. The accumulative number of alumni of Universitas Terbuka that reaches more than 1,9 million in 2021 is a piece of evidence. Meanwhile, the number of active students at UT reaches 346.717 in 2022. We serve not only those who live in Indonesia but also Indonesian citizens who live overseas in more than 46 countries including in Asian countries such as Malaysia, Saudi Arabia, Hong Kong, Singapore, Taiwan, some European countries, and even several countries in Africa. We also see the urgency for the development of the digital ecosystem, especially in distance learning.

Moreover, as part of our efforts toward a cyber university, we continue to innovate through collaboration with partners from public to private sectors, from local to global partners. In response to education trends in the world after the pandemic, we develop our Moodle and micro-credential programs to cater to the current education and industry needs. Accordingly, we also see the need of upgrading our scoring system and start to implement Artificial Intelligence (AI) to prevent plagiarism and emphasize originality for our students. This is part of our commitment to quality.

On the other hand, Universitas Terbuka also actively participates in the “Merdeka Belajar Kampus Merdeka (MBKM)” program, which includes joining a consortium. UT, in collaboration with several leading universities in Indonesia, has developed a marketplace for online courses in the Indonesian Cyber Education Institute. Furthermore, UT actively establishes cooperation with other universities and corporations, as well as encourages and facilitates students in taking part in student exchange programs, apprenticeships, research, community program, as well as entrepreneurship activities.

Finally, I congratulate you on joining THE 4th OPEN SOCIETY CONFERENCE. Hopefully, the results of the conference will bring many benefits to the contribution of technology toward Sustainable Development Goals.

Wabillahi taufik wal hidayah wa ridho wal inayah,
Wassalamualaikum warahmatullahi wabarakatuh.

Tangerang Selatan, 7 July 2022
Rector of Universitas Terbuka,

Signed

Prof. Ojat Darojat, M.Buss. Ph.D.
NIP 196610261991031001

TABLE OF CONTENTS

FOREWORD i
DEAN OF FACULTY OF LAW, SOCIAL AND POLITICAL SCIENCES REMARKS iii
RECTOR REMARKS vi
TABLE OF CONTENTS ix

SUB-THEME: CYBER SECURITY CHALLENGES IN LAW PERSPECTIVE
Legal Analysis of The Criminal Act of Selling Personal Data Through the Deep Web
Mohammad Dery Rifani, Ivan Zairani Lisi, Rini Apriyani 1-9
The Existence of Digital Platforms and the Challenges in the Enforcement of Indonesian Competition Law
Rhido Jusmadi, L. Budi Kagramanto, M. Hadi Shubhan 10-24
Cyber Security: Legal Challenges and Opportunities in The Metaverse World
Dian Ratu Ayu Uswatun Khasanah, Yeni Santi, Megafury Apriandhini 25-32
Mechanism For Implementing Criminal Liability of Campaign Funds
Sukarno, Juajir Sumardi, Muhadar, Anwar Borahima 33-42
Criminal Threats in The Personal Data Protection Bill in Indonesia
Muhammad Rusli Arafat, Hevi Dwi Oktaviani 43-51
Cyber Security Challenges in Law Perspective “Challenges of Criminal Law Enforcement in Misuse of Social Media (Medsos)”
Rivaldhy N. Muhammad, Abdul Mutalib, Rahmat Hi. Abdullah 52-61
Digital Espionage in New Era of Cyber: Political and International Law Perspectives
Syarifurohmat Pratama Santoso, Richard Togaranta Ginting, Fransiska Timoria Samosir 62-66
Guarantee of Information and Communication Technology Application Security in Indonesia: (Regulations and Challenges?)
Nurfaika Ishak 67-74
Legal Policy of The Personal Data Protection Bill in Indonesia
Hevi Dwi Oktaviani, Muhammad Rusli Arafat 75-84
The Urgention of Personal Data Protection on Metaverse Era: a Potential Threat to Privacy and Security
Rina Elsa Rizkiana, Dian Ratu Ayu Uswatun Khasanah 85-96
The Legality of Marriage for Giving Dowry in The Form of Money in The Metaverse According to The Perspective of Islamic Law
Nur Sulistiyaningsih 97-104
Readiness Of the Government in Legal Regulations to Face the Metaverse Era
Yeni Santi, Dian Ratu Uswatun Hasanah 105-111
Potential of Money Laundering in the Metaverse Era
Nadia Nurani Isfarin, Sani Nur Imamy, A. Rachmat Wirawan 112-121

SUB-THEME: DIGITAL TRANSFORMATION AND THE CHANGING SOCIAL LIFESTYLE
Synchronous Method: Bimbingan Teknis Pelaksanaan "Take Home Exam" Universitas Terbuka
Steven Anthony 122-130

Transformation and Continuity: An Environmental Anthropology Study on the Digitalization Process by Kelompok Pengawas (POKMASWAS) Taman Kili-Kili Sea Turtle Conservation in Trenggalek
Basyarul Aziz 131-144
Android-Based Learning Video Innovation to Improve Digital Literacy as A Social Lifestyle in Education for Elementary School Teachers
Dewi Nilam Tyas, Sri Sulistyorini, Sri Sukasih, Desi Wulandari, Suparti 145-152
Mobile Based Exam Training Using Android Controlled by Website: A Prototype
Djoko Rahardjo 153-159
Komunikasi Manusia di Era Transformasi Digital: Literature Review
Windra Irawan 160-170
Eksistensi Pendidikan dan Pembelajaran IPS di Era Metaverse
Yulian Widya Saputra, Rahmadi, Made Ngurah Partha 171-177
Digitalisation of Shamanic Practice in Serving Remote Patients
Perdamaian Daulay, Momy A. Hunowu, Windra Irawan 178-188
Strategi Programming Acara “Si Otan” di Stasiun Tevevisi Trans 7
Vayol Parama Adrianjara, Susi Andrini 189-200
Kajian Sintesis Cashless Society di Indonesia
Dwi Rahmawati, Raden Aswin Rahadi 201-208
Website Development Using the Codeigniter Framework – A Literature Review
Erman Arif, Imelda Paulina Soko 209-216
Work or Study: Observing Informal Learning Among Employees and Teachers in Schools
Astrid Wangsagirindra Pudjastawa, Rina Kusweni 217-228

SUB-THEME: HUMAN CAPITAL DEVELOPMENT THROUGH METAVERSE
Challenges and Opportunities for Remote Working after COVID-19 Pandemic
Winin Maulidya Saffanah, Rizky Wahyu Permana 229-239
Patterns Of Social Interaction of Child-Assisted Citizens in Special Child Development Institutions
Randi, Eva Lidya, M. Fajar Ganta Saputra, Wahyu Vergiawan Lestanto, Khevin Wiriski 240-246
Reframing Individual’s Bureaucratic Personality in Public Service Interaction in Digital Era
Yeni Widyastuti, Susanti 247-256

SUB-THEME: LIBRARY AND INFORMATION SYSTEM IN METAVERSE SOCIETY
Media Literate As A Determinant Of Student Performance In Communication Science Undergraduate Program Of Universitas Terbuka
Arifah Bintarti, Djoko Rahardjo 257-264
Library Paradigm and Challenges Towards The Era of Metaverse Society
Richard Togaranta Ginting 265-269
Digital Learning Ecosystem In Indonesian Open University Library
Dewi Maharani Rachmaningsih 270-282
De-Contextual Communication; A Transformation Model Of Library Services In The Metaverse Era
Sri Sediyaningsih, Mohammad Pandu Ristiono, Septian Dwi Cahyo 283-290

SUB-THEME: CREATIVE DIGITAL ECONOMY THROUGH THE WORLD OF METAVERSE

Capaian *Smart Economy* dan Tantangannya di Era Metaverse
Dedy Juniadi,Siti Aisyah, Zainur Hidayah 291-303
The Potential of Virtual Methods As A Means Of Ecotourism Education In The Era Of Society 5.0
Putu Nomy Yasintha, Richard Togaranta Ginting, I Dewa Ayu Putri Wirantari 304-311
The Effect Marketing Media Social On Competitive Advantage and Performance
Khoiriyah Trianti, Karina Utami Anastuti 312-334
Branding In Metaverse: Why Big Brand Advertising In Metaverse
Arsa Widitiarsa Utoyo, Tobias Warbung, Nunnun Bonafix, Hervina Diah Aprilia, Julianto Oei 335-342
Kube Development (Joint Business Group) In Jatiluwih Village, Bali Through Digital Marketing In The New Normal Era
I Dewa Ayu Putri Wirantari, Putu Nomy Yasintha, Richard Togaranta Ginting 343-348
Storytelling Marketing In The Digital Economy: Utilizing Burke's Pentad On Product's Stories
Natalia Widiasari 349-359

SUB-THEME: TREND AND DIRECTIONS OF TRANSLATION IN METAVERSE

Students' Ability in Assessing Translation Quality and Translating Figurative Language in English
Afriani 360-372

SUB-THEME: THE FUTURE GOVERNANCE IN THE METAVERSE WORLD

Improving City Plan Certificate Services Electorally (E KRK) Based On Digital City Spatial Planning
Dwi Putranto Riau 373-391
Analysis Of Transparency Information The Procurement Of Goods/Services Through The Media Website (E-Procurement) In Realizing Goods Governance In Polewali Mandar Regency
Miswar, Sudirman Karnay, Jeanny Maria Fatimah 392-400
The Future Of Cities In The Metaverse Era: Are Indonesian Cities Ready?
Bani Pamungkas 401-418
The Model Of Government Communication In A Level Of Homogen Community In Era The Government 4.0.
Susanti 419-423

Legal Analysis of The Criminal Act of Selling Personal Data Through the Deep Web

Mohammad Dery Rifani[1], Ivan Zairani Lisi[2], Rini Apriyani[3]
[1,2,3]Faculty of law, Mulawarman University, Jl. Sambaliung No.1, Sempaja Sel., Kec. North Samarinda, Samarinda City, East Kalimantan 75119
e-mail: dery.rifani@gmail.com

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

The development of information technology has both positive and negative impacts on people's lives. One of the negative impacts is the emergence of new crimes that use computers and networks, both as targets for crime and as tools or means of crime (Cybercrime). Because the law is one of its functions to ensure the smooth process of national development while securing the results that have been achieved should be able to protect the rights of internet service users while cracking down on cybercrime perpetrators. In mid-2020, there was a leak of personal data from one of the e-commerce platforms, namely Tokopedia as much as 91 million data, this data was sold through the Deep web site for 5000 USD or about 74 million rupiah. The development of the criminal act of selling personal data through the Deep Web website makes it difficult for law enforcement to reveal the identities of the perpetrators due to the nature of Anonymous owned by the Deep Web, and it also shows that regulations in Indonesia have not comprehensively regulated the criminal act of selling personal data through the Deep Web, making it difficult for law enforcement to persecute the perpetrators of the criminal act of selling illegal personal data. This research uses a doctrinal approach based on the provisions of the statute approach. Discussing two points of discussion, namely, first, the Author Wants to Know the arrangements in the handling of criminal acts of the sale of Personal data through the Deep Web based on the Perspective of Criminal Law in Indonesia.).

***Keywords**: Cybercrime, Deep Web, Data Protection*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

A. Background

The development of information technology has a positive and negative impact on people's lives. One of the negative impacts is the emergence of new crimes using computers and their networks, both as targets of crime and as tools or means of crime (Cybercrime). Due to the law, one of its functions is to ensure the smooth running of the national development process while at the same time securing the results that have been achieved, it should be able to protect the rights of internet service users as well as take firm action against the perpetrators of cybercrime[1]. In its development, cybercrime has entered a more sophisticated stage where illegal transactions and crimes in it cannot be exposed by law enforcement because the nature of Cybercrime is anonymous (disguised) and the means where these crimes and illegal transactions are carried out is the Deep Web. According to Wikipedia, the Deep Web is a collection of websites or information that is not indexed on search engines in general, so that the Deep Web can only be accessed with special software with the aim that all information and transactions in it cannot be known to many people and to disguise the identity of its users[2].

Currently in Indonesia, internet users are starting to try to access the Deep Web, whether it's just for making YouTube video content, to buying and selling someone's personal data illegally[3]. The deep web was originally used to exchange information about hackers and cracking, but because it is anymous and very safe from the reach of law enforcement, the Deep Web has turned into a forum for illegal transactions. Deep webprovide anything needed, one can buy any kind of drugs and can even hire assassins without even meeting face to face[4].

Indonesia is one of the countries with the most internet users in the world. According to the Association of Indonesian Internet Providers, in 2020, Internet users in Indonesia will reach 173.3 million or 73.3% of the Indonesian population[5]. Where with this number of internet users, Indonesia is very vulnerable to cybercrimes such as theft of personal data and the illegal sale of personal data. In mid-2020 it was discovered that 91 million data were leaked from one of the e-commerce platforms, Tokopedia, this data was also sold through the Deep web site for 5000$ USD or around 74 million rupiah[6].

The development of criminal acts of selling personal data through the Deep Web site makes it difficult for law enforcement to reveal the identities of the perpetrators due to the Anonymous nature of the Deep Web, and this also shows that regulations in Indonesia have not comprehensively regulated the criminal act of selling personal data through the Deep Web. making it difficult for law enforcers to prosecute the perpetrators of the criminal act of selling the illegal personal data.

B. Question

1. How are the arrangements in handling the criminal act of selling personal data through the Deep Web based on the perspective of criminal law in Indonesia?
2. What is the form of criminal liability for perpetrators who commit criminal acts of selling personal data through the Deep Web in the perspective of criminal law in Indonesia?

---

[1] Dista Amalia Arifah, Cases of Cybercrime in Indonesia, Journal of Economic Business, 2011, p.185
[2] https://id.wikipedia.org/wiki/Deep_Webaccessed on 22 March 2018 at 22:50
[3] https://www.cnnindonesia.com/technology/20191017112046-185-440289/card-credit-to-passport-curian-dijual-murah-di-dark-webaccessed on 20 January 2020 at 14:45
[4] https://kriminologi.id/angle-pandang/kata-pakar/penegakan-law-kejahan-siber-saja-not enoughaccessed on 22 March 2018 at 22:55
[5] https://technology.business.com/read/20201110/101/1315765/apjii-1967-juta-warga-indonesia-already-melek-internet accessed on May 17, 2021.
[6] https://www.cnnindonesia.com/technology/20200503120157-185-499513/penelusuran-91-juta-data-bocor-tokopedia-dijual-rp74-jutaaccessed on 17 May 2021

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

C. Research Objectives

The purpose of this research is directed to answer 2 (two) things:

First, to find out about the regulation in dealing with criminal acts of selling personal data through the Deep Web based on the perspective of national criminal law. Second, this study aims to analyze the form of criminal liability against someone who commits a criminal act of selling personal data in Indonesia through the Deep Web because the subjective element of the perpetrator is disguised when accessing the Deep Web.

D. Research Benefits

The benefits of research from this writing are as follows:

1. Theoretical/Academic, this research aims to contribute ideas or new perspectives in legal science, especially in the case of criminal acts of selling personal data through the deep web, where the methods and modus operandi have developed making it difficult for law enforcers to handle their cases, with reference to which is adapted to the disciplines of law that have been studied and the science of criminal law in particular.
2. Practically, the results of this study are expected to be useful for the author to expand knowledge in the field of law and develop criminal law in particular, as well as provide insight to readers, both from academia and the general public regarding matters that threaten cyber security.

E. Literature Review

1. Criminal Liability Theory

When the criminal element is met, a person will be held criminally responsible as for the explanation of criminal liability according to Andi Hamzah which states that criminal liability implies that anyone who commits a criminal act or violates the law, as formulated in the law, then that person should be held accountable for his actions in accordance with the law. the mistake[7].

According to Mahrus Ali quoted by H. Ishaq in his book, he explained that criminal responsibility in criminal law is a central concept known as the teaching of error. Errors in a narrow sense can take the form of intentional (opzet) or negligent (culpa). In Latin the teaching of this error is called "mensrea". The doctrine of mensrea based on an action does not result in a person being guilty unless the person's thoughts are evil. Criminal liability is an assessment of whether a suspect or defendant can be held accountable for a crime that occurred[8].

According to Sudaryono and Natangsa Surbakti, a person can be convicted not only because he has been proven to have committed an act that violates the law, violates (contradicts) the law, is against the law, or fulfills the elements of a criminal act, by saying that he has committed a crime. Even though his actions have fulfilled the formulation of a criminal offense in the law and are not justified, this does not yet meet the requirements for a criminal sentence. For the existence of a punishment, it is still necessary to have a condition, namely that the person who commits the crime must have an error or is guilty. In other words, the person must be accountable for his actions, or if viewed from the point of view of actions, his actions must be accountable to that person[9].

[7] Andi Hamzah, Principles of Criminal Law Cet-4, Rineka copyright, Jakarta, 2010, p. 12
[8] H. Ishaq, Criminal Law Cet-1, Rajawali Press, Depok, 2019, p. 93
[9] Sudaryono and Natangsa Surbakti, Criminal Law Fundamentals of Criminal Law Based on KUHP and Draft Criminal Code, Muhammadiyah University Press, Surakarta, 2017, p. 166

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

According to Mahrus Ali, criminal responsibility is the continuation of objective reproaches that exist in criminal acts and subjectively those who meet the requirements to be convicted for their actions[10].

2. Political Theory of Criminal Law

According to Mahroni, the politics of criminal law is an effort to realize laws and regulations that are in accordance with the current state and situation, and in the future. Legal Politics here can be interpreted as how the State seeks or makes and formulates a good statutory regulation for the present and the future[11]. According to Sudarto, quoted by Hanafi Amrani in his book, he explained that legal politics can also be interpreted as an effort to realize good regulations according to the circumstances and situation at that time. On another occasion, Sudarto put forward the notion of 'legal politics', namely the policy of the state through the competent bodies to establish the desired regulations which are thought to be used to express what is contained in society and to achieve what is aspired to. Starting from the theoretical framework of legal politics, if we draw it into the context of criminal law, the politics of criminal law can be interpreted as the national will to create criminal law in accordance with the aspirations and values originating from the Indonesian nation[12].

3. Definition of Cybercrime.

According to Prof. Barda Nawawi quoted by Dwi Haryadi in his book said that Cybercrime is an act that is carried out illegally, without rights or unethically that occurs in cyberspace, so it cannot be ascertained which country's legal jurisdiction applies to it. These actions are carried out using any equipment that can be connected to the internet, resulting in material and immaterial losses (time, value, services, money, goods, self-esteem, dignity, confidentiality of information) which tend to be greater than conventional crimes, the perpetrators are people who control use of the internet and its applications, these acts are often carried out transnationally/across national borders[13].

METHODOLOGY

In carrying out this research, the author will use a doctrinal approach. This legal research is research that is carried out with the aim of finding applicable positive principles or doctrines[14]. The doctrinal approach in question is research based on statutory provisions (Black Letter Law). In this approach, the author will construct and combine laws and regulations with other legal regulations as well as relevant theories including legal principles, principles and doctrines that support the implementation of the legal construction to achieve legal truth as well as solutions to legal problems.

RESULTS AND DISCUSSION

Arrangements in Handling the Crime of Selling Personal Data Through Deepweb in the Perspective of Indonesian Criminal Law

1. The history of the deep web and its influence on cybercrime

The deep web originated from a program created by the United States Navy, this program is known as TOR or The Union Router where the TOR program functions as a

[10] Mahrus Ali, Principles of Corporate Criminal Law, Pt Rajagrafindo, Jakarta, 2013, p. 94
[11] Mahroni, Introduction to the Politics of Criminal Law, Aura Publishing, Bandar Lampung, p.1
[12] Amran Hanafi, Politics of Criminal Law Reform, UII Press, Yogyakarta, 2019, p.4
[13] Dwi Haryadi, Integral Policy for Countering Cyberporn in Indonesia, Lima, Pangkal Pinang, 2012, pp.44-45
[14] Bambang Sugono, Legal Research Methodology, Jakarta, Rajawali Pers, 2015, p. 86

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

means of American Navy intelligence to share intelligence information, this program was launched on September 20, 2002 and the TOR program can used for public.

The term Deep Web itself was popularized by Mike Bergman in his journal entitled "The Journal electronic publishing" where Mike quoted the opinion of an IT expert named Jill Elsworth where Jill argued that:

“It would be a site that's possibly reasonably designed, but they didn't bother to register it with any of the search engines. So, no one can find them! You're hidden. I call that the invisible Web."

2. Law Number 24 of 2013 concerning Population Administration

Law Number 24 of 2013 concerning Population Administration has several weaknesses when applied as a legal basis for criminal liability for the perpetrators of selling personal data through the Deep web while the weaknesses are as follows:

a. *The types* of data protected by this law are very limited
b. This law cannot cover criminal acts committed via the internet
c. This law only regulates the types of data misuse, namely manipulating data and spreading someone's personal data against the law
d. This law does not regulate transnational crimes (Borderless).

3. Law Number 11 of 2008 and Law Number 19 of 2016 concerning Electronic Information and transactions

Law Number 11 of 2008 and Law Number 16 of 2016 are legal umbrellas that protect users of electronic systems from misuse of their personal data and take firm action against perpetrators of cyber crimes.However, this law has weaknesses in handling criminal acts of selling personal data through e-maildeep webThe weaknesses of this law are as follows:

a. *This law does not have a complete personal data terminology, neither the* definition nor the type of personal data itself
b. This law only regulates the misuse of data, namely, manipulating data, providing personal data to those who are not entitled to it as well as the accessibility of a person's personal data by the public.
c. This law has a limited interpretation of the use of software and hardware as a means of carrying out clear actions that result in the unclear position of the programTORnorI2Pto *accessDeep Webas a means of committing a crime*

4. Indonesia's Weaknesses in Handling the Crime of Selling Personal Data Through the Deep Web

Indonesia currently has several weaknesses in dealing with criminal acts of selling personal data through the Deep Web both from preventive measures, namely existing regulations and repressive measures related to law enforcement.

a. *There are no rules that comprehensively regulate Cybercrime through the Deep web, as well* as rules that protect people's personal data in cyberspace. Law Number 11 of 2008 and Law Number 19 of 2016 do not yet have regulations regarding the misuse of the Deep web as a means of committing criminal acts, which makes it difficult for law enforcement to reveal the identity of criminals because the Deep web can disguise the identity of its users.
b. The absence of comprehensive regulations regarding the protection of personal data Law Number 11 of 2008 and Law Number 19 of 2016 regulates the protection of personal data but this law does not explain the terminology or definition of personal data itself.
c. The prosecution of the criminal act of selling personal data through the Deep web has not fully received the attention of law enforcement officials. Because Cybercrime

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

cases in Indonesia are still dominated by cases of spreading false news and defamation through social media.

d. The ability of law enforcement officers or investigators is still very minimal in mastering computer operations and understanding computer hacking and the ability to carry out investigations of cybercrime cases. Some of the most influential factors include the lack of knowledge of computers, the technical knowledge and experience of investigators in dealing with cybercrime cases is still limited, and the evidence system is still difficult for investigators.
e. Lack of public insight into the security of their personal data, making them vulnerable to becoming victims of criminal acts of selling personal data.

5. Legal Concepts in Handling the Crime of Selling Personal Data Through the Deep Web

   Due to the terminology and criminal application of the handling of criminal acts of selling personal data in Indonesia as well as Law number 11 of 2008 and Law number 19 of 2016 concerning information and electronic transactions, there is no comprehensive rule against the criminal act of selling personal data through the Deep Web so that These regulations need to be updated by adding norms including:

Criminal Liability Against Perpetrators Who Conduct Criminal Acts of Selling Personal Data Through the Deep Web in the Perspective of Indonesian Criminal Law

1. Deep Web Access Method

   Selling personal data illegally through the Deep Web, the perpetrators at least have computer skills or expertise in operating computers very well, because in using the Deep Web as a means of buying and selling personal data, perpetrators can at least master 2 programs, namely the TOR (The Union Router) program.) and the I2P Program or also known as The Invicible Internet Project. These two programs are in charge of Anonymizing (disguising) User Identity behind the scenes. TOR has an algorithm where this program will randomize both Personal identity, network identity, and the physical location of users.

   TORworks by directing internet traffic through a network of volunteers provided free of charge and worldwide, with over 4,000 relays. TOR functions to hide the identity of internet users. People who use the TOR network use the Onion Routers network, this keeps the user's location secret.Then all illegal business transactions in it use pseudonyms that have nothing to do with the real identity of the perpetrator, and all transactions are carried out using payment methods using Bitcoin or third party services, which aims to protect sellers and buyers in these illegal transactions.

2. The method of buying and selling personal data through the Deep Web

   When the perpetrators obtain data from cracking and hacking activities, the perpetrators will then peddle the data on the Deep Web market place. after an agreement is reached between the perpetrator and the buyer, the perpetrator will send the data via email or the perpetrator can send a link or link to the buyer so that the buyer can download the data himself. However, please note that in making payment transactions through the Deep web, you cannot use banking or E-Money services such as paypal. Because the identity of the perpetrators will be known, therefore the deep web uses virtual currency, namely Bitcoin because the currency is difficult to track its circulation than cash.

   When the perpetrators obtain data from cracking and hacking activities, the perpetrators will then peddle the data on the Deep Web market place. after an agreement is reached between the perpetrator and the buyer, the perpetrator will send the data via

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

email or the perpetrator can send a link or link to the buyer so that the buyer can download the data himself. However, please note that in making payment transactions through the Deep web, you cannot use banking or E-Money services such as paypal. Because the identity of the perpetrators will be known, therefore the deep web uses virtual currency, namely Bitcoin because the currency is difficult to track its circulation than cash.

In order to ensure the security of the identity of the perpetrators in transacting market places on the deep web in collaboration with third parties, namely escrow services, where escrow will act as a trusted intermediary in exchange for commission fees. The bitcoin exchange is carried out using an anonymous account number such as a Swiss bank account but with more cloaking, this anonymous account number is called a bitcoin wallet which is special software that has been installed or installed previously. To use bitcoin, users must know one thing, namely that bitcoin is an unregulated currency, if users feel cheated or treated dishonestly in financial transactions, users cannot go to the bank to ask them to return their money.

3. Criminal Liability Selling Personal Data Through Deep web

Criminal liability is an obligation for the perpetrator of a crime to be responsible for an act he has committed. The act in question is an act which according to criminal regulations is a prohibited act, which if it continues, it will be subject to sanctions in the form of imprisonment or fines. The criminal application of the responsibility of the perpetrators of selling personal data in Indonesia that is currently still relevant is Article 94 of Law Number 24 of 2013 concerning Population Administration, in conjunction with Article 30 paragraph (1), in conjunction with Article 32 paragraph (2) of Law Number 11 Year 2008 and Law Number 19 of 2016 concerning Electronic Information and transactions which read as follows:

Article 94 :

“Everyone who orders and/or facilitates and/or manipulates Population Data and/or elements of Population data as referred to in Article 77 shall be sentenced to a maximum imprisonment of 6 (six) years and/or a maximum fine of Rp. 75,000,000.00 (seventy five million rupiah)"

Article 30 paragraph (1)

"Every person intentionally and without rights or unlawfully accesses Computers and/or Electronic Systems belonging to other Persons in any way."

Article 32 paragraph (2)

"Every person intentionally and without rights or against the law in any way transfers or transfers Electronic Information and/or Electronic Documents to the Electronic Systems of other people who are not entitled."

The imposition of the perpetrator's responsibility using this article is because the criminal elements in these articles are still relevant to be imposed on the perpetrators such as:Disseminate personal data and also provide personal data of someone who is not entitled to because in the sale of personal data these elements can still be applied even though the application is limited.

Then the regulation on the use of TOR and I2P programs in accessing the Deep Web as a means of committing criminal acts in the IT law has a limited interpretation and narrow scope because the I2P and TOR programs are programs made by the United States Navy created to exchange information and documents. intelligence and the function of this

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

program itself as a tool to disguise the identity of its users. So that its use makes it difficult to trace the identity and location of the perpetrator.

CONCLUSION

Legal Concepts in Handling Sales of Personal Data Required Due to Law Number 11 of 2008 and Law Number 19 of 2016 concerning Information and Electronic Transactions, as well as Law Number 24 of 2013 concerning Population Administration Only Regulates Noma Related to Misuse of Data Such as Disseminating Data Someone, as well as providing documents and electronic information to other people who are not entitled to even though this norm can still be applied, but the application of the norm is limited so it is necessary to add to the norm of data misuse by way of being traded,And the use of Deep Eweb as a means of criminal acts has not been specifically regulated in Law Number 11 of 2008 and Law Number 19 of 2016 concerning Information and Electronic Transactions in the form of criminal liability against perpetrators of criminal acts of selling personal data through the Deep Web in its legal application using Law Number 11 of 2008, Law Number 19 of 2016 concerning Information and Electronic Transactions as well as Law Number 24 of 2013 concerning Population Administration, namely: hacking and spreading personal data and providing personal data of a person to those who are not legally entitled against the lawLaw Number 19 of 2016 concerning Information and Electronic Transactions and Law Number 24 of 2013 concerning Population Administration, namely: hacking as well as, distributing personal data and providing personal data of a person to those who are not legally entitledLaw Number 19 of 2016 concerning Information and Electronic Transactions and Law Number 24 of 2013 concerning Population Administration, namely: hacking as well as, distributing personal data and providing personal data of a person to those who are not legally entitled the author's advice to the indonesian government is, Accelerate the process of ratification of the Personal Data Protection Bill. and also the need to establish cooperation with other countries to facilitate law enforcement officers in taking firm action against the perpetrators of selling personal data through the Deep Web. Due to the nature of this crime is borderless or cross-country. Revise the ITE Law which is a legal umbrella for all Indonesian people from all threats of cyber crime, because the current regulations have not been able to provide legal certainty in handling criminal acts of selling personal data through the Deep Web. As well as training and educating law enforcement officers so that they can track the identity and location of perpetrators who use the deep web as a means of committing crimes.

ACKNOWLEDGEMENTS

The authors would like thank scholarship, funders, enumerators etc.

REFERENCES

Dista Amalia Arifah. 2011. *Cases of Cybercrime in Indonesia*. Journal of Economic Business. pages 185.

Andi Hamzah. 2010. *Asas-Asas Hukum pidana Cet-4*. Jakarta. Rineka cipta

Amran Hanafi. 2019. *Politik Pembaharuan Hukum Pidana*. Yogyakarta. UII Press

Bambang Sugono. 2015. *Metodologi Penelitian hukum*. Jakarta. Rajawali Pers

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Dwi Haryadi. 2012. *Kebijakan Integral Penanggulangan Cyberporn di Indonesia*. Pangkal Pinang. Lima

Mahrus Ali. 2013. *Asas-asas Hukum Pidana Korporasi*. Jakarta. PT Rajagrafindo

H.Ishaq. 2019. Hukum Pidana Cet-1. Depok. Rajawali Pers

Sudaryono dan Natangsa Surbakti. 2017. *Hukum Pidana Dasar-dasar Hukum Pidana Berdasarkan KUHP dan RUU KUHP*. Surakarta. Muhammadiyah University Press

Dery Rifani. 2018. Deep Web, Retrieved 22 March 2018, from http: https://id.wikipedia.org/wiki/Deep_Web

Dery Rifani. 2018. *Penegakan Law Kejahan Siber Saja Not Enough*, Retrieved 22 March 2018, from http: https://kriminologi.id/angle-pandang/kata-pakar/penegakan-law-kejahan-siber-saja-not enough

Dery Rifani. 2020. *Card Credit To Passport Curian Dijual Murah Di Dark Web*, Retrieved 20 January 2020, from https://www.cnnindonesia.com/technology/20191017112046-185-440289/card-credit-to-passport-curian-dijual-murah-di-dark-web

Dery Rifani. 2021. Apjii 1967 *Juta Warga Indonesia Already Melek Internet*, Retrieved 17 May 2021, from http: //technology.business.com/read/20201110/101/1315765/apjii-1967-juta-warga-indonesia- already-melek- internet

Dery Rifani. 2021. *Darknet Place Transaksi Jual Beli Online Yang Hiding Identitas Belinya*, Retrieved 17 May 2021, from http://www.thepanicchannel.com/technology/darknet-place-transaksi-jual-beli-online-yang-hiding-identitas-belinya/

Dery Rifani. 2021. *Deep Web*, Retrieved 17 May 2021, from http://en.wikipedia.org/wiki/Deep_web

Dery Rifani. 2021. *Penelusuran 91 Juta Data Bocor Tokopedia Dijual Rp74 juta*, Retrieved 17 May 2021, from http://www.cnnindonesia.com/technology/20200503120157-185-499513/penelusuran-91-juta-data-bocor-tokopedia-dijual-rp74-juta

Dery Rifani. 2021. *Tor (anonymous network)*, Retrieved 17 May 2021, from http://id.wikipedia.org/wiki/Tor_(anonymous_network)

The Existence of Digital Platforms and the Challenges in the Enforcement of Indonesian Competition Law

Rhido Jusmadi[1], L. Budi Kagramanto[2], M. Hadi Shubhan[3]
[1]Faculty of Law, Universitas Trunojoyo Madura
[2]Faculty of Law, Universitas Airlangga
[3]Faculty of Law, Universitas Airlangga
e-mail: rhido.jusmadi@trunojoyo.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

The existence of digital platforms has created a revolutionary change in the competition law system. Its existence as a multisided platform that is conceptually different from conventional economic platforms requires special understanding. The business competition law enforcement authorities see that the multisided character causes the efficiency and consumer welfare approach to be insufficiently applied to business competition law cases involving digital platforms. So, an alternative approach is needed, namely the principle of fairness, to answer challenges in enforcing business competition law.

***Keywords**: Digital Platform, multisided platform, competition law, fairness principle*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

Throughout history, economic development has been shaped by revolutionary technological discoveries. It is the same with the current development of the digital economy, which is part of the development of information technology (internet) which is massive, mass, convergent, accessible, and global. Its development has provided economic benefits not only for developed countries but also for developing countries. (Oxford Economics, 2011).

One of the impacts of the development of the digital economy is the birth of a digital platform which in its development creates a disruption effect in many economic sectors (Kieran Tranter, 2017). The development of digital platforms has provided many digital infrastructures capable of providing various services, including marketplace, application stores, social networking, ride-hailing, and search engines. This digital platform has implications not only for the nature of its economic transactions but also for the company's ability to rapidly expand its scale so that it can affect the structure of its economy (UNCTAD, 2019).

As with conventional businesses that have existed previously based on the availability of physical infrastructures such as airports, seas, trains, and toll roads/arteries, this digital platform-based business has structurally very different consequences from conventional businesses. When the digital platform becomes dominant, it will become more assertive on both sides of the market by becoming a monopoly in search engines and monopsony in e-commerce. Digital platforms are also moving from a product and service pricing model to a data-driven one, selling data, extracting it, or using it for commercial purposes (Prospera, 2019).

Business competition authorities in several jurisdictions have difficulty applying conventional approaches that have been used to assess whether or not there has been a violation of competition law. Argentina, Colombia, Pakistan, Russia, and Turkey reported difficulty using conventional competition assessment instruments based on price and consumer welfare in dealing with emerging competition issues in the digital platform sector. Egypt, Kenya, Peru, and Turkey also reported problems when defining relevant markets and determining whether the digital platform market is dominant. Furthermore, Brazil, Kenya, Russia, and Turkey also reported that standard economic analysis mechanisms and traditional business competition assessment tools such as market share and small but significant and non-transitory increase in price test (SSNIP), in abuse of dominant position and merger valuation, do not sufficient in providing an assessment of cases related to digital platforms (UNCTAD, 2021).

Indonesia also experienced the same thing. Komisi Pengawas Persaingan Usaha (KPPU) conveyed this on various occasions that in addition to the difficulties in applying standard economic analysis mechanisms and traditional business competition assessment tools such as the SSNIP, KPPU also sees significant control over consumer data that provides market power which is not only related to business competition issues but also related to consumer protection and privacy protection issues. Therefore, KPPU seeks to answer challenges related to how Indonesia's business competition policies and laws identify and deal with the negative impact of market power from digital platform companies and find ways to face these challenges to protect and encourage competition in the digital economy (Wibowo, 2021).

The existence of digital platforms arises because of the influence of the development of information technology (internet) which massively and systematically aggregates, accumulates, and connects all economic actors (producers, consumers, distributors, intermediaries, logistics, transporters, and so on) into one large ecosystem, digital economy. As has been explained, the authorities of competition law enforcement in the world (including Indonesia) see the impact of digital platform have resulted in the economic and legal approaches that have been used to analyze, whether or not, there is a fraudulent competition

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

practice in the market. So, it is necessary to implement the existence of alternative approaches that are more effective so that the current business competition law can reach digital platforms. This article tries to analyze the alternative approaches that can later be used to anticipate the occurrence of fraudulent competition practices carried out by digital platforms in the digital economy market.

METHODOLOGY

The type of research that will be used in this research is normative legal research used to examine the rule of law, legal principles, legal theories, and legal doctrines to answer legal issues that have been determined in the research. The achieved result is to provide a description of what should be done (Marzuki, 2014; Hutchinson, 2006). This study used a conceptual approach derived from the views and doctrines that develop in the science of law. By studying this, this research will be able to find ideas that create legal understandings, legal concepts, and legal principles relevant to the research problems (Marzuki, 2014).

The sources of legal materials used in this research are primary legal materials and secondary legal materials. Primary legal material is authoritative legal material, which means it has the authority consisting of statutory regulations, official records, or minutes in making laws and regulations, and judges' decisions both in Indonesia and also in other countries. While secondary legal materials are all publications on the law that are not official documents, which include textbooks, legal dictionaries, legal journals, and comments on court decisions (Marzuki, 2014).

Analysis of legal materials is carried out in a logical-systematic manner with the following stages: 1) conducting an inventory and identification of the sources of relevant legal materials, namely primary legal materials and secondary legal materials; 2) systematizing all existing legal materials and also to apply principles, theories, concepts, legal doctrines and other references; and 3) conducting a deductive analysis of legal materials, namely an analysis that explains a general matter and then draws it to a more specific conclusion, the analysis process is carried out based on the logical rules of systematic, prescriptive legal thinking (Hernoko, 2010; Hadjon & Djatmiati, 2005).

RESULTS AND DISCUSSION

Characteristics & Issues of Competition Law in Digital Platforms

Since first appearing in the mid-1990s, the definition of the digital economy has evolved a lot, following developments that reflect the rapidly changing nature of technology (Barefoot, et.al, 2018). The digital economy is more than just a market (in its conventional/physical context) that crosses and integrates all markets where goods and services utilize the internet base for production, distribution, trade, and consumption by various parties. Meanwhile, market understanding has traditionally been considered only as a stream in economics, such as financial markets or capital markets, but in this context, the digital economy has become a whole in an economic system that runs parallel to the industrial economy (Competition Commission South Africa, 2020).

The definition of the digital economy then develops into an analysis related to various policies and digitalization of technology on the one hand and the growth of information, communication, and technology (ICT) and digital-oriented companies as the main actors on the other (OECD, 2012a). Furthermore, the digital economy then develops more on digital technology, services, products, techniques, and skills that spread across economies. This process is often referred to as digitization, which is the transition of a business through digital technology, products, and services (Brennen & Kreiss, 2014).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Furthermore, digital platforms are defined as products or services where users with various kinds of products, services, or complementary information (applications) can interact with each other. The platform includes devices (such as telephones), software (such as operating systems and browsers), and services (such as search engines, social networking, and e-commerce sites). Digital platforms provide access between consumers and many diverse applications, extend, and combine functionality, and improve consumer access to applications (Shelanski, 2013). A digital platform is also defined as "two-sided network…that facilitate interactions between distinct but interdependent groups of users, such as buyers and suppliers." (Koh & Fichman, 2014). This definition focuses on a digital platform as a process of interaction between different groups of users who join the platform as both users and providers of goods and services (Asadullah, Faik, & Kankanhalli, 2018).

Based on this definition, there are at least several forms of the scope of the digital economy, namely: First, the core form of the digital sector (ICT) consists of hardware manufacture, information services, software, IT consulting, and telecommunications. Second, a narrower scope, namely digital services, platform economy (digital), sharing economy, and gig economy. Third, a broader scope, namely e-business, e-commerce, industry 4.0, precision agriculture, and the algorithmic economy (Bukht & Heeks, 2017).

In another perspective, digital platforms can also be divided into technical and non-technical. Based on technical concepts, the notion of digital platforms focuses on technical elements and processes that interact with each other to form a digital platform (Asadullah, Faik, & Kankanhalli, 2018; Spagnoletti, Resca, & Lee, 2015). In a non-technical sense, a digital platform is defined as a commercial network market that allows transactions in the form of business to business (B2B), business to customer (B2C), or even customer to customer (C2C) (Asadullah, Faik, & Kankanhalli, 2018).

Based on this definition and scope, digital platforms have several characteristics. First, digital platforms significantly reduce transaction costs, including distribution, retrieval, contracting, and monitoring costs (Eisenmann, Parker, & Alstyne, 2006). Second, digital platforms assist in organizing and coordinating the development of complementary product technologies through modularity and adjustment of governance structures (Tiwana, Konsynski, & Bush, 2010). Third, digital platforms have the character of generativity, namely the ability of technology to produce new results-driven by large and heterogeneous uses (Faraj, Krogh, Monteiro, & Lakhani. 2016). Fourth, digital platforms create a cross-side network effect, which is a condition that reflects the fact that the value of a platform for users on the one hand increases as the number of participants on the other side increases (Hagiu, 2014).

Based on these characteristics, digital platforms need consideration in analyzing their competitive conditions. First, multisided digital platforms imply that the participation of one group of users results in network externalities on the other side of the digital platform. Cross-network (indirect) externalities exist where demand on one side of the digital platform depends on participation (OECD, 2019). Second, digital platforms can also benefit from direct network effects, where the benefits felt by users of digital platform services directly increase along with the increase in the number of other users of the digital platform services (Katz & Shapiro, 1985).

Third, the network effects in digital platforms imply that the efficiency and benefits of using digital platforms will increase as the size of the digital platform increases. Network effects also affect the price structure, namely the relationship between the prices charged on different sides of the digital platform. For multisided digital platforms, how the total price is divided between the different sides may be necessary because there are so many price levels in the price formation. This explains the frequent phenomenon of zero-price for users on the one

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

hand being subsidized by payments. Economies of scale are also typical in multisided markets, given their relatively high proportion of fixed costs, such as for research and development and their low proportion of variable costs (Duch-Brown, 2017; OECD, 2019).

Fourth, the special features of a multisided business and network effects in digital platforms can lead to "winner-takes-all". And create business competition based on an "ecosystem," which refers to a new way to organize goods and services involving many companies that are mutually exclusive collaborate and compete to offer. various goods or services (World Economic Forum, 2019). The prevalence of network effects may imply business competition outside the market rather than within the market (LEAR, 2019). However, not all digital platform markets are "winner-takes-all" in the market. Because this requires strong network effects, high switching costs, and multihoming (the practice of using more than one digital platform simultaneously, such as using two search engines with different users simultaneously), users become undesirable or very difficult (OECD, 2019). Similarly, a strong network effect can make markets simultaneously efficient and concentrated. So far, there are no clear benchmarks for efficient market structures in the digital platform market (Duch-Brown, 2017).

The dynamic structure of the digital platform market with its inherent characteristics such as zero-price, network effect, and multisided and multihoming services is one of the factors that requires careful consideration when determining the market and building market power in the digital platform market. In some cases, it is not clear whether digital platforms are competing with traditional businesses or whether they are building a separate relevant market. This requires careful analysis and understanding of market dynamics, especially those in the digital platform sphere (UNCTAD, 2021). In addition, digital platforms have new business service models and functions whose operations rely on unique programming algorithms designed to collect and process data and make decisions based on the data collected and processed. High economies of scale and scope characterize the costs of such a business model and, as such, can facilitate the concentration of large data markets across multiple businesses playing in that market (OECD, 2016).

The existence of digital platforms as digital entities raises questions about types of services they provide, most of which are not regulated in the existing laws and regulations. Some digital platforms still give rise to many interpretations regarding the types of services provided from the business model run with the existing laws and regulations (Prospera, 2019). In general, several problems arise related to law enforcement issues in business competition law that arise as a result of the existence of the digital platform. Some of these problems will be mapped as follows, namely.

1. Multisided platforms. It is a business model that acts as an intermediary between two or more different platforms as a user group that allows mutual interaction. Therefore, multisided platforms consist of shared facilities where interactions occur among users. Multisided platforms are based on virtual or physical places (platforms) that allow and facilitate interaction between two or more different user groups, characterized by interdependence between the parties, due to indirect relationships and network effects (Rochet & Tirole, 2003; Armstrong, 2006; Rysman, 2009; Piezunka, 2011; Hagiu & Wright, 2014; Li, 2015; Staykova & Damsgaard, 2016). These dual and multisided digital platforms make many competition principles irrelevant or inapplicable, making it difficult for competition authorities to continue to protect the interests of consumers (Prospera, 2019).
2. Integrate vertically and horizontally. Every businessperson can have relationships with other parties, competitors, and suppliers. However, when a businessperson wants his

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

market share to be more significant, the company's growth and profit increase, the level of efficiency is getting higher, and to reduce uncertainty about the supply of raw materials needed in the production and marketing of products, the company will merge or collaborate with other businesspeople. The collaboration both with businesspeople at the same/similar level (horizontal) or with businesspeople at different levels who have business links from upstream to downstream (vertical) (Lubis, et.al., 2017).

3. Network effects arise when the value of a product for one consumer increases when other consumers also consume the product. In the context of digital platforms, network effects will appear when more consumers use and adopt digital services. In this case, Google's search engine algorithm will increase if there is a high search volume, and social features on Facebook will work well when more and more friends share their content. In theory, network effects can lead companies to adopt anti-competitive practices to dominate the market, even as new and better technologies emerge and are introduced in the market. Such behavior can be hazardous for business competition because it not only prevents the entry of potential competitors but also opens the way for predatory pricing practices (Parker, Petropoulos & Alstyne, 2020)
4. Free services or zero-price provision. In the era of digital platforms, the market with zero price provision has increased with its unique characteristics and extensive scope. It is almost impossible for a consumer not to use at least one free digital product or service daily. This is usually designed to build customer loyalty, obtain user data from their customers, get free publicity, and even annoy other businesses that compete with them. The difficulty that the competition authority will face is the question of how to evaluate the transaction between the user and the provider of the product/service that is provided free of charge. Suppose the nature of the transaction is difficult to assess. In that case, the relationship between digital platform entrepreneurs and consumers will likely be challenging to define, making it difficult to implement appropriate regulations. In an environment where products cannot be identified and the business model is ambiguous, the existence of a digital platform business will be far from the reach of existing laws and regulations (Prospera, 2019).
5. Data usage and control. Digital platforms rely on all kinds of data to function correctly. Digital transaction data must be transferred between users, customers, merchants, payment system operators, card companies, and many other intermediaries. Apart from this data flow, the reality is that there are still many obstacles to sending fast and secure data. The capacity to move large amounts of data in a fast way across a country's jurisdictional boundaries can violate provisions such as privacy and consumer data protection (Prospera, 2019).

Based on this, new findings shape the intervention in the digital market and lead the competition authorities to understand it with a different mindset. The new findings are as follows: (Competition Commission South Africa, 2020; Sivinski, Okuliar & Kjolbye. 2017; Vestager, 2019; OECD, 2013, 2014, & 2016).

1. Fast and responsive innovations presented by digital platforms in the digital market are the desired result of business competition policies because one of the objectives of implementing business competition policies is to encourage creativity and innovation. Therefore, intervention in the form of competition regulation on digital platforms must balance enforcing the principles of fair business competition with the desire to maintain innovation in the digital platform market.
2. It is possible, in the digital platform market, to concentrate on the advantages of being a pioneer in the market, data accumulation, network effects, and proprietary behavior. If

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

they occur, these conditions require competition policies and regulations to proactively identify and prevent as a form of defense strategy before it becomes too difficult and complex to enforce.
3. In the digital platform ecosystem, consumer conditions are very different from consumers in conventional markets. Digital market consumers are well informed, and with the ease of entering the digital market, consumers can determine the benefits of their choice quickly and accurately. This requires competition authorities to balance the long-term policy objectives of economic growth with consumer preferences.
4. The fast pace of change in the world of digital platforms requires the competition authority to monitor developments continuously and be ready to anticipate when conditions change at any time, which can lead to various problems that must be resolved.

The accumulation of big data, the most asset on a digital platform, and the presence of network effects can provide market power and abuse of dominant position. From an economic perspective, the dominant position is occupied by the company with the largest market share. Having a significant market share, the company has market power. With this market power, the dominant company can take action/strategy without being influenced by its competitors. The parameter is that businesspeople who are in a dominant position have the highest position among their competitors in terms of market share, financial capacity, ability to access supply or sales, and ability to adjust supply or demand for specific goods or services (Lubis, et.al., 2017).

Most of the business competition authorities in the world do not prohibit businesspeople from being in a dominant position, nor are they prohibited by it, as long as the achievement of the dominant position is carried out through the fair or healthy business competition. However, what is prohibited is if the businessman abuses his dominant position. Article 25 paragraph (1) and Article 19 of Law Number 5 of 1999 explain the forms of abuse of dominant position or barriers to business competition that can be carried out by businesspeople who have a dominant position, namely:
1. Establishing trading conditions with the aim of preventing and/or preventing consumers from obtaining goods and/or services that are competitive in terms of price and quality; or
2. Limiting market and technology development; or
3. Inhibit other business actors who have the potential to become competitors from joining the relevant market; or
4. Refuse and or prevent certain businesspeople from carrying out the same activities in the relevant market; or
5. Preventing a competitor's consumer from having a relationship with that competitor; or
6. Limit the circulation and/or sale of goods and/or services in the relevant market; or
7. Conduct discriminatory practices against certain businesspeople.

Market power and abuse of dominant position in the market are not the only concerns in the context of business competition. However, these market forces have become a source of concern in digital platforms, as described below (OECD, 2013, 2014, & 2016):
1. Vertically integrated digital platform companies benefit from ownership of the platform and at the same time compete with sellers on the platform. This allows the platform owner to use the information and data collected from the seller to the seller's advantage and the seller's disadvantage.
2. Vertical integration also encourages incentives for self-preferences, actions whereby digital platforms will give preferential treatment to their services over those of other companies and thereby maintain their dominance within the platform.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

3. Conglomeration can potentially negatively impact inclusive growth in the digital platform market, even for several major economic players who compete with each other in the digital market. This is concerning, especially if the level of market concentration is already very high in a digital platform market, and the possibility of increasing conglomeration will increase the entry barrier for potential entrants.
4. Resale price maintenance, also known as vertical price-fixing in the digital platform market, has also been investigated, especially in several cases that have emerged in Europe. The practice of resale price maintenance is not an act against the law of business competition, where every business actor has the right to control several aspects of the distribution of his products. Businesspeople can set up retail companies or work with other parties. Establishing retail itself requires capital and energy, while cooperation with other parties does not, but businesspeople do not have direct control. However, what needs to be considered is when the resale price maintenance occurs on a digital platform where the businesspeople already have market power and a dominant position in the digital platform market, so that these businesspeople can exercise control up to a market monopoly (Duke, 2007; Kayne, et al. al., 2007).

The Principle of Fairness as an Alternative

The presence of digital platforms has brought problems related to business competition issues. Most of these problems are very difficult to solve if relying on normative positivist approaches that have been adopted by business competition law, such as efficiency, consumer welfare, collusion, vertical integration, horizontal integration, market power, dominant position, and so on. Therefore, it is necessary to have another approach that comprehensively and fundamentally can cover the gaps in these technical approaches' inability to solve the problems in competition law enforcement related to digital platforms.

The existence of digital platforms does not only have an impact on the emergence of technical legal problems, but it also has an impact on the theoretical level of business competition law. It is known globally that the development of digital platforms impacts business competition law policies and regulations. In addition, digital platforms also have an impact on re-questioning the existence of business competition law, following the 2 major theories as explained above. Based on two major theories given the main objectives of business competition law, the existence of digital platforms has been able to achieve its goals. In the context of efficiency goals for business actors, digital platforms have been able to simplify and reduce the cost structure of production, logistics, and payment processes, improve communication between suppliers and/or consumers and offer the possibility of advertising tailored to consumer interests (OECD, 2016).

In the context of consumer welfare goals, digital platforms can also provide space for startups to establish their companies online and generate revenue in the global digital platform market. Digital platforms can also create "market democratization" by providing networks and distribution channels between micro, small and medium enterprises (MSMEs) and large businesses. The digital platform will create a level playing field between MSMEs with major economic businesspeople and facilitate the potential to get the same customers among them. For consumers, digital platforms can reduce product search costs, facilitate price and product comparisons, and create more efficient and convenient shopping distances. Likewise, digital platforms can create new options for consumers, including workplace sharing, ride-hailing, food delivery, and local freelance work opportunities. The features available on digital platforms can provide consumers with information, convenience, choice, and competition at low prices and increased quality (World Economic Forum, 2019).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Therefore, currently, several global business competition authorities are trying to shift their approach more broadly by using the principle of fairness as an alternative approach to analyzing the existence of digital platforms in enforcing business competition law. Several important people in the business competition authority have initiated the principle of fairness in business competition. Renata Hesse, former Assistant Attorney General of the United States for the Antitrust Division, and Margrethe Vestagar, European Commissioner for Competition, said that the essence of business competition is fairness with the main objective of protecting competition at all levels of the economy. (Hesse, 2016; Vestagar, 2017, 2016, 2015).

The European Commission increasingly echoes the need for competition fairness in the Competition Policy Annual Report (2017) which sets out the desire to make the market work more fairly for everyone and spread the benefits of applying justice in business competition both in Europe and in the world (European Commission Report on Competition Policy-2016, 2017). The decision to connect the principle of fairness in business competition law is an effort not to separate the economic sector from the community but instead seeks to unite it with the community and seeks to show the broader community that fairness can also contribute to the welfare of society (Lamadrid de Pablo, 2017).

In addition, in the United States, similar movements have emerged that promote the principle of fairness as an alternative approach to the business competition law system, including the New Brandies Movement. The New Brandies Movement determines several core principles in the paradigm of the objectives of business competition law, in which the principle of fairness is the primary basis. Those core principles are: First, antimonopoly is the main tool and the essential philosophical foundation for structuring a democratic society. In this case, the New Brandies Movement fears that economic power helps gain political power, and that such power can weaken the government. Market-dominant firms have enormous influence over the political process, whether through lobbying, financing elections, staffing government, funding research, or establishing systemic interests they can leverage. They use this strategy to win favorable policies and strengthen their dominance. Furthermore, the New Brandies Movement believes that the structure of the market and the economy can determine how authentic the freedom experienced by individuals is in everyday life. This can be done by interacting with government officials and through relationships in everyday economic life that occur in society. Second, antimonopoly is more than just antitrust. In this case, antimonopoly aims to create a system of checks and balances in the commercial and economic fields. Antitrust law is only one tool of the antimonopoly system (Khan, 2018).

Third, antimonopoly is not defined as "big is bad". Certain industries tend to develop naturally into monopolistic practices. In such cases, the answer is not to break up the companies but to devise a regulatory system that prevents corporate executives from exploiting power. Fourth, antimonopoly must focus on the structure and process of business competition, not on outcomes. Antimonopoly laws were passed to protect consumers from excessive market concentration from private power and to protect market structures that redistribute opportunity and individual wealth. For the most part in its journey, antitrust law enforcement achieves its goal not by focusing on any specific outcome, but by ensuring that markets are structured in a way that promotes openness and competition. Fifth, there is no such thing as "market forces". The Chicago Schools state that market structures emerge largely through "natural forces", whereas the New Brandies Movement believes that political economy is structured only through laws and policies and rejects all forms of inevitable power. Technological advances may shift the existing balance in a way that facilitates consolidation. However, just as governments can structure political economies to encourage innovation, they can also ensure that emerging innovations are not used to exert control over markets (Khan, 2018).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

In its development, business competition law and economics have become concepts that have developed more objectively and strictly protect the free market economy, with four principles: a) “consumer welfare” and “efficient allocation of resources” or efficiency have become the main objectives of business competition law; b) “anti-competitive effect” and “competition on the merits” have been used as the main criteria to determine compliance with business competition law; c) “proportionality” and “useful effect” as benchmarks for settlement solutions; d) “due process” and “rule of law” as principles that support proper law enforcement. It is through compliance with these four principles that business competition law protects the values represented by various ideas about the principle of fairness, and business competition authorities in the world must respect and comply with these principles to embody the vision of a fair market and society (Dolmans & Lin, 2017).).

In legal terms, the principle of fairness in business competition means fair competition among competing business actors. From an economic point of view, the basis of fair competition is the proper function of a competitive market, where profits are shared equally among its members (consumers and companies) (OECD, 2018). European Union’s Rules on Competition defined fairness in business competition: “… are designed to ensure fair and equal conditions for businesses, while leaving space for innovation, unified standards, and the development of small businesses.” US Fair Competition Act said the fairness in business competition are :“(a) to promote and maintain and encourage competition; (b) to prohibit the prevention, restriction or distortion of competition and the abuse of dominant positions in trade in Barbados and within the Caricom Single Market and Economy; (c) to ensure that all enterprises, irrespective of size, have the opportunity to participate equitably in the market place; and (d) for connected matters.”

In recent years, there have been many comments about fairness concerning the rule of law. In particular, some scholars such as Kaplow and Shavell have the opinion that the rule of law in the business competition should be chosen because it can bring prosperity, so the idea of fairness should be the primary basis in evaluating the rule of law in business competition (Kaplow & Shavell, 2000). In this context, the prominent discussion of fairness in business competition law is due to several reasons. First, fairness may have reflected a view on long held and internalized social norms. Second, fairness. may be a. proxy for some instrumental purposes. Third, fairness represents a desire for satisfaction (Kaplow & Shavell, 2000, 2002).

The existence of the principle of fairness in business competition law is increasingly prominent and strengthened when answering fundamental problems that previously could not be solved using the approach of consumer welfare and efficiency theory. As explained above, the theory of consumer welfare and efficiency has long been a reference for establishing the general objectives of business competition law worldwide. So, currently, there is a growing demand that the purpose of competition law is not enough to use the two theories. However, there must be a new theory in determining the main objectives of business competition law that better reflects the value of justice in responding to the problems that currently arise in society, namely fairness (Khan, 2018).

CONCLUSION

Digital platforms have different market characteristics from conventional markets. However, from a business competition perspective, the digital market must be seen as a business model that brings new challenges, theoretically in business competition law and technically in law enforcement. Several classical approaches in business competition law, such as efficiency theory and consumer welfare theory, are basically able to answer the phenomenon of the development of digital platforms. However, problems in business competition law still

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

arise. Among them is the monopolistic behavior of digital platform business actors who aggregate their market power to the point of abusing their dominant position in the market. In addition, the extraction of consumer data by business actors to increase profits through digital platforms leads to abusive behavior and privacy violations against consumers. These conditions require global business competition authorities to encourage fairness as a moral foundation in upholding the principles of fair business competition in the digital platform era. So that the primary goal of business competition can be achieved, namely protecting business competition so that it continues to exist and be implemented by all business actors.

ACKNOWLEDGEMENTS

This article was written in order to fulfill the obligation in lectures that are currently being taken by the first author in the Doctoral Program of Law in Law Faculty in Airlangga University for the Academic Year of 2021-2022 under the guidance of the Promoter Prof. L. Budi Kagramanto and Co-Promoter Prof. M Hadi Subhan.

REFERENCES

Armstrong, Mark. (2006). Competition in Two-Sided Market. *The RAND Journal of Economics*, Vol. 37, 668–691.

Asadullah, Ahmad, Isam Faik, & Atreyu Kankanhalli. 2018. Digital Platforms: A Review and Future Directions. Research Paper on Literature Review on Digital Platform, *Twenty-Second Pacific Asia Conference on Information Systems*.Japan.

Barefoot, Kevin, Dave Curtis, William Jolliff, Jessica R. Nicholson, & Robert Omohundro. 2018. *Defining and Measuring the Digital Economy*. Working Paper. Bureau of Economic Analysis, United States Department of Commerce. Washington, DC. Available at: https://www.bea.gov/system/files/papers/WP2018-4.pdf.

Brennen, Scott & Daniel Kreiss. (2014). Digitalization and Digitization. *Culture Digitally, 8*. Available at: http://culturedigitally.org/2014/09/digitalization-and-digitization/.

Bukit, Rumana & Richard Heeks. (2017). *Defining, Conceptualising and Measuring the Digital Economy*, Working Paper Series, Centre for Development Informatics Global Development Institute, SEED, University of Manchester. Manchester.

Competition Commission South Africa. (2020). *Competition in Digital Economy*. Report Paper, September.

Dolmans, Maurits & Wanjie Lin. (2017). *Fairness and Competition Law: A Fairness Paradox*, Concurrences N4-2017.Competition Law Review.

Duch-Brown, Nesto. (2017). *The Competitive Landscape of Online Platforms*. European Commission JRC Digital Economic Working Paper 2017–04.

Duke, Arlene. (2007). *Corones Competition Law in Australia*. Thomson, Lawbook, Fourth ed.

Eisenmann, Tom, Geoffrey G. Parker, & Marshall W. Van Alstyne. 2006. *Strategies for Two-*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Sided Markets. Harvard Business Review (84:10).

European Commission. (2017). *Report on Competition Policy 2016*, COM (2017) 285 final, May 31, 2017.

Faraj, Samer, Georg von Krogh, Eric Monteiro, & Karim R. Lakhani. (2016). *Online Community as Space for Knowledge Flows*. Information Systems Research, (27:4).

Hadjon, Philipus M. & Tatiek Sri Djatmiati, 2005, *Argumentasi Hukum*, Gadjah Mada University Press, Yogyakarta.

Hagiu, Andrei. (2014). *Strategic Decisions for Multisided Platforms*. MIT Sloan Management Review (55:2).

Hagiu, Andrei & Julian Wright. (2014). *Multisided Platforms*. International Journal of Industrial Organization, Vol. 43, issue C, 162–174.

Hagiu, Andrei. (2007). *Merchant or Two-Sided Platform*? Review of Network Economics (6:2).

Hesse, Renata. (2016). *And Never the Twain Shall Meet? Connecting Popular and Professional Visions for Antitrust Enforcement*, Global Antitrust Enforcement Symposium, Washington DC, September 20.

Hernoko, Agus Yudha. (2010). *Hukum Perjanjian Asas Proporsionalitas dalam Kontrak Komersial*, Jakarta: Kencana.

Hutchinson, Terry. (2006). *Researching and Writing in Law*, Australia: Thomson Reuters.

Kaplow, Louis & Steven Shavell. 2000. *Principles of Fairness Versus Human Welfare: On the Evaluation of Legal Policy*, Harvard Law School John M. Olin Center for Law, Economics and Business Discussion Paper No. 277, (3/2000) (ssrn no. = 224946).

Kaplow, Louis & Steven Shavell. (2002). *Fairness Versus Welfare*, Cambridge, Ma., Harvard University Press.

Katz, Michael L., & Carl Shapiro. (1985). *Network Externalities, Competition, and Compatibility*. American Economic Review, Vol. 75, No. 3.

Kayne, Veronica G., et.al.. (2007). *Vertical Restraints: Resale Price Maintenance Territorial and Customer Restraint*. Practising Law Institute, January-February.

Khan, Lina. (2018). The New Brandeis Movement: America's Antimonopoly Debate, Editorial. Journal of European Competition Law & Practice, Vol. 9, No. 3.

Koh, Tan Koon and Mark Fichman. (2014). Multihoming Users' Preferences for Two-Sided Exchange Networks, MIS Quarterly (38:4).

Lamadrid de Pablo, Alfonso. (2017). *Competition Law as Fairness*, Editorial. Journal of

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

European Competition Law & Practice, Vol. 8.

LEAR. (2019). *Ex-Post Assessment of Merger Control Decisions in Digital Markets*. Final Report.

Li, Jian. (2015). Is Online Media A Two-Sided Market? Computer Law & Security Review, Vol. 31, 1, 99–111.

Lubis, Andi Fahmi, et.al.. (2017). *Buku Teks Hukum Persaingan Usaha*, Edisi Kedua. Komisi Pengawas Persaingan Usaha (KPPU).

Marzuki, Peter Mahmud. (2014). *Penelitian Hukum*, Edisi Revisi, Cet. 9. Kencana: Jakarta

Organization for Economic Cooperation and Development (OECD). (2012a). *OECD Internet Economy Outlook 2012*. OECD Publishing, Paris.

Organization for Economic Cooperation and Development (OECD). (2013). The Digital Economy, OECD, Paris. http://www.oecd.org/daf/competition/The-DigitalEconomy-2012.pdf

Organization for Economic Cooperation and Development (OECD). (2014). *Measuring the Digital Economy: A New Perspective.* OECD Publishing, Paris.

Organization for Economic Cooperation and Development (OECD). (2016). *Big Data: Bringing Competition Policy to the Digital Era*, DAF/COMP (2016)14, Paris, 27 October 2016.

Organization for Economic Cooperation and Development (OECD). (2018). *How Can Competition Contribute To Fairer Societies?* Contribution from Greece, Global Forum on Competition, DAF/COMP/GF/WD(2018)1, 14 November.

Organisation for Economic Co-operation and Development (OECD). (2019). *An Introduction to Online Platforms and their Role in the Digital Transformation*.

Organisation for Economic Co-operation and Development (OECD). (2019). *What is an "online platform"?, in An Introduction to Online Platforms and Their Role in the Digital Transformation*, OECD Publishing, Paris, https://doi.org/10.1787/19e6a0f0-en.

Organisation for Economic Co-operation and Development (OECD). (2019). *Background Note: Latin American and Caribbean Competition Forum – Session III: Practical Approaches to Assessing Digital Platform Markets for Competition Law Enforcement*.

Oxford Economics. (2011). *The New Digital Economy - How it will transform business. White Paper*, Oxford, UK; June 2011: Oxford Economics.

Parker, Geoffrey, Georgios Petropoulos, & Marshall Van Alstyne. (2020). *Digital Platforms and Antitrust*, Working Paper 06/2020, Bruegel.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Piezunka, Henning. (2011). Technological Platforms: An Assessment of The Primary Types of Technological Platforms, Their Strategic Issues and Their Linkages to Organizational Theory. *Journal Betriebswirtsch*, Vol. 61, 179–226.

Prospera (Australian Indonesia Partnership for Economic Development). (2019). *Digital Platform Regulation*, Prospera Policy Brief, 26 Juli.

Rochet, Jean C., & Jean Tirole. (2006). Two-Sided Markets: a Progress Report, *RAND Journal of Economics* (37:3).

Rochet, Jean C., & Jean Tirole. (2003). Platform Competition in Two-Sided Markets. *Journal of European Economic Association*, Vol. 1, 990–1029.

Rysman, Marc. (2009). The Economics of Two-Sided Markets. *Journal of Economic Perspective,* Vol. 23, 125–143.

Shelanski, Howard A..(2013). *Information, Inno*vation, *and Competition Policy for the Internet*, University of Pennsylvania Law Review, Vol. 161: 1663.

Sivinski, Greg, Alex Okuliar, & Lars Kjolbye. (2017). *Is Big Data a Big Deal? A Competition Law Approach to Big Data*, European Competition Journal, 13:2-3, 199-227.

Spagnoletti, Paolo, Andrea Resca, & Gwanhoo Lee. (2015). *A design theory for digital platforms supporting online communities: a multiple case study*, Journal of Information Technology (30:4).

Staykova, Kalina S., & Jan Damsgaard. (2016). *Adoption of Mobile Payment Platforms: Managing Reach and Range.* Journal of Theoretical Applied Electronic Commerce Research, Vol. 11, 65–84.

Tiwana, Amrit, Benn Konsynski, & Ashley A. Bush. (2010). *Platform evolution: Coevolution of platform architecture, governance, and environmental dynamics,* Information Systems Research (21:4).

Tranter, Kieran. (2017). Disrupting Technology Disrupting Law. *Law, Culture and the Humanities Journal.*

United Nations Conference on Trade and Development (UNCTAD). (2019). *Competition Issues in The Digital Economy, Intergovernmental Group of Experts on Competition Law and Policy*, Trade and Development Commission, Eighteenth Session, Geneva, 10–12 July.

United Nations Conference on Trade and Development (UNCTAD). (2019). *Competition Law, Policy and Regulation in The Digital Era, Trade and Development Commission, Intergovernmental Group of Experts on Competition Law and Policy*, Nineteenth Session, Geneva, 7–9 July.

Vestager, Margrethe.)2017). *How Competition Can Build Trust In Our Societies*, TED Talk New York 20 September 2017; *Why Global Markets Need Rules, Ascona on 5 August*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

2017; Competition for a Fairer Society, Speech at 10th Annual Global Antitrust Enforcement Symposium, Georgetown, September 20, 2016; W*orking Together to Support Fairer Competition Worldwide*, Speech at UCL Jevons Institute Conference, London, June 3, 2016; *The Values of Competition Policy*, Speech at CEPS Corporate Breakfast, Brussels, October 13, 2015; *Luther And The Modern World*, Speech at 9th Luther Conference and the award ceremony of the Luther Rose 2016, November 14, 2016.

Wibowo, Kodrat.)2021). *Ekonomi dan Persaingan Usaha Pasca Undang-Undang Cipta Kerja di Tahun 2021*, Makalah Presentasi Dalam Webinar Sosialisasi Undang-Undang Cipta Kerja, Komisi Pengawas Persaingan Usaha (KPPU) Republik Indonesia.

World Economic Forum. (2019). *Competition Policy in a Globalized, Digitalized Economy, Platform for Shaping the Future of Trade and Global Economic Interdependence*, White Paper, December.

World Economic Forum. (2019). *Platforms and Ecosystems: Enabling the Digital Economy*.

Cyber Security: Legal Challenges and Opportunities in The Metaverse World

Dian Ratu Ayu Uswatun Khasanah[1], Yeni Santi[2], Megafury Apriandhini[3]
[1,2,3]Department of Law, Social, and Political Sciences, Universitas Terbuka
e-mail: dian.khasanah@ecampus.ut.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

The impact of the Covid-19 pandemic has changed all fields to be digital-based. The acceleration of digitization will ultimately accelerate all fields of entry into the world of the metaverse. In the virtual world, which is made as close as possible to the real world, rights and obligations arise. Legal problems will inevitably arise along with interactions that occur in cyberspace. In this paper, we will discuss the challenges and opportunities of metaverse in the legal field. The research method in this article is normative juridical by using the law approach (statue approach) or the rule of law under it and a conceptual approach. The data used in this paper is secondary data, namely library books, laws and regulations, scientific works, articles, and other related documents. The conflicts that occur in the metaverse are not much different from those in the real world. Meanwhile, there is currently no legal regulation that overshadows it. Indonesia has a reference to Government Regulation number 71 of 2019 and Government Regulation number 80 of 2019. The legal rules are only in the form of Government Regulation so that a legal umbrella is needed. From this research, the author provides suggestions to make laws that also touch the virtual realm in order to create cyber security when it is in the metaverse. When there is a legal problem in the metaverse world, there are rules that are used to find a solution.

***Keywords**: Metaverse, Legal Issues, Cyber Security*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

Metaverse is designed like life in the real world. Humans are represented with each other by avatars/identities in the virtual world. From gestures, facial expressions, and appearances can be made as close as possible to the original. The interactions that occur are also the same. There are buying and selling transactions, cooperation, agreements, socializing, and others that occur in the real world. Even sports, music performances, business transactions, dating, and so on, which used to be done through physical face-to-face activities, can now be done in the Metaverse world.

In the reality of human life wherever and whenever there is always a clash of attitudes, opinions, behaviors, goals, and needs that are always contradictory so that such a process will lead to a change (Sabian Uthman, 2009). So that the metaverse does not rule out the possibility of a clash between practice and theory. The role of law is important to be present to regulate not only in the real-life arena but must develop to touch the metaverse. The term metaverse was first used in Snow Crash, a cyberpunk genre novel published in 1992. In the novel, the metaverse is described as a virtual world that people can visit via VR devices (Li & Xiong, 2022).

As the experiences and activities of people in the virtual world vary, evil in the metaverse will also appear along with various crimes in the real world. From cases of personal data protection, copyright, buying and selling, sexual harassment and other crimes. Everything new must have a good and bad impact. But science and technology must always innovate, so that bad things can be minimized as little as possible.

As is the case in the legal field, legal crimes that occur in the metaverse world must be interpreted as a challenge and opportunity so that the law can think of preventive and repressive measures as cyber security. Law is the controller to create order. As stated by legal expert Soerjono Soekanto about the function of law, namely: To provide guidance to community members, how they should behave or behave in dealing with problems in society which mainly concern basic needs.

To maintain the integrity of the community concerned; and Provide guidance to the community concerned to carry out social control (Social Control). Soerjono Soekanto's opinion can apply in the real world as well as in the metaverse. When the legal function is applied to cyberspace or the metaverse, the term cyber security appears. The point is to provide security in cyberspace. Whether it concerns software or developing as a guide for metaverse activities represented by avatars in the metaverse. For cases conducted online, while Indonesia refers to the Law on Information and Electronic Technology. In transactions and buying and selling online, it refers to government regulations. So, in this paper, we describe the opportunities and threats of the metaverse so that the legal position is not only used in online activities, but also penetrates the metaverse with more complex problems.

METHODOLOGY

The research method in this article is normative juridical by using the law approach (statue approach) or the rule of law under it and a conceptual approach (conceptual approach). Normative Juridical Research is a legal research method that is carried out by examining library materials or secondary materials only (Roni, 1994; Soerdjono and Sri, 1994; Amirudin and Zainal, 2004). In this article, the data used is secondary data, namely library books, laws and regulations, scientific works, articles, and other related documents.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

RESULTS AND DISCUSSION

Understanding Metaverse

Last year, Mark Zuckerberg (29 October 2021) stated that Facebook would soon change its name to Meta and also make significant investments in the development of Metaverse technology (Muhammet Damar, 2021). According to Indarta, et al (2022) the metaverse is predicted to enter many areas of human life in 10-15 years. From the data presented, the role of law should be in anticipating the problems that arise with the expansion of the metaverse. To find out more about the possible laws that occur in life in the metaverse, it is necessary to first understand the meaning of the metaverse itself. Defines metaverses as virtual environments also known as MUVE (Multiuser Virtual Environments), which has a format that derives from the MMORPG (Massive Multiplayer Online Role-Playing Games) although unlike these, no they have a priori an objective or goal to meet as happens in a video game (Naya, et al. 2012 in Diaz, et al. 2022). The metaverse is getting more and more popular with Covid-19. During the period from 2019 to early 2022, all switched from conventional methods to technology-based. Even at home, you can still connect with one another. Meetings, buying and selling, education, and other fields can be done online. So, we get to know zoom, Microsoft teams, google meets, and similar apps. Social media also adorns the daily activities of millennials. Even in the world of justice, it is also known as e-litigation and e-court. The suspect does not have to come to court to proceed with the case at trial. The litigations used the support of the internet network or known as e-litigation. The implementation of e-litigation is a development of the previously implemented e-court program (Khasanah, DRAU; Chairunnisa, 2021). The familiarity of human life with the use of technology makes the metaverse easy to accept and not just a concept.

Opportunities and Obstacles in Legal Issues

A new order with activities in the metaverse world must also have an impact on legal developments. The law must enter to solve the problems that arise in the metaverse world. Various cases that occurred resulted in the law should not be negligent. A small example in the metaverse world, there is a conflict of agreement and trade. Legal action when there is a violation of the agreement that has been agreed by the trade/business actor represented by his avatar. Many marketplaces are interested in entering buying and selling in the metaverse. Examples of NFT marketplaces are OpenSea, Rarible, TokoMall (Sugiharto, et al. 2022). It further states that NFT is a blockchain technology that people can use to collect digital assets and trade them. The problem of buying and selling, where the metaverse is ogled by various world brands to develop their sales. Especially fashion brands, many glances at the metaverse by selling accessories or character clothes for avatars. Violation of the obligations and rights of other people taken can cause legal problems.

Metaverse, which is a similarity to real-life activities carried out with the help of technology, is an opportunity and a challenge for law enforcement. Apart from the examples above, there are also many other problems. The struggle for territory in cyberspace certainly also requires its own strategy. How to determine territory and apply the rule of law, take over territory, permit entry and exit of an area, and manage a territory in the metaverse also require legal regulations. So that when a violation occurs, sanctions can be applied. Determination of territorial boundaries is important because one of the elements of the state is the existence of territory. The constitutive element of the establishment of a state is that there must be a people, a certain territory, and a sovereign government. In the metaverse world, there is land ownership that can be bought and sold. When talking about the territory of a country there is synonymous with sovereignty. Whether the metaverse also recognizes the term state or not, of course, it

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

remains a thought about regional regulations. From the theory of the state element, apart from the territory there is also the people. This means that the community represented by the avatar will gather in an area. So that legal problems can occur after the territory. there will be a new problem with the rules of interaction between avatars. This is important so that when things happen that lead to criminal or civil acts, the elements that fulfill them can be identified. Law and society are inseparable entities.

In the metaverse world also crave for peace and coexistence as in real life. What if in the interaction there is sexual harassment, bullying, violence, and others. Law must be present and co-operated as policy and rule makers. Sexual harassment in the metaverse world can occur because 3D images represented by avatars can foster emotional and psychological interactions in the real world (https://katadata.co.id/desysetyowati/digital/61cedc01d8b01/metaverse-dunia-virtual-ingkatkan-risiko-case-sexual-harassment). The example of sexual harassment explains that even though it is represented by an avatar, sexual harassment can occur in the metaverse. The elements of a criminal act must be fulfilled, and the previous sanctions must also be applied as a deterrent effect so that there are no arbitrary acts in the metaverse. Included in the author's attention is a discussion of women. What is classic and perhaps in the metaverse does not recognize 'gender'. But it becomes interesting in the author's analysis. As in the case of a woman from London, England, who made a confession that shocked the world. A woman named Nina Jane Patel admitted to being a victim of sexual harassment while on the Metaverse. She admitted to having been sexually assaulted verbally and virtually raped while on Horizon Venues, Meta's metaverse which is still in development. When that happened, Patel said that the reaction he experienced was the same as in the real world, namely freezing or not being able to do anything because everything happened so fast. (https://www.kompas.com/wiken/read/2022/02/05/204000481/perempuan-asal-enggris-mengaku-jadi-korban-pemerkosaan-di-metaverse?page=all.). From this incident, we know that indecent treatment in the metaverse also has an impact on the avatar owner in the real world. So, the term in the avatar doesn't 'know gender' doesn't mean it's empty of harassment crimes. We can make beautiful avatars because the items needed are also sold in the metaverse. Such as hats, women's clothes, hair bands, and others.In buying and selling goods, some avatars can be made as if they are in the form of a beautiful woman as the seller. The goal is to attract buyers and promote the merchandise offered. It seems like a trivial thing, but it can be caught by law to protect women so that they are not just objects. The freedom of creativity and imagination to make your own avatar also needs to be limited by rules to minimize cases that corner women such as sexual harassment. Suwatno (2022) writes that Metaverse is viewed theoretically as a very open world. Where a person's age, race, gender, or religion does not matter. Mostly because someone was able to hide their identity behind an avatar. In practice, we can create an avatar according to our wishes, such as in the form of a sexy woman. And, from the avatars that we make, we can finally make indecent acts appear. One of them is the trigger for harassment discussed above.

To the extent that the law must be able to anticipate the threats that occur, it becomes an opportunity for the development of laws that touch the metaverse. It further states that Individuals can trade, collaborate, create assets, invest in virtual real property, personalize their world, exchange identities, and can achieve many things, and they only need internet access, a smartphone, and a Virtual Reality headset. (Suwatno, 2022). From there, it can be seen that in the metaverse there are interactions that can have legal repercussions. From the various cases listed above, the law must immediately see it as an opportunity to anticipate in order to touch the violations that occur in the metaverse. Policy makers must be able to map the possibilities

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

of legal cases that occur so that the existence of the metaverse will be complete with legal instruments.

Rules of law

For buying and selling problems in the metaverse, Indonesia has Government Regulation number 71 of 2019 concerning Electronic System and Transaction Operation. In addition, Government Regulation (PP) Number 80 of 2019 concerning Trading Through Electronic Systems. While the PP is a reference when carrying out buying and selling transactions electronically. A number of regulations in PP PMSE function as aspects of consumer protection, and treatment between foreign business actors and local businesses. And between offline business actors and online business actors in terms of business certainty and aspects that can encourage the growth of the electronic commerce sector in Indonesia. As mandated by the Trade Law, this PP still has to be further developed.

When people are worried about personal data that can be misused for negative actions, such as online loans, PP Number 71 of 2019 states that electronic operators are required to register. From there it is easy to do tracer. Then there is also a prohibition on disseminating electronic information/electronic documents.

The protection carried out by Government Regulation (PP) Number 80 of 2019 writes down the obligations that must be fulfilled by buying and selling actors with electronic mode. Furthermore, the PP provides fresh air for the Indonesian people because it is written to prioritize domestic goods or services. Not only the goods discussed in the PP but also services. We can offer services as content creators for a product. However, the PP was born during the online trading period. There has not been thought of a more complex metaverse legal problem. When the metaverse has mastered several lines of modern life, the rule of law is not just a Government Regulation. Everything in the metaverse activity can be included in one umbrella Act. Metaverse is not just a game and buying and selling activity. So that when problems outside the commercial sector arise, the legal rules that govern still use conventional ones that apply in the real world. From there, a polemic will arise if the law does not anticipate it from the start.

In addition to the two regulations above, transactions and activities on the metaverse must comply with the regulations contained in Law Number 19 of 2016 concerning Amendments to Law Number 11 of 2008 concerning Information and Electronic Transactions as well as its amendments and implementing regulations. The regulation requires all Electronic System Operators (PSE) to ensure that their platforms are not used for actions that violate laws and regulations.

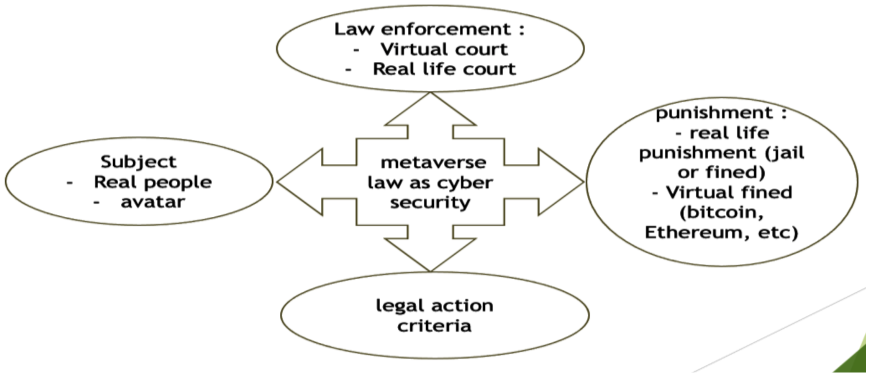
It has been written between opportunities and obstacles with examples in the cases that occurred, as well as the legal basis, finally, the author argues the importance of cyber security. When everyone is thinking about entering the metaverse world or looking for ways to build a metaverse business empire, the law must be responsive to the problems that follow. Of course, in the metaverse world, people also want to live a quiet life. Article 28D paragraph (1) of the 1945 Constitution states that: (1) Everyone has the right to recognition, guarantee, protection, and legal certainty that is fair and equal before the law. So that the mandate of the article can also be applied in the world of the metaverse. Basically, legal protection and certainty must exist, both in the real world and in the virtual world or in the metaverse.

The existence of Government Regulations when viewed from the sequence of Indonesian laws and regulations in accordance with Law Number 12 of 2011 is included below. So that the rules for reference activities in the metaverse are still required by law. In metaverse activities, we are not only involved online but also present ourselves in it by being represented

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

by an avatar. When there is a legal action, whether it will be resolved by judiciary, the avatar also in the metaverse world or which can be subject to law is the owner of the avatar who is prosecuted in the real world. From there, the need for an umbrella law on activities and rules for metaverse activities.

From the regulations written above, the author considers the importance of the basic law on metaverse. Where in the current era, the metaverse is inevitable. We have to keep up with the times, and the era we will face is a metaverse. Here the author tries to make a model of the rules that are applied to the metaverse.



From the model above, the law on metaverse is positioned as cyber security. In it set about: Subject; protected or legally enforceable actors include avatars and real people (operating the avatar). Law Enforcement: Law enforcement can be in the form of ordinary/conventional courts (district courts, high courts, supreme courts, and other law enforcers as usual) and also law enforcement in the metaverse (courts with law enforcement avatars). Legal Action Criteria: how the classification of actions can be called legal acts in the metaverse, it is important to classify them so that in determining legal steps they are clear. Punishment: sanctions are given when legal actions are included in the conventional scope, there are penalties and fines. Meanwhile, when a legal act falls into the category of legal action whose punishment is in the metaverse, it can be subject to fines using the currency applicable to the metaverse (eg etherum, bitcoin, etc).

CONCLUSION

Based on the literature study conducted regarding the Metaverse cyber security and legal challenges and opportunities, it can be concluded that the metaverse must be accompanied by the rule of law. Cyber security is important in the metaverse concept. Its function is to set strategies, block cyber-attacks in real-time, and also anticipate actions that cause legal problems in interactions between avatars. The law must be able to seize opportunities from the obstacles of problems that occur in the life of the metaverse. The existence of a legal umbrella will be able to break down policies and give birth to legal regulations that apply in the real world and in the metaverse. Because when the reference used is only in the form of PP, it is certainly still weak in terms of cyber security. So there must be further research that ultimately results in an academic manuscript for the basis for making rules on cyber security in the metaverse world. From there, the law will be kept up to date and updated with the forms of crimes or violations during the transformation period. The law that will be used to handle legal issues in the metaverse will also regulate judicial and trial for avatars, sanctions such as fines using the currency used in activities in the metaverse, law enforcement officers who are also in the form of avatars (police avatars, judges, prosecutors, lawyers, etc.). So later there will be

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

a rule on whether the legal action is tried in the real world or in the metaverse world represented by the suspect's avatar.

ACKNOWLEDGEMENTS

Thank you to the Faculty of Law, Social Sciences, and Political Science, Indonesia Open University, and those who have participated in this writing for all forms of support given to the authors.

REFERENCES

Amirudin dan Zainal Asikin. (2004). *Pengantar Metode Penelitian Hukum*. Jakarta: Raja Grafindo Persada.

Dian Ratu Ayu Uswatun Khasanah, & Chairunnisa, M. D. (2021). LITIGATION TRANSFORMATION IN LAW ENFORCEMENT EFFORT IN INDONESIA DURING THE COVID-19 PANDEMIC. *Jurnal Hukum, Humaniora, Masyarakat, Dan Budaya (HUMAYA)*, 1(1), 16-21. https://doi.org/10.33830/humaya.v1i1.1865.2021

Díaz, J. E. M., Saldaña, C. A. D., & Avila, C. A. R. (2020). Virtual World As A Resource For *Hybrid Education. International Journal Of EmergingTechnologies In Learning*, 15(15), 94–109. Https://Doi.Org/10.3991/Ijet.V15i15.13025

Fahmi Ahmad Burhan. (2021). https://katadata.co.id/desysetyowati/digital/61cedc01d8b01/metaverse-dunia-virtual-tingkatkan-risiko-kasus-pelecehan-seksual diakses pada tanggal 18 Juni 2022

Indarta, Yose, dkk. Metaverse: Tantangan dan Peluang dalam Pendidikan. *Jurnal Basicedu*, vol 6 Nomor 3 2022, hal. 3351-3363.

Li, Y., & Xiong, D. (2022). *The Metaverse Phenomenon In The Teaching Of Digital Media Art Major*. 643(Adii 2021), 348–353.

Muhammet Damar. (2021). Metaverse Shape Of Your Life For Future: A Bibliometric Snapshot. *Journal Of Metaverse*, 1 (1), 1–8.

Ronny Hanitijo Soemitro. (1994). *Metodologi Penelitian Hukum dan Jurimetri*. Cetakan Kelima, Jakarta: Ghalia Indonesia

Sabian Utsman. (2009). *Dasar-dasar Sosiologi Hukum Makna Dialog antara Hukum & Masyarakat.* Yokyakarta : Pustaka Pelajar, h. 186

Soerdjono Seokanto dan Sri Mamudji. (1994). *Penelitian Hukum Normatif Suatu Tinjauan Singkat.* Jakarta: Raja Grafindo Persada.

Sugiharto, Alexander,dkk. (2022). *NFT&Metaverse: Blokchain, Dunia Virtual&Regulasi*. https://books.google.co.id/books?hl=en&lr=&id=D_5ZEAAAQBAJ&oi=fnd&pg=PA1&dq=metaverse+artikel+jurnal+pdf&ots=DLwbhbzWCm&sig=hr8rKejIy1Qr48NPw21PjNkxAc&redir_esc=y#v=onepage&q&f=false

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Suwatno. (2022). *Masa Depan Komunikasi Bisnis di Era Metaverse: Peluang dan Tantangan*. http://berita.upi.edu/masa-depan-komunikasi-bisnis-di-era-metaverse-peluang-dan-tantangan/ https://jbasic.org/index.php/basicedu/article/view/2615/pdf

Maulana Ramadhan. *Perempuan Asal Inggris Mengaku Jadi Korban Pemerkosaan di Metaverse*. https://www.kompas.com/wiken/read/2022/02/05/204000481/perempuan-asal-inggris-mengaku-jadi-korban-pemerkosaan-di-metaverse?page=all. diakses 18 Juni 2022

Mechanism For Implementing Criminal Liability of Campaign Funds

Sukarno[1], Juajir Sumardi[2], Muhadar[3], Anwar Borahima[4]
[1]Hasanuddin University Doctoral Program
[2,3,4]Hasanuddin University, Indonesia
e-mail: sukarnojaksa@gmail.com

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

This study aims to analyze to analyze the mechanism for implementing the criminal liability of campaign funds. The method used is normative legal research intended to be able to examine norms related to the issue of corporate responsibility in election crimes. The result of this study is that the Company's Responsibility in election crimes as a corporation is responsible for actions committed by its members in relation to the scope of its work, of course, the criminals that must be imposed on the corporation can be in the form of principal or additional criminal crimes, The implementation of the audit The campaign fund report is carried out by a public accounting firm but the audit is only carried out on the suitability between receipts and expulsions that reported and if there is an error, the political party or candidate participating in the election will be given time to correct the report and if there is a violation will be submitted to the KPU, the maximum restriction on donations from political parties and candidates participating in the election must be clearly regulated so as not to provide an opportunity for companies or individuals to leave their money so as not to violate the provisions of the existing Law.

***Keywords**: Mechanism, Criminal liability, Campaign Funds*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

Campaigning is a crucial stage in elections where pairs of candidates and legislative candidates will compete to offer a vision and mission and work program if elected to voters as owners of sovereignty in a democratic country. The open proportional electoral system forces each candidate to offer more of a figure of himself as a candidate than his political party. Candidates will compete with their party mates to market themselves.

Of course, this will lead to problems with the increasing size of each candidate's campaign finance and the reporting of his campaign funds. Because the regulation of campaign funds in Law Number 7 of 2017 concerning General Elections is the same as the previous regulation, making political parties the subject of whistleblowers not their candidates. The source of campaign funds can come from individuals or non-governmental companies/business entities.

Campaign funds are accumulated costs in the form of money, goods, and services used by election participants to finance their campaign activities. Almost all countries require political parties and candidates to provide reports on political party funds under the order of the Act, such reports are submitted to public bodies, parliaments, or special bodies and must be published. Likewise, in Indonesia, candidates and political parties have the right to provide reports in accordance with Law Number 7 of 2017 concerning Elections.

There are three financial statements that must be made by candidates during the campaign period which can be seen in the table below:

Table 1. Three Components of Financial Statements that must be Made by Candidate

NO	REPORT	DESCRIPTION
1.	Initial Campaign Fund Report (LADK)	Bookkeeping containing information on Campaign Fund Special Account, source of initial balance or opening balance, details on calculation of receipts and expenses obtained prior to opening of Special Campaign Fund Account, and receipt of donations originating from candidates and/or political parties or a combination of political parties and other parties
2	Report on Receipt of Campaign Fund Donations (LPSDK)	Bookkeeping containing all receipts received by the Candidate Pair after the LADK is submitted to the KPU at the regional level
3.	Campaign Fund Revenue and Expenditure Report (LPPDK)	Bookkeeping containing all Campaign Fund receipts and expenditures Source: Law, processed, February 2022

Source: Law, processed, February 2022

Campaign fund arrangements, "will be effective if implemented with strong control mechanisms and strict sanctions for any violations committed. For this reason, a supervisory agency consisting of independent elements who specialize in law and elements of the police and other elements who are authorized to supervise campaign funds is needed. The agency must have sufficient authority to carry out supervisory functions"[1].

The absence of a limit on the amount of campaign funds from political parties gives backtrack for companies and companies to continue to make donations beyond the limits

[1] Didik Suprianto,2013, Peserta pemilu, Yayasan Perludem, Jakarta selatan, hlm 4

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

prescribed by the electoral law. This only concerns reported campaign funds, given that the distribution of campaign fund donations is not only through accounts. Even though people and companies make donations to political parties but their names don't want to be mentioned. The amount of this donation is actually more, because the electoral law has not linked the amount of donations to the tax payment report of a person or business entity.

According to the author that in the absence of limits on campaign funds from political parties and candidates for legislative members and executive candidates, it provides an opportunity to manipulate the amount of donations from other parties who quibble with donations from candidates and political parties.

The purpose of opening a campaign fund report (which includes a list of contributors and details of receipts and expenditures) is to test the principle of accountability, which is to ensure that the responsibilities of political parties, candidates for legislatures and executive officers in the receipt and expenditure of campaign funds are rational, ethically appropriate and do not violate laws and regulations[2].

The principle of transparency and accountability of campaign fund reports is very important to do considering the many indications of irregularities, as stated by the Coordinator of the Political Corruption Division of Indonesia Corruption Watch (ICW), Abdullah Dahlan, admitted that the reporting of political party campaign funds in the 2009 Legislative Elections, almost all of them were dishonest because they did not match reality. According to Abdullah, the report submitted to the General Election Commission (KPU) for further audit by auditors shows significant differences with campaign spending in reality[3].

The formulation of the problem in this journal is " how to implement the accountability of election campaign funds".

METHODOLOGY

This type of research is normative legal research, which is meant by normative legal research, the study of applicable normative law. The application can be realized through legal documents[4]. The results of the application will create an understanding of the realization of the implementation of normative legal provisions that have been studied to have been carried out appropriately or not[5].

RESULTS AND DISCUSSION

Campaign Fund Reporting

All election participants are required to submit their campaign fund reports to the General Election Commission (KPU). Election participants who violate this provision will be subject to sanctions. With this special account, it is certainly expected that the flow of funds received by political parties ranging from income to expenditure during the campaign period will be monitored by the KPU. If the election participant does not make a preliminary report on campaign funds, they will be sanctioned not to be included in the election. Meanwhile, election participants who do not submit the final report on campaign funds can be subject to the most

[2] Ramlan Surbakti, Didik Supriyanto, Topo Santoso. Penanganan Pelanggaran Pemilu. Kemitraan Bagi Pembaharuan Tata Pemerintahan. Jakarta 2011

[3] www.tribunnews.com, ICW: Pelaporan Dana Kampanye Partai Tidak Jujur, diakses pada tanggal 04 Maret 2022, pada pukul

[4] S. E. Dwita, M. Pangerang, F. Patittingi, And Azisa Nur, “Academic Journal Of Interdisciplinary Studies AJIS,” Acad. J. Interdiscip. Stud., Vol. 11, No. 1, Pp. 293–302, 2022.

[5] Ramlan Surbakti, Didik Supriyanto, Topo Santoso. Penanganan Pelanggaran Pemilu. Kemitraan Bagi Pembaharuan Tata Pemerintahan. Jakarta 2011

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

severe sanctions, namely the non-determination of the candidate who is elected if they get a seat.

So according to the author, it is unreasonable if the election participants do not comply with the established rules because this will harm themselves or the political parties that carry it if this sanction is really set.

Political parties are required to submit an election campaign fund account number in the name of a political party to the KPU as one of the prerequisites as an election participant[6].

Campaign fund reports made by election participants including receipts and expenditures must be submitted to the public accounting firm appointed by the KPU no later than 15 (fifteen) days after voting. According to the author, the period of 15 (fifteen) days owned by the public accounting firm is very limited to conducting an audit, so that later it is also questionable the validity of the audit results produced by the public accounting firm.

Then, the public accountant submits the audit results to the KPU, no later than 30 (thirty) days from the receipt of the report. The KPU notifies the results of the audit of the campaign funds of each Election Participant to the Election Participants no later than 7 (seven) days after the KPU receives the audit results from the public accounting firm. KPU announces the results of the election campaign fund examination to the public no later than 10 (ten days) days after the receipt of the examination result report[7].

Reporting of political party accounts is carried out at each level of the KPU. This means that the report is given to the Regency/City and Provincial KPU before being submitted to the KPU RI. Reporting of campaign funds by political parties must be carried out by parties and candidates for DPD members, in accordance with the mandate of KPU Regulation Number 17 of 2013 concerning Guidelines for Reporting Campaign Funds. The important points that need to be considered by the party are the source of campaign funds, the form and amount of funds, and the bookkeeping of campaign funds. However, according to the author, it is very unfortunate if Law No. 8 of 2012 concerning the General Election of Members of the DPR, DPD, and DPRD only requires the obligation to report campaign funds charged by political parties and dpd candidates, while there is no obligation for caleg / individuals to report campaign funds. Although this problem has been responded to by the KPU by issuing KPU Regulation Number 17 of 2013 concerning Guidelines for Reporting Campaign Funds which requires legislative candidates to make campaign fund reports, this seems useless because the reports made are only charged with being reported to political parties and dpd member candidates only.

The public accounting firm appointed by the KPU in the process of conducting the audit was found not to provide correct information regarding the requirements, so the KPU canceled the appointment of a public accounting firm. A canceled public accounting firm is not entitled to payment for services. Furthermore, the KPU appointed a replacement public accounting firm to continue the implementation of the audit of the campaign fund report of the party concerned[8]. The sanctions rules in the end, the KPU must appoint a public accounting firm as it must be explored regarding the mechanism, because judging from the existing rules, the public accounting firm itself does not have much time to carry out the audit implementation process. Thus, if there is a misappropriation of information by the public accounting firm, which later requires the KPU to appoint a new public accounting firm, of course, the time needed will be narrow and will hinder the KPU itself.

---

[6] KPU Kota Batu: Admin KPU Kota Batu, 2018. Aplikasi Pelaporan Dana KampanyePemilu 2019 Sebagai Kontrol Bagi Peserta Pemilu. Diakses 7 Maret 2019 dari website

[7] Ben Reilly, Sistem Pemilu, Dari ACE Project, kerjasama IFES-IDEA- UN, hlm. 112

[8] Topo Santoso, Penegakan Hukum Pemilu, Tim Peneliti Perludem, Jakarta, 2012, hlm. 110.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

With the many loopholes that exist in the matter of campaign fund reports in Law No. 8 of 2012 concerning the General Election of Members of the DPR, DPD, and DPRD, it seems that there are still many rules that must be regulated in detail and the KPU responds to existing problems by issuing KPU Regulation No. 17 of 2013 concerning Guidelines for Reporting Campaign Funds.

This further rule according to the author deserves appreciation because it provides further on more detailed technical matters that will be used as guidelines for reporting campaign funds by election participants. It remains only how election organizers socialize to election participants that KPU Regulation No. 17 of 2013 concerning Guidelines for Reporting Campaign Funds can run optimally in practice.

Implementation Of Campaign Fund Audit

For the sake of accountability, campaign fund reports in the form of campaign fund books along with details of receipts, expenditure details and a list of donors must be audited by a public accountant. Both Law No. 10/2008 and Law No. 8/2012, Law No. 42/2008 and Law No. 32/2004, regulate this matter. In connection with this arrangement, there are several problems that later result in the non-realization of transparency and accountability[9].

First, about the public accounting firm in charge of conducting the audit. Law No. 12/2008 and Law No. 8/2012 confirm that the public accounting firm that audits campaign fund reports is appointed by the General Election Commission (KPU). However, Law No. 42/2008 and Law No. 32/2004 do not confirm this, so that the spouse of the presidential candidate and the spouse of the candidate for the regional head can appoint the public accounting firm he wants himself. For the sake of uniformity of regulations and in order to avoid conflicts of interest between campaign fund report makers and campaign fund report examiners, public accounting firms must be appointed by the General Election Commission (KPU). It is the General Election Commission (KPU) that then notifies election participants that their campaign fund reports are submitted to certain public accounting firms for audit.

Second, about the object of the audit. The main weakness of the three electoral laws in regulating the audit of campaign funds is the vagueness of the regulation of audit objects, so this confuses the public accounting firm. Indeed, there is a general election commission (KPU) regulation that tries to explain the object of the audit, but the regulation is still vague so that as a guideline for auditing campaign funds, it is also still multi-interpreted. Therefore, the electoral law must emphasize the object of the audit, in order to ensure that there are no violations in the management of campaign funds as written in the campaign fund report.

The main task of the auditor is to ensure the presence or absence of sources of campaign funds from prohibited parties, the presence or absence of individual and corporate donors that exceed the donation limit, and the presence or absence of donors whose identity is unclear.

Third, about the audit period. All election laws affirm that campaign fund reports must be audited by public accounting firms. But each of the laws has different arrangements related to the timing of the audit. Indeed, the volume of work on auditing legislative election campaign fund reports is greater than that of presidential elections or local elections, but the technical auditing is actually the same, so the maximum service period limit for auditing campaign funds for legislative elections and Executive candidates can be a benchmark.

After the limit of 3 (three) days of submission of campaign fund reports to the organizers runs out, the General Election Commission (KPU) is required to submit a campaign fund report file to a public accounting firm, no later than 3 (three) days after the submission deadline

[9] Adnan Topan Husodo. Pengaturan Dana Kampanye Dan Implikasinya T erhadap Praktik Korupsi Pemilu. Yayasan Perludem, Jakarta 2012. hlm 38

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

expires. **Fourth**, An important drawback of campaign fund reporting arrangements is the absence of sanctions against perpetrators of violations found in the campaign fund audit report.

The problem of conducting campaign fund audits becomes more complicated, because the Law only gives a very limited time, namely 30 days to the KAP to complete the campaign fund audit. a very short campaign fund audit time can be ensured that it will not produce a quality audit report or find any violations of campaign fund rules. It can be said that such an audit of campaign funds is ultimately to meet the mere aspect of formality.

Announcement Of Audit Results

Law No. 10/2008 andUU No. 8/2012 confirm that the campaign fund report is announced by the General Election Commission (KPU), the provincial General Election Commission (KPU) and the District/City Election Commission (KPU), 10 (ten) days after it is submitted by the public accounting firm. However, before being announced, no later than 7 (seven) days after being received from a public accounting firm, campaign fund reports must be submitted to political parties and DPD candidates.

Law No. 42/2008 regulates the General Election Commission (KPU), the provincial General Election Commission (KPU) and the General Election Commission (KPU) of the district/city to announce the results of the audit report funds no later than 10 (ten) days after submission from a public accounting firm. Previously, it was confirmed that the General Election Commission (KPU), the provincial General Election Commission (KPU) and the General Election Commission (KPU) of the district/city submitted the results of the campaign fund audit to the candidate's spouse and campaign team no later than 7 (seven) days after the deployment from the public accounting firm. Meanwhile, Law No. 32/2004 regulates, the regional Election Commission (KPU) announces the results of the campaign fund audit no later than 3 (three) days after submission from the public accounting firm.

Instead of raising suspicions, the provisions should be changed: first, the General Election Commission (KPU) submits audit reports to election participants and the public simultaneously; second, the time lag between the General Election Commission (KPU) receiving audit report results from a public accounting firm with public announcements and giving to election participants, is only one day. Thus, political parties and candidates as well as the wider community can quickly get reports on the results of campaign fund audits. This provision also ensures that once a political party submits a report and campaign to the General Election Commission (KPU) and the General Election Commission (KPU) submits it to a public accounting firm for audit, the campaign fund report does not change again. Thus the public accounting firm and the General Election Commission (KPU), are no longer suspected of being able to flirt to change the campaign fund report.

The second problem is how to submit the report on the results of the audit of campaign funds to the public. If the submission of the audit report to political parties and candidates, it is enough to provide a copy of the audit report, then the same method can actually be done to the public. However, the submission of audit reports to the public in such a way is obviously ineffective, because not every person or group of people can come to the office of the General Election Commission (KPU).

If there are reports of campaign funds of political parties and dpd candidates violating the rules regarding the source of campaign funds, restrictions on donations and prohibitions on donations, it will be easily detected by a public accounting firm that has the authority to audit the reports of campaign funds received by prospective DPD members participating in the election. Public accounting firms may ask political parties and dpd candidates to correct their

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

reports. This is possible given the absence of rules prohibiting public accounting firms from asking political parties and DPD candidates to correct their reports.

Procedures For Handling Election Crimes

About how to handle pimilu crimes, it has been clearly regulated in the election law Number 7 of 2017 concerning general elections. After Bawaslu gets an indication of a criminal act, Bawaslu will report to the police no later than 1x24 hours from the time an act is suspected of being an election crime. This can be seen in Article 476 paragraph (l) which states that "Reports of alleged election crimes are forwarded by Bawaslu, Bawaslu Province, Bawaslu l (abupaten/ Kota, and/or Panwaslu Kecamatan to the National Police of the Republic of Indonesia no later than 1 x 24 (one time twenty-four) hours from the time of Bawaslu, Bawaslu Province, Bawaslu Regency/City, and/or Panwaslu Kecamatan stating that the act or acts suspected are election crimes".

The report must be submitted in writing which must contain complete data such as the full name of the whistleblower, the full address of the whistleblower, the reported parties, when and where the incident occurred and briefly explain the incident.

The report, the investigator is only given a maximum of 14 days from the receipt of the report to submit the results of the investigation and the file to the public prosecutor. This is regulated in Article 480 paragraph (1) which essentially states that "The Investigator of the National Police of the Republic of Indonesia submits the results of his investigation accompanied by a case file to the public prosecutor no later than 14 (fourteen) days from the receipt of the report and can be carried out without the presence of the suspect".

And if the results of the investigation are considered incomplete then within 3 (three) days the public prosecutor must return the file along with instructions to be completed and the investigator after receiving the file must return no later than 3 (three) days.

Article 480 paragraph (4) states that "The public prosecutor shall transfer the case file as referred to in paragraphs (1) and (3) to the district court no later than 5 (five) days from receiving the case file and may be carried out in the absence of the suspect."

Then in Article 482 subsection (1) "The district court examines, adjudicates, and decides the case of election offences no later than 7 (tqiuh) days after the transfer of the case file and may be done in the absence of the accused".

From the articles containing the procedures for handling election acts, it can be seen that the time given is quite short so that according to the author to solve criminal acts, especially those related to making donations from companies or groups, it is not effective considering that the time is very short so that to trace the origins of campaign fund donations originating from both individuals and groups or companies is very difficult to detect.

Sanctions and Law Enforcement

In Law No. 8 of 2012 concerning the General Election of Members of the DPR, DPD, and DPRD, it is stated that if there is a political party that does not submit an initial report on campaign funds until the specified time limit, it will be subject to sanctions in the form of cancellation as an election participant in the area concerned[10]. Similarly, the existing provisions for DPD candidates will be subject to cancellation sanctions as election participants if they do not report the initial campaign fund report by the time limit stipulated by law. Regarding for election participants who do not submit reports on the receipt and expenditure of Election Campaign funds to public accounting firms appointed by the KPU until the stipulated time

[10] Mellaz, A. (2018). Personal Vote, Candidate-Centered Politics, dan Pembiayaan Pileg 2014. Dalam Sukmajati, M & Perdana, A (ed) (2018). Pembiayaan Pemilu di Indonesia. Jakarta: Bawaslu

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

limit will be subject to sanctions in the form of not being determined to be an elected candidate[11]. Judging from the sanctions contained in the rules, of course, it is not fooling around so that it cannot be taken lightly by election participants. This rule is very good for election participants to perform the obligation to report campaign funds[12].

In Law No. 8 of 2012 concerning the General Election of Members of the DPR, DPD, and DPRD, there have been sanctions arrangements for violations related to money politics. It can be seen from articles 303, 304, 305 which have regulated the provisions of sanctions for recipients and donors who exceed the maximum limit or donations originating from parties prohibited in the law. This provision can certainly be a breath of fresh air for the holding of cleaner elections and provide space for law enforcement related to this campaign fund to violate it.

If campaign funds are not reported, the implication is that campaign fund reports on the rules are necessary for the problem to be properly addressed, this prevents overlapping actions and agencies authorized to deal with.

The campaign funds reported by the party to the KPU (General Election Commission) do not reflect the actual report. Further implications, there is manipulation of financial statements submitted to the public[13]. To prevent abuse of power and corruption, laws should be able to carry out the function of control over power so that political power can run in balance[14]. This control function can be reflected by the existence of sanctions to provide signs for election participants to carry out their proper obligations. In the campaign fund rules of Law No. 8 of 2012 concerning the General Election of Members of the DPR, DPD, and DPRD, there are administrative sanctions and criminal sanctions in question. But, the author feels that the rules are less strict because there are still loopholes for violators to correct their mistakes.

The author strongly agrees with Panwaslu in his report, in the 2004 elections recommended that the arrangement of campaign funds be made more detailed and emphasized in order to create a transparent report. If a person, group, non-governmental business entity makes a donation exceeding the provisions of the law, it will be subject to a maximum of two years' imprisonment with a maximum of 500 million and if in making a donation by including false data, it will be sentenced to a maximum of 1 year with a maximum fine of 12 to 24 million.

According to the author, with the provisions of this article, political party parties will include reports that are far from what they really mean that campaign funders can be engineered into donations originating from political parties or from donations of candidates participating in elections whose amount is not regulated in the law.

According to the author, the provisions in article 339 of the Election Law should also apply to companies that make donations so that if they are proven to have made donations from the proceeds as prohibited in Article 339 paragraph (1) then the company must be stated with clear sanctions. By not regulating clear sanctions against companies that make campaign fund donations derived from the matters listed in paragraph (1) it seems to provide a breath of fresh air for the company because the punishment of companies that make campaign fund donations derived from other criminal institutions or from the proceeds of concealing or disguising the proceeds of criminal acts (TPPU) becomes unclear.

[11] Priyatno, Dwidja, 2017, Sistem Pertanggungjawaban Pidana Korporasi Dalam Kebijakan Legislasi, Bandung: Kencana
[12] Ramlan Surbakti, Didik Supriyanto, Topo Santoso. Penanganan Pelanggaran Pemilu. Kemitraan Bagi Pembaharuan Tata Pemerintahan. Jakarta 2011
[13] Lia Wulandari, Dana Kampanye Pemilu di Indonesia: Isu Krusial yang Cenderung Terabaikan, Dalam Jurnal Pemilu dan Demokrasi Yayasan Perludem, No. 3, Jakarta, November 2012, hlm. 57
[14] Ibid.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

CONCLUSION

The audit of the campaign fund report is carried out by a public accounting firm to see the suitability between the receipt and distribution reported and if there is an error, the political party or candidates participating in the election will be given time to correct the report and if there is a violation, it will be submitted to the KPU. So far, the KPU still provides an opportunity for political parties or election participants to return to the State treasury if there are donations from companies or individuals that exceed the maximum amount stipulated by the election law. and if it is not implemented, the KPU will delegate the case to the competent authority. The authority of public accounting firms should be expanded to audit the inflow of funds in and out so that no flow of funds from the proceeds of crimes is entrusted to candidates or party members. Criminal sanctions against companies that make campaign fund donations under Article 339 Paragraph (1) must be strict.

REFERENCES

Adnan Topan Husodo. (2012). *Pengaturan Dana Kampanye Dan Implikasinya T erhadap Praktik Korupsi Pemilu.* Yayasan Perludem, Jakarta

Ben Reilly. *Sistem Pemilu, Dari ACE Project*, kerjasama IFES-IDEA- UN

Didik Suprianto,2013, *PesertaPpemilu*, Yayasan Perludem, Jakarta selatan

Irwansyah. (2020). *Penelitian Hukum*. Mirra Buana Media. Yogyakarta.

Lia Wulandari, *Dana Kampanye Pemilu di Indonesia: Isu Krusial yang Cenderung Terabaikan*, Dalam Jurnal Pemilu dan Demokrasi Yayasan Perludem, No. 3, Jakarta, November 2012

Mellaz, A. (2018). *Personal Vote, Candidate-Centered Politics, dan Pembiayaan Pileg 2014. Dalam Sukmajati*, M & Perdana, A (ed) (2018). Pembiayaan Pemilu di Indonesia. Jakarta: Bawaslu

Lia Wulandari, *Dana Kampanye Pemilu di Indonesia: Isu Krusial yang Cenderung Terabaikan, Dalam Jurn*al Pemilu dan Demokrasi Yayasan Perludem, No. 3, Jakarta, November 2012

Priyatno, Dwidja. (2017). *Sistem Pertanggungjawaban Pidana Korporasi Dalam Kebijakan Legislasi*, Bandung: Kencana

Ramlan Surbakti, Didik Supriyanto, Topo Santoso.2011, *Penanganan Pelanggaran Pemilu. Kemitraan Bagi Pembaharuan Tata Pemerintahan*. Jakarta

S. E. Dwita, M. Pangerang, F. Patittingi, And Azisa Nur, "*Academic Journal Of Interdisciplinary Studies AJIS," Acad. J. Interdiscip. Stud*., Vol. 11, No. 1, Pp. 293–302, 2022.

Topo Santoso. (2012). *Penegakan Hukum Pemilu*, Tim Peneliti Perludem, Jakarta

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Veri Juaidi. (2012). *Pengaturan Dana Kampanye Pemilu: Mau Dibawa Kemana?.* Yayasan Perludem, Jakarta

www.tribunnews.com, ICW: *Pelaporan Dana Kampanye Partai Tidak Jujur,* diakses pada tanggal 04 Maret 2022, pada pukul 10.00. WIT

KPU Kota Batu: *Admin KPU Kota Batu* .(2018). *Aplikasi Pelaporan Dana KampanyePemilu 2019 Sebagai Kontrol Bagi Peserta Pemilu.* Diakses 7 Maret 2019 dari website

Criminal Threats in The Personal Data Protection Bill in Indonesia

Muhammad Rusli Arafat[1], Hevi Dwi Oktaviani[2]
[1,2]Universitas Singaperbangsa Karawang
e-mail: rusli.arafat@fh.unsika.ac.id (corresponding author)

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

The issue of personal data protection in Indonesia is currently a problem that requires special arrangements. During the Covid-19 pandemic, the cyber police recorded 182 cases of data theft reported by the public. This figure increased by 27.3% compared to the previous year which was 143 reports. There is no comprehensive regulation that guarantees cyber security in Indonesia, causing many cases of personal data theft. The government through the Personal Data Protection Bill (RUU PDP) seeks to ensure cyber security, especially for personal data that must be protected, one of the efforts to protect personal data is to provide criminal threats to every person and corporation that violates the protection of personal data. This study aims to analyze how the criminal threats in the PDP Bill as a means of preventing and eradicating criminal acts against the protection of personal data. The problems in this study will be analyzed using the theory of criminal law. To obtain comprehensive results, this research uses a normative juridical method with a statute approach, the data being collected through literature and document studies. Brief results of research findings in the form of criminal provisions are contained in CHAPTER XIII articles 61 to 69. It contains criminal threats for individuals (Natural Persons) and corporations (Legal Persons). There is an additional crime in the form of confiscation of profits and/or assets obtained or the result of a crime and payment of compensation, the criminal threat deviates from the provisions of Article 10 of the Indonesian Criminal Code.

***Keywords**: Cybercrime, Deep Web, Data Protection*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

The development of information and communication technology changes people's behavior globally and causes the world to become borderless, the social changes that occur change significantly and take place so quickly. The use of computer technology that continues to evolve has led to a process of convergence between information technology, media, and communication to eventually produce a new facility known as the internet, as well as being the beginning of the birth of civilization in cyberspace. The internet has created a world of computer-based communication that offers a new virtual reality (indirect and unreal) making all areas of people's lives inseparable from the existence of the internet. Through the world of the internet or what is often referred to as cyberspace, all forms of community creative activities can be carried out in a borderless manner that can penetrate various national borders in the world. The development of information technology is not only able to create a global world but has also developed a new living space for the community, namely the life of virtual communities (cyber communities).

With the existence of internet technology, people can feel the benefits both in the economic, educational, social, and other fields. The utilization of the Internet affects the development of science and science which can be easily accessed. Thus so much information can be received quickly. Access to information that can be obtained easily has a positive or negative impact. The positive side of the rapid development of information and communication technology is that the management of large amounts of data can be managed properly, quickly, effectively, and efficiently and minimize errors. The negative side of the development of technology and information can harm the community, such as data misuse, theft of personal data, sales of personal data, fraud, and others.

The Covid-19 pandemic situation that hit Indonesia added to the negative side of the development of information and communication technology. From the beginning of the pandemic until now it is known that there are various modes of crime that often occur in the community. Not only conventional crimes such as theft, fraud, and robbery, what is happening is even cybercrime (cybercrime) has also become a type of crime that has increased quite high, with very diverse modes, such as data theft, and account burglary, or carding.

Based on data from the Indonesian National Police, in 2020, there were at least 937 reported cases. Of the 937 cases, there were three cases with the highest number, namely cases of provocative, hate content and hate speech, which was reported the most, around 473 cases. Then followed by online fraud with 259 cases and pornographic content with 82 cases. For cases of data theft during the Covid-19 Pandemic, the cyber police recorded 182 cases of data theft reported by the public. This figure increased by 27.3% compared to the previous year which was 143 reports. With so many cases of data theft as described previously, there needs to be government efforts to prevent and overcome these crimes.

Cyber security arrangements in Indonesia are contained in the Information and Electronic Transactions (ITE) Law Number 11 of 2008 as amended through the ITE Law Number 19 of 2016. This law includes rules for several violations, such as distributing illegal content, data protection violations, unauthorized access to computer systems to obtain information, and an illegal and unauthorized expropriation or eavesdropping on other computer or electronic systems. To minimize and overcome cyber threats, it is necessary to strengthen cyber security, where the level of urgency of cyber security is directly proportional to the level of dependence on utilization in cyberspace. There is no comprehensive regulation that guarantees cyber security in Indonesia, causing many cases of personal data theft. The government through the Personal Data Protection Bill (RUU PDP) seeks to ensure cyber security, especially for personal data that must be protected.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

The Personal Data Protection Bill regulates the threat of criminal penalties for any person or corporation that violates the provisions as stipulated in Article 61 to Article 66 of the PDP Bill. Punishment certainly has several purposes, including giving retaliation to the perpetrators of crimes, providing a deterrent effect, and preventing the occurrence of criminal acts. Legislative policy formulation/policy can be interpreted as a policy to formulate Positive Law to be better and also to provide guidance not only to legislators but also to courts that apply the law and also to the organizers or implementers of court decisions.

The formulation policy/legislative policy in determining the punishment system is a policy process that goes through several stages. First, the stage of determining the criminal by making laws; Second, the stage of giving the punishment by the authorized body; and third, the stage of implementing the crime by the competent implementing agency (muladi and Arif, 2010). The sub-system of the criminal system occupies a strategic position in the regulation of the threat of punishment or the criminal system. The criminal system is a field in criminal politics. Criminal Politics is a rational effort by society to tackle crime. In this study, the author focuses on research at the stage of determining the crime by the legislators.

This research will explain the basic issues regarding the criminal plan for perpetrators who commit criminal acts as regulated in the PDP Bill which will be enacted to protect personal data in Indonesia. This criminal plan is a basic problem because it is motivated by the many cases of personal data theft and is an effort by the government to provide cyber security guarantees in Indonesia. The challenge of cyber security assurance, especially in protecting personal data in the digital era as it is now, is a serious problem faced by the government and must immediately be taken seriously and create the expected cyber security. The sentencing plan in the PDP Bill will be the subject of discussion in this research so that it will be understood the extent to which the goal of protecting personal data through the PDP Bill is by looking at the criminal threats in the regulated articles.

Starting from the problems mentioned above, the formulation of the problem in this study is, how is the criminal threat in the PDP Bill as a means of preventing and eradicating criminal acts against the protection of personal data? Related to this research, previously someone has conducted research with the title Legal Protection of Personal Data as Privacy Rights (Sekaring, 2021) This research focuses on finding the essence of legal protection of personal data as privacy rights and forms of legal protection of personal data as privacy rights in Indonesia.

Research title, Personal Data Protection Legislation Formulation in the Industrial Revolution 4.0 (Erlina, 2020) This research focuses on personal data protection regulations that must be ratified in Indonesia immediately. Research title, Juridical Analysis of Online Marketplace Privacy and Liability Policies in Protecting Users' Personal Data in Cases of Data Leakage (Maichle, 2021) This research focuses on online marketplace privacy policies related to personal data protection and forms of online marketplace accountability in a preventive and repressive manner against leaks data.

The title of the research, Protection of Online Consumers' Personal Data During E-Commerce Transactions in Indonesia (I Putu Bayu Mahendra, 2021) This research focuses on the importance of protecting the right to privacy and personal data when transacting on the internet. The title of the research, The Urgency of the Bill (RUU) on the Protection of Personal Data (Moh Hamzah Hisbulloh, 2021) This research focuses on the urgency of the Personal Data Protection Bill.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

METHODOLOGY

This research is research on criminal threats in the bill on the protection of personal data. The method used in this study is a normative juridical research method (Soerjono Soekanto and Sri Mahmudji, 2003), this study examines the literature related to the issues studied and, in this study, uses a statutory approach. The statutory approach is an approach that is carried out by examining all laws and regulations related to the legal issues being handled (Peter Mahmud Marzuki, 2010). In addition to the statutory approach, this research also uses a conceptual approach. The legal materials used in this study are primary legal materials consisting of laws and regulations related to the issues studied and secondary legal materials in the form of literature and journals related to the issues studied. All legal materials were collected by document study technique and then analyzed by descriptive analysis technique.

RESULTS AND DISCUSSION

Criminal Sanctions in the Personal Data Protection Bill

Criminal law is a law that has a special nature, namely in terms of sanctions. Everyone who is dealing with the law, will always think that the law leads to something that binds one's actions in the community. In its regulation, the law has provisions about what to do and what not to be (forbidden) to do, along with the consequences that will arise for both (Adami Cahzawi, 2011). Criminal law has differences when juxtaposed with other laws, these differences include, among others, negative sanctions which are referred to as a misery or crime. Criminal sanctions have various forms and types, such as confiscation of property through fines, deprived of their freedom of life because they have to undergo punishment in the form of confinement or imprisonment, not only that, but criminal sanctions can also take a person's life through the death penalty.

Criminal sanctions are punishments/sanctions that are deliberately given by the state through the criminal justice process (Bambang Waluyo, 2004). The sanction is imposed on every person who is legally proven to have violated the criminal law. Sentencing is a sentencing as a legitimate effort based on law to apply sanctions to someone who through the criminal justice process has been legally and convincingly proven guilty of committing a crime (P.A.F. Lamintang, 2010). Thus, the criminal law regulates punishment and sentencing related to the process of imposing the sentence.

The word punishment comes from the word "straf" and the term punished comes from the word "gestraft". Mulyato argues that the two terms are conventional terms. He does not agree if the two terms are interpreted that way, he uses unconventional terms in interpreting the two terms above. Iya argues that the word punishment is defined as criminal so that "straf" is defined as criminal and punished is interpreted as threatened with punishment so that the word threatened with punishment is juxtaposed with the term "wordt genstraft".

Interpreting criminal (straf) according to positive law as special suffering. According to van Hammel, the suffering imposed by the competent authority to impose a criminal on behalf of the state as the person in charge of public law order for a violator, the suffering is imposed solely because the person has violated a legal regulation that must be enforced by the state. Meanwhile, interpreting a crime (straf) as suffering inflicted on someone, that suffering by criminal law is associated with a violation of a norm, which with a judge's decision has been handed down for someone guilty.

Van Hammel and Simon (Barda Nawawi Arif, 1996), These two Dutch criminal law experts have the same view in providing limits on punishment, which in essence is suffering. But it must be understood that suffering is not a goal, but only a tool used by the state to remind people not to commit crimes (Andi Hamzah, 1986). Indonesian criminal law experts also have

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

the same view in understanding and giving reasons for the concept of criminal. According to Prof. Sudarto, traditionally a crime can be defined as a misery imposed by the state on someone who violates the provisions of the law (Sudarto, 1996).

In formulating criminal law norms and formulating criminal threats, there are at least 3 (three) things to be achieved by the implementation of criminal law in society, namely:

1. Forming or achieving the ideals of an ideal society or society that is aspired to;
2. Maintaining and upholding noble values in society;
3. Maintaining something that is considered good (ideal) and followed by the community with negative norm formulation techniques.

The philosophy of punishment as a philosophical basis for formulating a measure or basis for justice in the event of a violation of criminal law. In this context, punishment is closely related to the criminal law enforcement process. As a system, the study of sentencing can be viewed from 2 (two) angles, namely the functional angle and the substantive norm angle.

From a functional point of view, the criminal system can be interpreted as the whole system (laws and regulations) for the functionalization/operationalization/concretion of criminals and the whole system (laws and regulations) that regulates how criminal law is enforced or operationalized concretely so that a person is sanctioned (law). From this point of view, the criminal system is identical to the criminal law enforcement system, which consists of the Material/Substantive Criminal Law sub-system, the Formal Criminal Law sub-system, and the Criminal Implementation Law sub-system.

From the point of view of substantive norms (only seen from substantive criminal law norms), the criminal system can be defined as the entire system of material criminal law rules/norms for sentencing; or The entire system of rules/norms of material criminal law for the awarding/imposition and execution of a crime. With this understanding, the entire statutory rules that exist in the Criminal Code as well as special laws outside the Criminal Code, are essentially a unified criminal system, which consists of "general rules" and “special rules”.

Based on general rules, namely those in the Criminal Code concerning criminal sanctions or types of punishment, there are only 2 types of criminal penalties, namely the main crime and additional punishment (M. Najih, 2014). The principal punishment is a punishment that can be imposed regardless of other penalties. Meanwhile, additional punishment is a punishment that can only be imposed together with the main punishment. Article 10 of the Criminal Code (KUHP) reads as follows: Criminal consists of:

1. Basic penalty (hoofd straffen) :
   a. Death Penalty;
   b. Imprisonment;
   c. The punishment of confinement;
   d. Criminal fines.
2. Additional penalty (bijkomende straffen) :
   a. Revocation of certain rights;
   b. Confiscation of certain goods;
   c. Announcement of Judge's Decision.

In general, a formulation of a crime should at least contain the following formulations: (1) the legal subject who is the target of the norm (addresses at norm); (2) prohibited actions (strafbaar), either in the form of doing something (commission), not doing something (omission) and causing consequences (events caused by behavior); and (3) criminal threats (strafmaat), as a means of imposing the enforcement or compliance with these provisions (Chairul Huda, 2011). One of the things that have caught the attention of experts and the public, in general, is related to the formulation of "criminal threats" or "strafmaat". By borrowing the

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

term David Givens, that crime both before and after it is committed always gives "crime signals" (David Givens, 2009), then the state declares the same as "criminal". “Crime signals” are stated by the legislators before a crime with a “criminal threat”, while after the crime is carried out through a “criminal imposed” by the judge. This is a representation of "disgrace" against a crime and its maker.

Going deeper into the discussion of this research, what is meant by special rules is the PDP Bill as special rules, although it is still in the form of a bill, this law is interesting to study, especially in the section on criminal provisions that contain criminal threats. Researchers conducted a study on the formulation of criminal acts regulated in the PDP Bill. In short, it can be stated that in the PDP Bill there are irregularities regarding the rules of punishment. The regulation of criminal threats in the PDP Bill is a deviation from the criminal rules stipulated in the general rules contained in Article 10 of the Criminal Code.

The following is an analysis of the criminal provisions in the PDP Bill.

Table 1. Formulation of Crime in the PDP Bill

Article	Formulation of Criminal	Imprisonment	Criminal Fines
61	(1) Any Person who knowingly obtains or collects Personal Data that is not his own with the intention of unlawfully benefiting himself or herself or another person or may result in a loss to the Personal Data Owner as referred to in Article 51 paragraph (1).	sentenced to a maximum imprisonment of 5 (five) years	or a maximum fine of Rp50.000.000.000 (fifty billion rupiah)
	(2) Any Person who intentionally and against the law discloses Personal Data that does not belong to him as referred to in Article 51 paragraph (2)	sentenced to a maximum imprisonment of 2 (two) years	or a maximum fine of Rp20.000.000.000 (twenty billion rupiah).
	(3) Any Person who intentionally and against the law uses Personal Data that does not belong to him as referred to in Article 51 paragraph (3)	sentenced to a maximum imprisonment of 7 (seven) years	or a maximum fine of Rp700.000.000.000 (seventy billion rupiah).
62	Any Person who intentionally and unlawfully installs and/or operates a visual data processing or processing device in a public place or public service facility that may threaten or violate the protection of Personal Data as referred to in Article 52	sentenced to a maximum imprisonment of 1 (one) years	or a maximum fine of Rp10.000.000.000 (ten billion rupiah).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

63	Any person who intentionally and against the law uses a visual data processing or processing device installed in a public place and/or public service facility used to identify a person as referred to in Article 53	sentenced to a maximum imprisonment of 1 (one) years	or a maximum fine of Rp10.000.000.000 (ten billion rupiah).
64	(1) Any Person who intentionally falsifies Personal Data with the intention of benefiting himself or another person or which may cause harm to others as referred to in Article 54 paragraph (1)	sentenced to a maximum imprisonment of 6 (six) years	or a maximum fine of Rp60.000.000.000 (sixty billion rupiah).
	(2) Any Person who intentionally sells or buys Personal Data as referred to in Article 54 paragraph (2)	sentenced to a maximum imprisonment of 5 (five) years	or a maximum fine of Rp50.000.000.000 (fifty billion rupiah)

Based on the table above, the act that is punishable by a criminal offense is intentionally obtaining or collecting Personal Data that does not belong to him with the intention of benefiting himself or another person against the law or may result in loss of the Personal Data Owner, intentionally disclosing Personal Data that does not belong to him, intentionally and against the law using Personal Data that does not belong to him, intentionally and against the law installing and/or operating visual data processing or processing equipment in public places or public service facilities that can threaten or violate the protection of Personal Data, intentionally and against the law using processing or data processing tools visuals posted in public places and/or public service facilities that are used to identify a person, intentionally falsify Personal Data with the intention of benefiting oneself or others or which may cause harm to others, and intentionally selling or buying data a Private.

The definition of what is meant by every person as the subject of a criminal act of protecting personal data is an individual or a corporation, this is as regulated in Article 1 point 6 of the PDP Bill. Furthermore, in Article 1 point 7, what is meant by the corporation is an organized collection of people and/or assets, both legal entities and non-legal entities following statutory regulations. In the Criminal Code Bill, it is explained that corporations include legal entities in the form of limited liability companies, foundations, cooperatives, state-owned enterprises, regionally-owned enterprises, or the equivalent, as well as associations both legal and non-legal entities or business entities in the form of firms. limited partnership, or it is equivalent in accordance with the provisions of the legislation. Based on Article 23 of the PDP Bill, corporations that can be held criminally responsible are those who control personal data and processors of personal data. While personal data controllers and processors of personal data originating from public bodies and organizations/institutions cannot be held criminally responsible, however, these public bodies and organizations /institutions are only subject to administrative sanctions as regulated in Article 50 of the PDP Bill.

Two main types of crime can be imposed on the perpetrator/defendant who violates the protection of personal data, first, namely imprisonment and fines. The basic punishment

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

regulated in the PDP Bill is alternative so that the judge can choose one of the main crimes to be imposed on the perpetrator/defendant who violates the protection of personal data. The main punishment in the form of imprisonment in the PDP Bill does not recognize a specific minimum threat. The principal punishment regulated in Article 61 paragraph (1) is in the form of imprisonment for a maximum of 5 (five) years or a maximum fine of Rp50.000.000.000(Fifty billion rupiah), Article 61 paragraph (2) is in the form of imprisonment for a maximum of 2 (two) years or a maximum fine of Rp20.000.000.000 (two billion rupiahs), and Article 61 paragraph (3) is in the form of imprisonment for a maximum of 7 (seven) years or a maximum fine of Rp70.000.000.000 (seven billion rupiah).

The principal punishment regulated in Article 62 is in the form of imprisonment for a maximum of 1 (one) year or a maximum fine of Rp10.000.000.000 (ten billion rupiahs), Article 63 paragraph (2) is in the form of imprisonment for a maximum of 1 (one) year or a maximum fine of Rp10.000.000.000 (ten billion rupiahs), Article 64 paragraph (1) is in the form of imprisonment for a maximum of 6 (six) years or a fine of a maximum of Rp60.000.000.000 (sixty billion rupiahs), Article 64 paragraph (2) is in the form of imprisonment for a maximum of 5 (five) years or a maximum fine of Rp50.000.000.000 (five billion rupiah).

Article 65 of the PDP Bill regulates additional penalties. Additional penalties are penalties that can only be imposed together with the main punishment. Article 65 stipulates that in addition to being sentenced to punishment as referred to in Article 61 to Article 64 against individual defendants, additional penalties may also be imposed in the form of confiscation of profits and/or assets obtained or proceeds from criminal acts and payment of compensation. Additional penalties are also intended for corporate actors, in Article 66 paragraph (4), namely, (1) confiscation of profits and/or assets obtained or proceeds from criminal acts; (2) freezing of all or part of the Corporation's business; (3) permanent prohibition on certain actions; (4) closure of all or part of the place of business and/or activities of the Corporation; (5) carry out obligations that have been neglected; and f. compensation payment.

Criminal provisions for corporations have different rules from crimes committed by individuals. In the event that the criminal acts as referred to in Article 61 to Article 64 are committed by the Corporation, the punishment may be imposed on the management, control holder, order giver, beneficial owner, and/or the Corporation. The only punishment that can be imposed on the Corporation is a fine. (3) The fine imposed on the Corporation is a maximum of 3 (three) times the maximum penalty imposed. Thus, against corporations, the principal punishment imposed is a fine, not a prison sentence.

CONCLUSION

Research on criminal threats in the bill on the protection of personal data in Indonesia shows that there are 7 (seven) acts of legal subjects that can be subject to criminal sanctions. The PDP Bill only regulates actions that are active/deliberately committed, not yet stipulates actions due to someone's negligence. Criminal threats for perpetrators are alternative, namely the main punishment can be in the form of imprisonment or a fine. Imprisonment for personal data infringement does not have a special minimum penalty, the main punishment in the form of imprisonment for each act has a maximum difference in the punishment that can be imposed. In addition to the main punishment in the PDP Bill, it also regulates additional penalties. These additional penalties, of course, deviate from the provisions stipulated in the general rules in book I of the Criminal Code. Criminal threats in the PDP Bill can later be imposed on any person, namely individuals or corporations who commit violations as referred to in Articles 61 to 64 of the PDP Bill. Specifically, corporate actors can only be sentenced to fines and cannot

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

be sentenced to imprisonment. The fine imposed on the Corporation is a maximum of 3 (three) times the maximum penalty imposed.

ACKNOWLEDGEMENTS

The authors are grateful to the heads of faculties, universities, and lecturers at the Faculty of Law, Universitas Singaperbangsa Karawang. interesting discussions as well as input and advice from experts provide broad insight so that this paper can be completed properly and on time. The author apologizes if in this paper there are many shortcomings both in substance and in delivery.

REFERENCES

Arief, Barda Nawawi. (1996). *Bunga Rampai Kebijakan Hukum Pidana*. Citra aditia Bakti. Bandung

Arief, Barda Nawawi. (2010). Kebijakan Legislatif Dalam Penanggulangan Kejahatan Dengan Pidana Penjara. Yogyakarta: Genta Publishing.

Chazawi, Adami. (2011). *Pelajaran Hukum Pidana 1: Stelsel Pidana, Tindak Pidana, Teori-teori Pemidanan dan Batas Berlakunya Hukum Pidana*. Jakarta: Rajawali Pers.

Givens, David. (2009). *Crime Signals; How to Spot a Criminal Before You Become a Victim,* New York : ST. Martin's Griffins

Hamzah, Andi. (1986). *Sistem Pidana dan Pemidanaan di Indonesia: dari rettribusi ke reformasi.* Pradnya Paramita, Jakarta

Lamintang, P.A.F dan Theo Lamintang. (2010). *Hukum Penitensier Indonesia*. Jakarta: Sinar Grafika.

Marzuki, Peter Mahmud. (2010). *Penelitian Hukum*. Jakarta: Kencana Prenada Media Group.

Najih, M. (2014). *Pengantar Hukum Indonesia*. Malang: Setara Press.

Soekanto, Soerjono dan Sri Mahmudji. (2003). *Penelitian Hukum Normatif, Suatu Tinjauan Singkat.* Jakarta: Raja Grafindo Persada

Sudarto. (1996). *Kapita Selekta Hukum Pidana*. Bandung: Alumni,

Waluyo, Bambang. (2004). *Pidana dan Pemidanaan*, Sinar Grafika, Depok.

Huda, Chairul. Pola Pemberatan Pidana dalam Hukum Pidana Khusus, *Jurnal Hukum* No. 4 Vol. 18 Oktober 2011, hlm. 509

BPHN. (2021). *Script Academic design Constitution about Personal Data Protection*. Retrieved from http://www.bphn. go.id/data/documents/ na protection of private data.pdf

Naskah Akademik Rancangan Undang-Undang Tentang Keamanan dan Ketahanan Siber, DPR RI, 2019.

Cyber Security Challenges in Law Perspective "Challenges of Criminal Law Enforcement in Misuse of Social Media (*Medsos*)"

Rivaldhy N. Muhammad[1], Abdul Mutalib[2], Rahmat Hi. Abdullah[3]
[1]Universitas Terbuka
[2,3]IAIN Ternate
e-mail: rivaldhy@ecampus.ut.ac.id

Article Info

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Article of OSC 2022

Abstract

The threat of cyber crime or cybercrime is a problem that can interfere with human activity, so social media users must be able to protect themselves from the threat of misuse of social media. So, researchers try to do research related to criminal law enforcement in the abuse of social media then affect cyber security awareness among abuser's social media against cybercrime threats. This study aims to find out how criminal law enforcement in the abuse of social media in the threat of cybercrime, and to find out how the formulation of responsibility and criminal provisions as efforts towards cyber security awareness. The concept used in this study is doctrine in criminal law or with the theory of criminal acts, legal responsibility crime and punishment. The method used in this research is normative juridical statutory approach (Statute Approach). The object of this research is understanding regarding criminal law norms by using educational modeling techniques understanding of criminal law in the use of social media against cybercrime threats. The challenge of handling cybercrime or cybercrime in law enforcement Different from other crimes, cyber security requires different thoughts comprehensive way to deal with it. Steps that can be taken to resolve problem; conduct training or some kind of understanding of cybercrime knowledge of law enforcement criminal law perspective.

Keywords*: Law Enforcement, Criminal, Social Media*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

PENDAHULUAN

Dewasa ini penggunaan teknologi semakin berkembang dengan pesat yang antara lain ditandai dengan semakin meingkatnya penggunaan media sosial seperti Facebook, Twitter, Instagram, Whatsapp, MySpace dan lain sejenisnya. Bertumbuhnya jumlah media sosial tersebut mengindikasikan tingginya animo masyarakat dalam penggunaan teknologi. Media sosial adalah salah satu sarana sosial masyarakat melalui internet atau dunia maya (*virtual*). Sama seperti sarana sosialisasi dalam dunia riil, dalam media sosial setiap orang memiliki kebebasan untuk mengekspresikan diri melalui aspirasi, opini, masukan yang disebut *comment* atau komentar dalam media sosial dimaksud, di samping memberikan komentar, para pengguna atau *user's* juga dapat melakukan unggahan atau *uploading* dan melakukan unduhan atau *downloading* atas berbagai gambar maupun suara.

Perkembangan teknologi berbasis internet di Indonesia saat ini dengan sendirinya berdampak pada teknologi informasi seperti media sosial (*medsos*), sehinggah memengaruhi pemikiran dan prilaku masyarakat serta peradaban secara global. Dampak perkembangan teknologi informasi yang memengaruhi dan mampu mengubah hampir setiap aspek kehidupan manusia ini, selain memberikan kontribusi positif juga berdampak negatif.

Dari sisi positif, terknologi infomasi meberikan kontribusi bagi peningkatan kesejahteraan masyarakat, kemajuan sebuah peradaban manusia, sementara dari sisi negatifnya juga, menjadi sebuah sarana perbuatan melawan hukum. Dengan kata lain dampak negatif dari teknologi informasi adalah kemudahan dan kenyamanan layanan internet dalam ber*medsos* itu, dalam keadaan mendesak keamanan dunia maya atau ada ancaman terhadap keamanan dunia maya atau dengan istilah lain *cyber-security*. Yakni ada ancaman yang sangat serius dan merisaukan.

Perkembangan dan kemajuan informasi seperti media sosial di samping memberikan kemaslahatan terhadap masyarakat dan di sisi lain juga menimbulkan kekhawatiran yang menyimpang dari tujuan sebenaranya, karena melihat kenyataan bahwa tingkat kejahatan di dunia maya atau *cybercrime* sudah mencapai tahapan memprihatinkan.

Ancaman terhadap *cyber-security* bahwa terjadinya kejahatan dunia maya atau *cybercrime* merupakan masalah yang dapat mengganggu aktivitas manusia sehingga pengguna media sosial harus mampu melindungi diri dari ancaman penyalahgunaan media sosial tersebut. Maka, pengamanan sistem informasi berbasis internet perlu diperhatikan karena jaringan inforamsi yang bersifat publik dan global tersebut sangat rentan dari berbagai bentuk kejahatan.

Untuk itu, penelitian ini terkait penegakan hukum pidana dalam penyalahgunaan media sosial (*medsos*) yang kemudian memengaruhi kesadaran *cyber security* pada kalangan pelaku penyalahgunaan *medsos* terhadap ancaman *cybercrime*. Hal tersebut juga berkaitan dengan berbagai aspek yang memengaruhi penegakan hukum, di antaranya masalah regulasi di bidang teknologi informasi dan aspek lainnya yaitu kemampuan penegakan hukum, kesadaran hukum masyarakat dan sarana prasarana yang mendukung penegakan hukum bidang teknologi informasi. Sebagaimana dengan tema "Cyber Security Challenges in Law Perspective" dan Berdasarkan uraian tersebut di atas maka kami tertarik untuk menulis mengenai bagaimana penegakan hukum pidana dalam penyalahgunaan media sosial dalam ancaman *cybercrime*, dan bagaimana formulasi pertanggung jawaban dan ketentuan pidana sebagai upaya terhadap kesadaran *cyber security*.

METODOLOGI

Berdasarkan permasalahan yang penulis teliti, penulis menggunakan metode penelitian hukum normatif. Penelitian hukum normatif ini berdasarkan bahan-bahan hukum dari beberapa literatur yang merupakan proses mendapatkan prinsip hukum, aturan hukum begitu juga dengan doktrin-doktrin demi mengetahui isu-isu hukum yang tengah dihadapi. Penulis

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

menggunakan pendekatan perundang-undangan (*statue approach*) di mana objek yang dijadikan penelitian berkaitan dengan peraturan perundang-undangan khususnya pada pengaturan hukum mengenai penyalahgunaan media sosial. Teknik yang penulis gunakan dalam penelusuran bahan hukum berupa kepustakaan (*library research*). Literatur-literatur yang dijadikan bahan rujukan dalam mengkaji permasalahan yang penulis angkat. Literatur tersebut baik dari buku, jurnal, serta internet yang telah dipilih terlebih dahulu, yang nantinya diharapkan dapat membantu menjadi bahan untuk menemukan titik cerah dalam menghadapi permasalahan yang hendak diangkat. Sedangkan untuk teknik analisis yang digunakan dalam penulisan ini menggunakan analisis kualitatif dengan penulisan secara narasi yang kemudian memuat kesimpulan.

HASIL DAN PEMBAHASAN

Penegakan Hukum Pidana terhadap Penyalahgunaan Media Sosial

Raharjo menyampaikan bahwa penegakan hukum merupakan proses untuk ide-ide badan pembuat undang-undang yang diformulasikan dalam kaidah hukum menjadi kebenaran yang hendak ikut memutuskan bagaimana penegakan hukum itu diupayakan (Raharjo, 2009). Penegakan hukum memiliki fungsi sebagai pertahanan kepentingan manusia supaya terlindungi di mana hukum itu harus diselenggarakan. Penerapan hukum dapat berlangsung secara baik dan aman namun dapat timbul juga adanya pelanggaran hukum. Oleh karena itu, dalam hal itu pula hukum yang suda dilanggar harus ditegakkan. Perlunya peranan yang ideal dalam penegakan hukum yang tidak hanya bermula dari diri sendiri namun juga datang dari pihak-pihak lain seperti aparat penegak hukum. Ruang lingkup penegak hukum yaitu meliputi mereka yang secara langsung dan tidak langsung menekuni aspek penegakan hukum seperti hakim, jaksa, polisi, advokat dan pemasyarakatan (Soekanto, 1984).

Penegakan hukumyang dilakukan dalam upaya menindaklanjuti tindak pidana penyalahgunaan media sosial dapat ditempuh menggunakan du acara yaitu penegakan secara represif dan penegakan secara preventif. Penegakan secara represif yaitu melalui penerapan hukum pidana yang dititikberatkan atas sifat pemberantasan setelah kejahatan itu berlangsung dengan cara melakukan penyelidikan kemudian melakukan penindakan terhadap pelaku serta melakukan penyidikan guna membuat laporan hasil berkas perkara. Penegakan secara preventif yang dapat dilakukan dengan memberikan sosialisasi atau penyuluhan kepada masyarakat mengenai dampak dari penyalahgunaan media sosial.

Dalam ketentuan hukum positif di Indonesia dari beberapa macam sanksi yang ada, sanksi yang paling sering digunakan adalah sanksi pidana, dalam memutuskan putusan terhadap seseorang yang dikatakan bersalah melakukan perbuatan pidana maupun tindakan melawan hukum (Chazawi, 2013). Sanksi pidana adalah suatu hukuman sebab akibat, di mana sebab merupakan kasus dan akibat tentu mendapat sanksi baik kurungan atau sanksi berbeda dari pihak berwenang. Sanksi pidana diancam atau dijatuhkan kepada pelaku tindak pidana yang berdampak negative bagi kepentingan hukum (Suhariyono AR, 2009).

Lumrahnya sanksi pidana digunakan sebagai alat pengikat agar seseorang memenuhi norma-norma yang berlaku. Banyak orang menganggap bahwa seseorang yang dikenakan sanksi pidana akan merasa jera karena sanksi dalam hukum pidana jauh lebih kejam daripada sanksi hukum lain. Maka dalam hal ini sesuai dengan doktrin yang berkembang dalam hukum pidana, bahwa sanksi pidana mempunyai tujuan *retributive* atau dapat disebutkan sebagai suatu langkah pencegahan terhadap perilaku-perilaku yang melanggar norma-norma hukum yang sah. Namun ada pula beberapa ahli yang berpandangan berbeda, bahwa hukum pidana tidak membentuk norma baru melainkan mempertegas sanksi semata-mata sebagai ancaman pidana (Marlina, 2009).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Sanksi merupakan suatu akibat yang timbul karena akibat dari adanya pengingkaran kepada suatu ketentuan hukum di mana pelanggaran ini dapat dibuat oleh setiap orang. Berkaitan dengan penjatuhan sanksi pidana bagi pelaku penyalahgunaan media sosial dapat dilihat dari beberapa peraturan yang mengatur diantaranya yang tertuang dalam KUHP. Selain itu, berkaitan dengan penyalahgunaan media sosial juga dapat diancamkan bahwa dijatuhkan sanksi pidana berdasarkan ketentuan UndangUndang Nomor 19 Tahun 2016 tentang Perubahan Atas Undang-Undang Nomor 11 Tahun 2008 tentang Informasi Dan Transaksi Elektronik (selanjutnya disebutkan Undang-Undang ITE). Adapun penegakan hukum berupa penetapan sanksi pidana tersebut dapat diputuskan melalui proses persidangan dengan mengikuti ketentuan dan aturan yang berlaku baik dalam KUHP maupun dalam ketentuan Undang-Undang ITE.

Terhadap ketentuan KUHP dan Undang-Undang ITE tersebut, dalam konteks penegakan hukum pidana maka yang dimaksudka adalah bagian dari mekanisme penegakan sanksi pidana sehingga harus dimaknai sebagai bagian dari pemidanaan. Dalam hal pemidanaan yang diantaranya dapat dimaknai sebagai pemberian hukuman, mestinya direncanakan dalam beberapa tahapan, yaitu:

1. Tahap penetapan pidana oleh pembuat undang-undang.
2. Tahap pemberian pidana oleh badan yang berwenang.
3. Tahap pelaksanaan pidana oleh instansi pelaksana yang berwenang.

Tahapan pertama sering juga disebut tahap pemberian pidana “in abstracto”, sedangkan tahap kedua dan ketiga disebut tahap pemberian pidana “in concreto”. Dari proses mekanisme penegakan hukum pidana, maka ketiga tahapan tersebut diharapkan merupakan suatu jalinan mata rantai yang saling berkaitan dalam satu kebulatan system (Muladi dan Barda Nawawi, 1992). Pada tahap *in abstracto* ini, pembuat undangundang telah menetapkan sejumlah ketentuan hukum yang mengatur mengenai ancaman pidana bagi sejumlah pelaku tindak pidana yang termasuk dalam tindak pidana penyalahgunaan media sosial.

Pengaturan tentang tindak pidana penyalahgunaan media sosial ini awalnya telah diatur dalam KUHP namun tidak dirincikan secara jelas, kemudian disahkan Undang-Undang ITE yang di dalam bya mengatur sanksi pidana terhadap penyalahgunaan media sosial lebih rinci dan jelas. Pengaturan dalam Undang-Undang ITE ini sesungguhnya pelaksanaan dari asas *lex specialis derogate legi generali* di mana dalam hal ini Undang-Undang ITE memiliki sifat khusus dalam mengatur tindak pidana atau kejahatan yang berkaitan dengan penyalahgunaan media sosial. Sehingga dalam penerapan hukum penegak hukum menggunakan Undang-Undang ITE untuk menangani kasus penyalahgunaan media sosial. Jika dicermati perbuatan atau tindakan yang dapat dikategorikan sebagai penyalahgunaan media sosial sangatlah beragam. Dalam KUHP maupun Undang-Undang ITE, perbuatan yang sering dijerat sebagai penyalahgunaan media sosial diantaranya perbuatan yang bentuknya:

1. Penghinaan
2. Pencemaran nama baik
3. Penistaan
4. Perbuatan tidak menyenangkan
5. Provokasi
6. Menghasut
7. Menyebarkan berita bohong
8. Pornografi dan Pornoaksi

Bentuk-bentuk perbuatan tersebut tidak semuanya dapat dilakukan penegakan hukum dengan maksud penegakan hukum pidana. Artinya bahwa tidak semua bentuk tindak pidana tersebut terhadap pelakunya yang melakukan kejahatan dapat dilakukan penuntutan di depan

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

pengadilan. Hal tersebut dapat terjadi disebabkan karena hukum atau Undang-Undang itu sendiri. Misalnya dalam Undang-Undang ITE terhadap bentuk kejahatan yang disebutkan di atas, sebagiannya ditentukan sebagai delik aduan sehingga diperlukan adanya pengaduan terlebih dahulu agar tindakan atau perbuatan tersebut dapat diproses secara hukum.

Pertanggungjawaban Pidana terhadap Penyalahgunaan Media Sosial

Hukum pidana memiliki tujuan memberikan keamanan dan mesamaratakan suatu keadilan bagi masyarakat (Suyanto, 2018). Hukum pidana juga memeiliki control suatu perbuatan pidana, karena dalam hukum pidana seseorang yang melakukan kejahatan akan dididik dan diberikan sanksi sesuai dengan perbuatan pidana yang telah ia lakukan hal itu agar seseorang yang melakukan perbuatan pidana itu memiliki perasaan jera untuk tidak berulah yang kedua kalinya, seiring dengan adanya aturan dalam peraturan perundang-undangan dapat memberikan tekanan terhadap masyarakat yang berniat buruk dan ingin berbuat tindak pidana.

Pertanggungjawaban pidana pada hakikatnya mengandung makna pencelaan pembuat atas tindak pidana yang telah dilakukannya. Oleh karena itu, pertanggungjawaban pidana mengandung di dalamnya pencelaan objektif dan pencelaan subjektif. Artinya, secara objektif si pembuat sudah berbuat tindak pidana dan secara subjektif si pembuat patut dipertanggungjawabkan atas tindak pidana yang dilakukannya sehingga ia patut dipidana. Pertanggungjawaban dalam KUHP tidak dicantumkan secara tegas apa yang dimaksud dengan pertanggungjawaban pidana tetapi pertanggungjawaban pidana diatur secara negative yang biasanya menggunakan frasa “tidak dipidana” misalnya dalam Pasal 48, 49, 50, 51 KUHP, “tidak dapat dipertanggungjawabkan” sebagaimana ketentuan Pasal 44 ayat (1) dan (2) KUHP.

Pertanggungjwaban yang diatur dalam hukum pidana adalah berupa dipidana sehingga yang dimaksud dengan pertanggungjawaban pidana adalah syarat-syarat yang digunakan sebagai acuan untuk menjatuhkan pidana kepada seseorang yang melakukan perbuatan pidana. Arti perbuatan pidana yakni suatu perbuatan yang merupakan larangan yang jika dilanggar dapat dikenai sanksi pidana, hal ini karena pada pertanggungjawaban pidana dikatakan “tidak dipidana, jika tidak ada kesalahan (*actus non facit reum nisi mens sit rea*)’.

Pertanggungjawaban merupakan suatu prinsip yang mendasar di dalam hukum pidana, atau yang lebih sering dikenal dengan asas “geen staf zonder schuld” (tiada pidana tanpa kesalahan). Tetapi, apabila pertanggungjawaban pidana tanpa adanya kesalahan diri si pelaku tindak pidana maka disebut dengan leer van het materiele feit. Sedangkan dalam KUHPidana sendiri memberikan sebuah penjelasan mengenai apa yang dimaksud dengan “geen straf zonder schuld”, akan tetapi asas ini dapat dikatakan sebagai asas yang tidak tertulis dan berlaku di Indonesia. Oleh karena itu, dalam sebuah pertanggungjawaban pidana terdapat dua hal yang harus diperhatikan, yakni tidak pidana (daad strafrecht), pelaku tindak pidana (dader strafrecht) (Roni Wiyanto, 2012).

Mengenai pertanggungjawaban pidana bagi pelaku tindak pidana penyalahgunaan media sosial telah diatur dalam peraturan perundang-undangan di Indonesia baik dalam KUHP maupun dalam undang-undang secara khusus diantaranya Undang-Undang ITE. Sebagaimana yang telah disebut dalam pembahasan sebelumnya, bentuk-bentuktindakan atau perbuatan pidana yang berkaitan dengan penyalahgunaan media sosial sangat beragam baik dari sisi motif maupun perbuatan dan aspek pertanggungjawabannya. Salah satu bentuk dari sekian contoh perbuatan pidana yang dilakukan dengan penyalahgunaan media sosial tersebut dalam pembahasan ini akan penulis contohkan misalnya perbuatan yang dilakukan dengan menyebarluaskan konten pronografi dan pornoaksi.

Berdasarkan ketentuan KUHP yang merupakan salah satu peraturan yang mengatur tentang pornografi, disebutkan pada Pasal 282 KUHP jika pornografi termasuk dalam delik

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

kesusilaan. Selain itu Pasal 282 KUHP juga terkandung rumusanrumusan yang dapat dijadikan acuan dalam pertanggungjawaban pidananya, yakni:

1. Menyiarkan;
2. Mempertunjukkan atau menempelkan di muka umum, tulisan, gambaran atau benda, yang telah diketahui isinya dan yang melanggar kesusilaan;
3. Memasukannya ke dalam negeri, meneruskannya, mengeluarkannya keluar negeri; atau
4. Menjadikan hal tersebut sebagai pencarian atau kebiasaan.

Meskipun telah diatur dalam KUHP, namun prakteknya dirasakan masih cukup sulit untuk mengatasi suatu tindak pidana pornografi sebagai bentuk penyalahgunaan media sosial. Hal ini disebabkan pasal-pasal KUHP yang mengatur tentang pornografi dalam memberikan pengertian maupun penafsiran mengenai pornografi masih dianggap multitafsir oleh beberapa orang, permasalahan ini terjadi tentunya karena masyarakat masih tabu dalam memahami tindak pidana pornografi sebagai salah satu bentuk perbuatan penyalahgunaan media sosial (Djubaedah, 2016).

KUHP juga mengatur mengenai jenis sanksi pidana dalam delik kesusilaan yang dilakukan dengan menyalahgunakan media sosial, yaitu pidana pokok. Arti pidana pokok yakni kurungan, penjara, serta denda. Jika seseorang melakukan kejahatan dimaksud maka dapat dikenakan pidana penjara, di mana hingga empat (4) bulan sampai dengan dua belas (12) bulan atau satu (1) tahun, sedangkan untuk dendanya sekitar Rp4.500,00 hingga Rp75.000,00-. Sementara jika dilakukan merupakan pelanggaran kesusilaan, maka dapat dikenakan pidana penjara paling tidak tiga (3) hari hingga tiga (3) bulan serta denda sebaganya Rp225,00- hingga Rp4.500,00. Selain ketentuan KUHP di atas, salah satu undang-undang yang mengatur tentang konten pornografi juga telah diatur secara khusus dalam Undang-Undang Pornografi, yang ketentuan pidananya diatur pada Bab VII Pasal 29 hingga Pasal 38. Jika dilihat sekilas ketentuan-ketentuan pidana yang diatur dalam UU Pornografi, dapat juga dijadikan dasar dalam memidana atau meminta pertanggungjawaban pidana pelaku penyalahgunaan media sosial berupa menyebarluaskan konten porno melalu saran media sosial apalagi pelaku dimaksud adalah pemeran dalam konten pornografi tersebut. Termasuk juga diantaranya perbuatan mempertunjukkan, menyiarkan serta mempertontonkannya di media sosial. Karena dalam Pasal 29, Pasal 30, Pasal 34, dan Pasal 36, suatu perbuatan dapat dikategorikan sebagai kejahatan pornografi jika memiliki unsur:

1. Pasal 29: memproduksi, membuat, memperbanyak, menggandakan, menyebarluaskan, menyiarkan, mengimpor, mengekspor, menawarkan, memperjualbelikan, menyewakan, atau menyediakan pornografi;
2. Pasal 30: menyediakan jasa pornografi;
3. Pasal 34: menjadi objek atau model yang mengandung muatan pornografi;
4. Pasal 36: mempertonotonkan diri atau orang lain dalam pertunjukkan suatu di muka umum yang menggambarkan ketelanjangan, eksploitasi sosial, persenggamaan atau yang bermuatan pornografi.

Berdasarkan ketentuan-ketentuan di atas, bagi beberapa kalangan masyarakat masih dianggap kurangnya penjelasan mengenai tata cara menyiarkan, mempertontonkan, maupun menyalahgunakan media sosial seperti apa yang dapat dikatakan sebagai sebuah tindak pidana, namun jika dilihat dari pengertian pornografi itu sendiri dikatakan jika sarananya merupakan "…melalui berbagai bentuk media komunikasi dan/atau pertunjukn di muka umu…", oleh sebab itu dapat disimpulkan jika media komunikasi yang bisa dijadikan wadah untuk menyebarkan konten pornografi baik berupa video ataupun foto dan diantaranya dapat berupa media sosial.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Selanjutnya dilihat dari UU ITE pada Pasal 45 ayat (1) dijelaskan bahwa “setiap orang yang memenuhi unsur sebagaimana dimaksud dalam Pasal 27 ayat (1), ayat (2), ayat (3), atau ayat (4) dipidana dengan pidana pejara paling lama enam (6) tahun dan/atau denda paling banyak satu milyar rupiah. Maka dengan dasar Pasal 27 ayat (1), “suatu perbuatan dapat dikatakan sebagai tindak pidana apabila dalam perbuatan tersebut terdapat unsur-unsur sebagai berikut: (1) unsur subjektif (berupa kesalahan yang dilakukan dengan sengaja), (2) unsur onjektif (melakukan perbuatan yang melawan hukum berupa mendistribusikan, mentransmisikan dan membuat dapat diaksesnya), (3) serta objek (berupa dokumen elektronik maupun informasi elektronik yang berisikan muatan melanggar kesusilaan)” (Adami Chazawi, 2011).

Sesuai dengan ketentuan-ketentuan dan sekalian penjelasan sebelumnya maka ketentuan Pasal 27 ayat (1) Undang-Undang ITE bahwa seseorang yang menyebarkan konen pornografi melalui media sosial dapat dikategorikan sebagai perbuatan pidana “informasi dan transaksi elektronik”. Hal ini dikarenakan subjek perbuatannya dilakukan dengan sengaja yang bertujuan untuk mendapatkan pendapatan berupa uang maupun peningkatan jumlah pengikut (*follower*) dalam media sosial. Sedangkan untuk objek dalam perbuatan pidananya dapat berupa dokumen elektronik maupun informasi elektronik. Kemudian jika dilihat berdasarkan karakteristik larangannya atau kepentingan hukum yang ingin dilindungi, maka dapat dikategorikan sebagai suatu tindak pidana kesusilaan. Maka suatu kegiatan berupa menyalurkan, membagikan maupun membuat diaksesnya sebuah dokumen elektronik serta informasi elektronik dapat dikatakan sebagai sebuah perbuatan yang melawan hukum jika dalam kegiatannya tersebut mengandung unsur yang melanggar kesusilaan sehingga dapat dikategorikan sebagai perbuatan pidana dalam bidang “infomasi dan transaksi elektronik”. Untuk pertanggungjawaban pidana bagi pelaku yang meyalahgunakan media sosial sebagai alat untuk menyebarluaskan konten pornografi adalah dapat dipidana penjara minimum khusus antara enam (6) bulan hingga dua (2) tahun, sedangkan maksimum khusus antara enam (6) hingga lima belas (15) tahun serta dipidana denda minimum khusus sekitar Rp250.000.000,00- hingga Rp. 1 milyar, sedangkan maksimum khusus sekitar Rp. 3 milyar hingga Rp. 7 milyar. Namun mengenai lamanya hukuman bagi seorang narapidana atau seberapa banyak mereka dapat dikenakan denda bukan merupakan sebuah jaminan bagi pelaku kejahatan penyalahgunaan sosial untuk tidak mengulangi perbuatannya kembali setelah menyelesaikan hukumannya. Oleh karena itu, menurut penulis undang-undang yang sudah ada saat ini dirasa masih kurang mengikat pelaku kejahatan penyalahgunaan media sosial sehingga mengakibatkan tidak adanya jaminann bahwa kejahatan dalam penyalahgunaan media sosial akan berkurang di masa mendatang.

Ancaman Pidana terhadap Penyalahgunaan Media Sosial

Sejalan dengan penggunaan media sosial, hukum pidana berlaku khususnya terkait dengan penyalahgunaan media sosial misalnya pencemaran nama baik atau halhal pidana terkait lainnya yang diakibatkan dari penyalahgunaan media sosial. Menurut Eddy OS, fungsi umum hukum pidana adalah untuk menjaga ketertiban umum, sedangkan fungsi khusus hukum pidana selain untuk melindungi kepentingan hukum juga memberika keabsahan bagi negara dalam rangka menjalankan fungsinya melindungi kepentingan hukum (Eddy OS, 2014). Ketika seorang melakukan tindak pidana, maka yang bersangkutan harus bertanggungjawab akan perbuatannya itu. Pertanggungjawaban pidana diartikan sebagai suatu kewajiban untuk membayar pembalasan yang akan diterima pelaku dari seseorang yang telah dirugikan (Romli Atmasasmita, 2000).

Dalam KUHP, salah satu bentuk tindak pidana yang dilakukan dengan penyalahgunaan media sosial adalah pencemaran nama baik yang diistilahkan sebagai penghinaan terhadap

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

seseorang, terdapat dalam Bab XVI, Buku II KUHP khususnya Pasal 310 ayat (1) dan (2), Pasal 311 ayat (1) dan Pasal 318 ayat (1) KUHP. Penghinaan itu harus dilakukan dengan cara menuduh seseorang telah melakukan perbuatan yang tertentu dengan maksud itu akan tersiar (diketahui orang banyak) (R.Soesilo, 1995). Dari pendapat tersebut dapat disimpulkan bahwa unsur penting dari penghinaan yaitu “dengan cara menuduh” dan “agar berita itu tersiar”.

Arti kata menuduh dapat diartikan membeberkan cerita yang tidak benar dengan cara menyiarkan baik secara lisan maupun tulisan, Ketika kita berbicara secara tertulis maka dapat dibagi lagi menjadi tertulis di atas kertas atau teertulis di dunia maya (dunia virtual). R. Soesilo menjelaskan yang dimaksud dengan “menghinaa” yaitu “menyerang kehormatan dan nama baik seseorang”. “Kehormatan” yang diserang tersebut hanya mengenai kehormatan tentang “nama baik”, bukan “kehormatan” dalam lapangan seksual. Berdasarkan penjelasan tersebut maka dapat disimpulkan bahwa kata menghina disini mempunyai pengertian yang sangat luas. Bahkan kata “menghina” itu dapat pula merujuk pada pengupload-an atau mengunduh gambar orang lain dengan cara diedit secara tidak senonoh atau asusila.

Apabila dikaitkan dengan penggunaan media sosial, maka pasal daklam KUHP dimaksud dapat disandungkan dengan beberapa pasal dalam Undang-Undang ITE yangmengaitkan perbuatan-perbuatan terlarang dalam informasi dan transaksi elektronik yang apabila dilanggar akan dikenakan sanksi pidana atau ancaman pidananya. Perbuatanperbuatan tersebut yang dilarang tersebut adalah perbuatan yang merugikan orang lain antara lain menyangkut pencemaran nama baik dan penyebaran rasa kebencian atau isu sara khususnya Pasal 27 ayat (3) Undang-Undang ITE, Pasal 28 Undang-Undang ITE serta Pasal 36 Undang-Undang ITE. Selain pencemaran nama baik dan penyebaran rasa kebencian atau isu SARA dan bentuk-bentuk pebuatan lainnya yang telah disebut sebelumnya tersebut, mestinya setiap orang harus memahami dengan baik konsekuensi hukum dari penggunaan media sosial sehingga tidak disalahgunakan dan akhirnya diancam dengan sanksi pidana.

Dalam konteks penggunaan media sosial, konsekuensi dimaksud diantaranya Pertama, berbagai tulisan, gambar atau apapun yang diunggah (*upload*) dalam media sosial atau dunia virtual tersebut dapat dijadikan alat bukti. Hal ini sebagaimana tercantum dalam Pasal 5 Undang-Undang ITE. Seperti yang diketahui bila berbicara alat bukti, maka berdasarkan Pasal 184 KUHAP, alat bukti yang sah adalah; (1) keterangan saksi; (2) keterangan ahli; (3) surat; (4) petunjuk; dan (5) keterangan terdakwa. Dalam perkembangan selanjutnya kini muncullah bukti elektronik pula demikian menciptakan adanya suatu kepastian hukum, karena seperti yang kita ketahui dewasa ini tingkat kebutuhan akan dunia virtual sangat tinggi. Tingkat kebutuhan yang tinggi tersebut bukan saja untuk menghabiskan waktu luang, tetapi juga untuk bekerja dan melakukan banyak transaksi lainnya.

Kedua, ada batasan terkait kebebasan berpendapat di mana suatu aktivitas dalam media sosial dapat dikategorikan pelanggaran. Adapun berbagai jenis pelanggaran yang diatur dalam Undang-Undang ITE dapat ditemui dalam berbagai pasal antara lain Pasal 27 sampai Pasal 37. Salah satu pasal yang membahas mengenai pencemaran nama baik dan penghinaan adalah Pasal 28 Undang-Undang ITE yang menentukan: “setiap orang dengan sengaja dan tanpa hak menyebarkan berita bohong dan menyesatkan yang mengakibatkan kerugian konsumen dalam transaksi elektronik”. Apabila dicermati ketentuan Pasal 28 Undang-Undang ITE maka dapat diambil kesimpulan bahwa pasal ini mengatur mengenai kerugian yang akan diterima oleh produsen. Dalam Undang-Undang ITE dibahas mengenai sanksi yang diberikan seputar persoalan pelanggaran-pelanggaran yang terkait dengan pencemaran nama baik, penghinaan maupun pelanggaran terkait lainnya, sebagaimana diatur dalam Pasal 45 sampai dengan Pasal 52 Undang-Undang ITE menyangkut Ketentuan Pidana. Apabila dilihat Pasal 45 Undang-Undang ITE, maka dapat dikatakan bahwa sanksi pidana penjara minimal 6 tahun dan

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

maksimal 12 tahun, sedangkan denda minimal 1 milyar rupiah sampai dengan 2 milyar rupiah. Sanksi pidana lainnya minimal dan maksimalnya dapat berbeda-beda tergantung pelanggaran yang dilakukan. Sedangkan berdasarkan Pasal 27 Undang-Undang ITE dapat diambil kesimpulan bahwa walaupun setiap orang mempunyai kebebasan untuk menulis dan membagikannya di media sosial terutsms kepunyannya sendiri, namun semua itu aada larangan-larangan yang terkait dengan hal tersebut.

SIMPULAN

Berdasarkan uraian-uraian sebelumnya, maka dapat ditarik kesimpulan yakni pertama, bahwa Penegakan hukum yang dilakukan dalam upaya menindaklanjuti tindak pidana penyalahgunaan media sosial dapat ditempuh menggunakan dua cara yaitu penegakan secara represif dan penegakan secara preventif. Penegakan secara represif yaitu melalui penerapan hukum pidana yang dititikberatkan atas sifat pemberantasan setelah kejahatan itu berlangsung dengan cara melakukan penyelidikan kemudian melakukan penindakan terhadap pelaku serta melakukan penyidikan guna membuat laporan hasil berkas perkara. Penegakan secara preventif yang dapat dilakukan dengan memberikan sosialisasi atau penyuluhan kepada masyarakat mengenai dampak dari penyalahgunaan media sosial. Kedua, bahwa pertanggungjawaban pidana bagi pelaku tindak pidana penyalahgunaan media sosial telah diatur dalam peraturan perundangundangan di Indonesia baik dalam KUHP maupun dalam undang-undang secara khusus diantaranya Undang-Undang ITE. Ketiga, baik dalam KUHP maupun Undang-Undang ITE sesungguhnya telah diatur konsekuensi-konsekuensi yang akan didapat jika dalam hal penggunaan media sosial tidak disertai dengan kebijaksanaan penggunaannya. Upaya menjamin akan adanya kepastian hukum terhadap keamanan dalam era perkembangan teknologi yang luar biasa saat ini maka pengaturan sanksi pidana dalam KUHP dan Undang-Undang ITE adalah sebuah keharusan sebagaimana jaminan kepastian hukum itu sendiri.

Atas dasar kesimpulan ini maka terdapat beberapa hal yang dapat penulis rekomendasikan. Pertama, dengan adanya ancaman pidana terhadap penyalahgunaan media sosial dalam KUHP dan Undang-Undang ITE maka terhadap masyarakat disarankan masyarakat umum harus lebih bijak dalam bertindak dan waspada dalam penggunaan media sosial agar dapat terhindar dari ancaman pidana tersebut. Kedua, terhadap aparat penegak hukum diharapkan untuk lebih peduli dan tegas dalam menindaklanjuti penyalahgunaan media sosial sehingga upaya penegakan hukum dapat dilakukan sesuai apa yang sudah ditentukan dalam KUHP dan Undang-Undang ITE maupun dalam ketentuan peraturan perundang-undangan lainnya. Ketiga, sekalipun pengancaman sanksi pidana dalam KUHP dan Undang-Undang ITE serta peraturan perundang-undangan lainnya ditujukan pada upaya menjamin penyampaian pendapat oleh setiap anggota masyarakat terlaksana tanpa adanya nilai-nilai ketertiban yang tercederai, namun ketentuan-ketentuan dimaksud tetap harus selalu dievaluasi agar di sisi lain ketentuan dimaksud menjamin akan adanya kepastian hukum di masyarakat khususnya dalam hal penggunaan media sosial.

DAFTAR PUSTAKA

Chazawi, A. (2013). *Hukum Pidana Positif Penghinaan*, Malang: Media Nusa Creative.

Eddy OS Hiariej. (2014). *Prinsip-Prinsip Hukum Pidana*, Yogyakarta: Cahya Atma Pustaka.

Marlina. (2009). *Peradilan Pidana Anak di Indonesia*, Bandung: Refika Aditama.

Muladi, Barda Nawawi Arif. (1992). *Bunga Rampai Hukum Pidana*, Bandung: Alumni.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

R. Soesilo. (1995). *Kitab Undang-Undang Hukum Pidana (KUHP) Serta KomentarKomentarnya Lengkap Pasal Demi Pasal*, Bogor: Politeia.

Raharjo, S. (2009). *Penegakan Hukum Sebagai Tinjauan Sosiologis*, Yogyakarta: Genta Publishing.

Roni Wiyanto. (2012). *Asas-Asas Hukum Pidana Indonesia*, Bandung: Mandar Maju.

Soekanto, S. (1984). *Pengantar Penelitia Hukum*, Jakarta: UI Press.

Suhariyono, AR. (2009). *Penentuan Sanksi Pidana Dalam Satu Undang-Undang*, Jakarta: Legislasi Indonesia.

Suyanto. (2018). *Pengantar Hukum Pidana (Cet. I)*, Yogyakarta: Deepublish.

Undang-Undang Nomor 1 Tahun 1946 tentang Peraturan Hukum Pidana (KUHP)

Undang-Undang Nomor 11 Tahun 2008 tentang Informasi dan Teknologi Informasi.

Digital Espionage in New Era of Cyber: Political and International Law Perspectives

Syarifurohmat Pratama Santoso[1], Richard Togaranta Ginting[2], Fransiska Timoria Samosir[3]
[1]Indonesian National Armed Forces
[2]Udayana University
[3]Bengkulu University
e-mail: pratamasantoso75@gmail.com

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

In the 21st century cyber era has provided many benefits for people's lives. Almost all the data we have today is stored in digital directories, from short messages to identity cards. However, behind the many benefits for people's lives, there are also negative impacts that always exist behind it. One of the negative impacts is the emergence of foreign espionage techniques that are ready to steal public data. Data is an important thing because it will involve information on the characteristics of a country so that it is directly related to security. Currently, the world's countries are competing to develop their cyber technology which is used for espionage and anti-espionage facilities. In this study, qualitative method techniques will be used by connecting the threads of digital espionage cases that utilize cyber facilities in the world.

***Keywords**: Digital Espionage, Political, International Law*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

Technology is inseparable from developing the power of a country (Santoso, 2021). In the current era of cyber, the digital world has become an inseparable part of the tools used by world spy agencies to carry out espionage actions. Even spy agencies such as the CIA (Central Intelligence Agency), can spend a lot of budgets to invest in cyber security to protect their national interest. Digital data is very important in today's 21st century, not only data of state officials but also public data, in general, is very expensive. Digital data is an information library that can help the government of a country to make policies according to its rationality.

After the information gathering phase, intelligence is required to make a strategic analysis of a problem. Among several important intelligence, outputs are judgment, forecasting, early warning, and problem-solving. Sugirman (2009), states that the characteristics of intelligence analysis are accuracy in giving judgment, sharpness, accuracy in proposing forecasting, and proportionality in formulating early warnings. In this process, the data is very important. In rationality, the smart place to go is the data library, which is now in digital form. the more data obtained, the more accurate the analysis made by the intelligence agency.

Policymaking as a result of digital espionage in the current era has entered a new phase. Government policies will always lead to national interests. The role of politics and international rules that should have been outlined will surely be forgotten to meet the needs of the country. Internet access is a hole that can be easily entered by cyber experts or hackers. This is the reason why several countries in the world have closed their internet access, for example, China and Russia.

RESULTS AND DISCUSSION

Espionage and National Interest

Referring to Das (2008) divides the five main instruments carried out by intelligence in obtaining information, namely (1) Human Intelligence (HUMINT), which is the collection of information through human contact, usually including information on the target name, location, time, the movement and intentions of the target; (2) Signal Intelligence (SIGINT), is the collection of information from the intercept (interception) of electromagnetic emissions, usually from electronic communications; (3) Imagery Intelligence (IMINT), is the collection of information sourced from aerial imaging of a target. Sources of information are usually based on infrared, radar, Moving Target Indicator (MTI), and Laser Radar (LADAR); (4) Measurement and Signature Intelligence (MASINT), is a collection of information that combines data from SIGINT and IMINT to analyze data from various electromagnetic threat spectrums; (5) And the last instrument is Open Source Intelligence (OSINT) which is a collection of data-based information available online. open in various media, such as radio, television, newspapers, the internet, commercial databases, videos, pictures, and various social media.

Of the existing instruments, for exemple SIGINT and OSINT are concepts that take advantage of the cyber world. A small example of the use of this world as a means of espionage is

1. The alleged use of TikTok as a Chinese spy tool by one of the commissioners of the America Federal Communication Commission.
2. Alleged Chinese hackers hacked the African Union Headquarters.
3. The National Security Agency (NSA) and Government Communications Headquarters (GCHQ) hacked the traffic of information encoded by big companies such as Yahoo, Google, Facebook, and Hotmail from Microsoft.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

4. The data espionage action took the form of wiretapping through sea cables by Australia, Britain, America, and Singapore on the SEA-ME-WE-3 submarine cable that crossed Indonesia.
5. Use of Spyware Virus NSO Group Israel in conducting espionage activities on mobile operating system devices.

The use of cyber in intelligence operations in espionage has become rational and has benefits similar to the HUMINT operation. The use of SIGINT and OSINT will further minimize the incidence of fatalities on the part of friends. These advantages make digital espionage operations the best option for collecting data and information from opponents.

Referring to this digital espionage act, cyber security is an intense and important matter that needs to be protected by the state. The espionage carried out by state official actors and civilian hackers through the cyber world to steal data every day has a fairly high intensity. Every day, referring to the live cyber threat map website, the average cyber attack worldwide is recorded at more than 55,000,000 per day. This data is the basis for the importance of the cyber network security system owned by the state. Especially referring to the fact that currently almost all data owned by the government is archived to computer hardware and has been digitized so that data leakage through cyber attacks is very likely to occur.

In the international world, recognizing the concept of the absence of eternal friends and opponents, everything will only be based on the doctrine of national interests alone. This also applies to the world of international intelligence, national interests will always be above international cooperation, even above traditional allies. An example of this is when Francis and Germany, who are known to be close allies of America in NATO (North Atlantic Treaty Organization) cannot be separated from digital espionage by America. According to a publicly leaked report, the NSA used a collaboration with Forsvarets Efterretningstjeneste, FE (Danish Intelligence Agency) to tap a Danish information network to spy on senior officials in Sweden, Norway, France, and Germany from 2012 to 2014. One of its targets was Angela Markel who was chancellor of Germany at the time. Other German targets targeted by the NSA included the then German Foreign Minister Frank-Walter Steinmeier and former German opposition leader Peer Steinbruck (Wikileaks, 2015).

This act of espionage through digital media is an instinct from the state for efforts to prevent and early detection of all visible and invisible threats. The doctrine of national interest and national security will always be the basis of the state doing things outside the instincts of state life. This effort is used to survive in the world of international politics. In realist thinkers, It can be everything in war, so the best solution is to prevent it from happening.

International Law Challenges and Espionage Through the Cyber World

Today's international spy law can be said to be the most backward compared to others. This is especially the case when it comes to real conflicts between extraterritorial spies and the sovereign interests of states. The ambivalence on this question, however, does not mean that spies exist in international law. Indeed, many rules of international law can be used that relate to spies, but this depends on the nature of the spies and their geographic location. The following sections discuss the legal issues that arise about territorial, extraterritorial and transnational spying. Digital espionage activity will be very difficult to punish due to the geographical position of the actor to the use of gray international law because it involves activities that are difficult to detect.

The crime of digital espionage as in the case study has violated the right of correspondence immunity in Article 27 of the 1961 Vienna Convention on Diplomatic Relations. if the crime of espionage is committed against a head of state as has been done by America, then the act

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

can be categorized as violating the provisions of the Convention on the Prevention and Punishment of Crimes Against Internationally Protected Persons, Including Diplomatic Agents 1973. Referring to the WikiLeaks report in collaboration with The daily Liberation and investigative website Mediapart reported that between 2006 and 2012, the NSA had at least intercepted the conversations of French Presidents Jacques Chirac, Nicolas Sarkozy, and Francois Hollande (Wikileaks, 2015). The President of France as Head of State has immunity rights according to diplomatic law, one of which is the right to freedom of communication. The NSA as the United States state intelligence agency that has intercepted the conversation of the French President is not justified under diplomatic law, besides that the Head of State is also a person protected under international law as stated in the Convention on the Prevention and Punishment of Crimes against Internationally Protected Persons, including Diplomatic Agents 1973. Furthermore, it was further explained that eavesdropping and cyber data theft is one form of crime that has been regulated in international legal instruments, the international legal instrument in question is the 2001 Budapest Convention on Cybercrime, which in Article 3 of the 2001 Budapest Convention on cybercrime regulates the definition of wiretapping as Illegal interception.

Espionage in the global world seems to be a natural thing to do by the state even though it is prohibited. International rules have been made to refer to digital espionage, however, this will return to the country's political pattern in the global world. A clear example is the case of America's wiretapping of several European countries, one of which is Germany and Francis who are close allies in NATO. Even though this has violated the protocol, because the two countries have had good relations for a long time, it seems as if no sanctions have been given to America.

CONCLUSION

Politics and International Law have always had a correlation with incidents of espionage. It is not uncommon for states to undermine international law in order for their national interests to work. This then directly demands how the state's political game is to minimize conflicts that occur if their espionage activities are uncovered.

Strengthening cyber defense is something that all countries in the world need to ensure the security of their data. Data is very personal and can be misused by other countries if not anticipated and prevented early. Strengthening the cyber power-based Intelligence Service is very much needed in the current 21st century era. State governments as executive institutions compete with each other to get accurate and abundant data about opposing countries in policy making. In this case, the intelligence agency is the leading institutional solution that will prepare it according to the nature of the agency's formation. After making policies as a means to realize the national interest, it is also necessary to conceptualize data security through cyber security.

REFERENCES

Checkpoint. (2022). *Live Cyber Threat Map*. In https://threatmap.checkpoint.com/

Das, S. (2008). *High-level Data Fusion*. Artech House, Inc.

Santoso, Syarifurohmat Pratama. (2021). *Power Negara*. Yogyakarta: Depublish Publisher.

Sugirman, S. (2009). *Intelligence Analysis: A Contemplation*. CSICI.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Wikileaks. (2015). *Espionnage lysée.* In https://wikileaks.org/nsa-france/

Wikileaks. (2015). *NSA Helped CIA Outmanoeuvre Europe on Torture*. In https://wikileaks.org/nsa-germany/

Guarantee of Information and Communication Technology Application Security in Indonesia: (Regulations and Challenges?)

Nurfaika Ishak
Universitas Islam Negeri Alauddin Makassar, Indonesia
e-mail: nurfaika.ishakk@gmail.com

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

In this era of rapid development of science, knowledge, and technology, society is faced with a challenge related to the use of information and communication technology that can be misused by irresponsible parties and can cause harm and loss to others in the form of threats to security stability in cyberspace. This study aims to find out how to guarantee the security protection of information and communication technology applications for Indonesian citizens from the laws and regulations perspective, then how challenges and opportunities can be addressed to overcome the gaps that occur. This research is normative research with a statutory approach. The data collection technique used in this study is a literature study technique collected by reviewing scientific works, journals, laws and regulations, and other related materials related to information and communication technology, and crimes in cyberspace. The results show that the Indonesian government has issued a law on information and electronic transactions. Furthermore, several work teams were also formed under state agencies/institutions that focused on responding to information security issues such as teams under the auspices of the Ministry of Communication and Information; there were also other teams from Indonesian National Police Agency. The challenges faced are related to law enforcement on the regulations that have been set, namely how the substance of the contents in these regulations can accommodate the protection/guarantee of the security of personal information in Indonesia. In addition, this is also influenced by the apparatus's actions and the community's response.

***Keywords**: Security, Information and Communication, Technology, Cyberspace*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

Freedom to express thoughts and freedom of opinion, as well as the right to obtain information through the use and utilisation of information and communication technology, is aimed at advancing public welfare, and educating the nation's life as well as providing a sense of security, justice, and legal certainty for users and administrators of electronic systems. In the life of society, nation and state, rights and freedoms through the use and utilisation of information technology are carried out by taking into account the limitations stipulated by law with the sole purpose of guaranteeing recognition and respect for the rights and freedoms of others and to fulfill the demands imposed by the law. justice by considerations of morality, religious values, security, and public order in a democratic society.

Information technology plays a vital role in trade and national economic growth to realirealisele's welfare; the government needs to support the development of information technology through legal infrastructure and its ration so that the use of information technology is carried out safely to prevent its misuse by taking into account the religious and socio-cultural values of the Indonesian people. In 2013 Indonesia became a victim of wiretapping by Australian intelligence services based on leaked documents from a former member of the United States National Security Agency (NSA), Edward Snowden. The document contains a number several for tapping telephone conversations by Australia, one of which is President Susilo Bambang Yudhoyono and nine people closest to the president's circle (Setyawan, 2016). Cyberspace is also one of the sources of various threats to a country's sovereignty. The threat can come from anyone. Cyberspace can be a thrthreatenry because it can be used to steal information, propaganda, provocation, and attacks on information in various fields such as banking data, military networks, and the national defense system (Setiyawan, 2020).

Cybercrime is a crime that uses information technology and is one form of transnational crime does not recognise borderless, without violence (non-violence), there is no physical contact (no physical contact), and without name characteristics of cybercrime that make cyber-Crime actors tough to track and the criminal elements are challenging to prove, over the limitations of the regulation (Wijaya, 2020). The implementation of law enforcement in cybercrime currently in Indonesia has several weaknesses, namely weakness in legal regulations that have not thoroughly governed the types of cybercrime, weaknesses in enforcement, namely the lack of human resources investigators who understand cybercrime, and the lack of facilities and prelaw enforcement facilities in cybercrime (Bawono, 2019). Cybercrime prevention enencountersany difficulties, one of them in the legal arrangement because the form of cybcybercrimeways experiences the development along with the progress of information technology (Akub, 2018). Cybercrime knows no boundaries (borderless) and the time of the incident because victims and perpetrators are often in different countries. All these actions can be carried out only in front of a computer that has Internet access without fear of being known by other people/eyewitnesses, so this crime is included in Transnational Crime/crimes between countries whose disclosures often involve law enforcement from more than one country (Hartono, 2019).

The increasing use of technology (such as the internet) creates new challenges in protecting personal property, especially personal data, and increasing the practice of collecting, utilising, and disseminating one's personal data (Prastini, 2018). Based on the results of national internet anomaly traffic monitoring from January to December 2018, there were 232,447,974 Cyberattacks on the Indonesian networks (Indirwan, 2020:39). The current condition of the implementation of Cybersecurity and resilience in Indonesia is still scattered in various institutions or stakeholders, each of which has governance guidelines. Various existing laws and regulations, in fact, cannot reach the problems in cyberspace (Indirwan, 2020).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Currently, a new legal regime has been born, known as cyber law or telematics law. Cyber law or cyber law is internationally used for legal terms related to the use of information and communication technology. Likewise, the law of telematics is a manifestation of the convergence of telecommunications law, media law, and informatics law. Other terms that are also used are the law of information technology (law of information technology), the law of cyberspace (virtual world law), and the law of cyberspace. These terms were born considering the activities carried out through a network of computer systems and communication systems both locally and globally (internet) by utilizing computer system-based information technology which is an electronic system that can be seen virtually. Legal problems that are often faced are related to the delivery of information, communication, and/or transactions electronically, especially in terms of evidence and matters related to legal actions carried out through the electronic system.

In 2019, the National Cyber and Crypto Agency (BSSN) reported 290 million cases of cyber attacks. This amount is 25% more than the previous year when cybercrimes caused Indonesia's US$ 34.2 billion in losses. The Covid-19 pandemic, apart from triggering a significant increase in phishing attacks, spam and ransomware malware attacks, has also increased the pressure to establish a well-functioning cybersecurity infrastructure (Anjani, 2021:1).In the case of cyber threats, based on data analysis, The ID-SIRTII traffic monitoring system (Indonesia Security Incident Response Team On Internet Infrastructure) noted that the incidence of attacks in cyberspace in Indonesia reached one million incidents and will tend to increase every day due to unknown system and application weaknesses (Chotimah, 2019). The laws and regulations in the field of information technology in force in Indonesia currently do not accommodate all cybercrimes, so several cybercrimes cannot be overcome, such as data theft through information technology which then demands a ransom of some funds.

In an era of rapid development of science, knowledge, and technology, society is faced with a challenge related to the use of information and communication technology that can be misused by irresponsible parties and can cause harm and loss to others in the form of threats to security stability in the online world. The purpose of this study is to find out how to guarantee the security protection of the use of information and communication technology for Indonesian citizens from a review of laws and regulations and how challenges and opportunities can be addressed to overcome the gaps.

METHODOLOGY

This research is normative research that uses a statutory approach (Irwansyah, 2021:133). An approach that prioritizes legal materials in the form of legislation as an essential reference in conducting research. Analysis of the data used is a qualitative analysis based on material and data related to the topic of discussion. The data collection technique is the collection of primary data/primary legal sources through direct research in the form of data collection on laws and regulations, and secondary data collection used is library research related to the problem being studied, which consists of literature. -literature such as books, journals, reports and internet sites related to the topic of discussion/information technology, communication, and cybercrime.

RESULTS AND DISCUSSION

Information globalisation has placed Indonesia as part of the world's information society, thus requiring the establishment of regulations regarding the management of information and electronic transactions at the national level so that information technology development can be carried out optimally, evenly, and spread to all levels of society to educate the nation's life; the

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

use and utilisation of information technology must continue to be developed in order to maintain, maintain and strengthen national unity and integrity based on laws and regulations for the national interest.

The government facilitates the use of information technology and electronic transactions by protecting the public interest from all kinds of disturbances as a result of the misuse of electronic information and electronic transactions that disrupt public order, as well as preventing the dissemination and use of electronic information and/or electronic documents containing prohibited contents. The government has the authority to terminate access and/or instruct the electronic system operator to terminate access to electronic information and/or electronic documents that have contents that violate the law.

Utilization of information technology, media, and communication has changed both the behaviour of society and human civilization globally. Information and communication technology development has also caused world relations to become borderless and caused significant social, economic, and cultural changes to occur so quickly. Information technology is currently a double-edged sword because in addition to contributing to improving human welfare, progress, and civilization, it is also an effective means of violating the law.

In this regard, the legal world has long since expanded the interpretation of its principles and norms when dealing with intangible material issues, for example, in the case of electricity theft as a criminal act. In reality, cyber activities are no longer straightforward because they are no longer limited by the territory of a country, which can be easily accessed anytime and from anywhere. Losses can occur both to the perpetrator of the transaction and to other people who have never made a transaction, for example the theft of credit card funds through shopping on the Internet. In addition, evidence is a significant factor, considering that electronic information is not only not comprehensively accommodated in the Indonesian procedural law system, but is also very vulnerable to change, intercept, falsification, and sending to various parts of the world as a matter of seconds. Thus, the resulting impact can be so complex and complicated.

The legal basis for regulating cyber security in Indonesia is the Electronic Information and Transactions (ITE) Law Number 11 of 2008 and the revised version of the ITE Law Number 19 of 2016. This law includes rules for several violations, such as distributing illegal content, data protection violations, unauthorised access permission to computer systems to obtain information, and an illegal and unauthorised expropriation or interception of other computer or electronic systems. The ITE Law provides legal protection for electronic system content and electronic transactions. However, this law does not cover important aspects of cybersecurity, such as information and network infrastructure, and human resources with expertise in cybersecurity.

Nationally, there are several problems related to the development of solid cyber-security, including the weak understanding of state administrators on security related to the cyber world which requires restrictions on the use of services whose servers are located abroad and the use of secured systems is required; the absence of adequate legality for handling attacks in the cyber world; governance of cyber-security institutions nationally which is still partial and scattered and the absence of standardized coordination in handling cyber-security problems; our industry is still weak in producing and developing hardware or hardware related to information technology (Ardiyanti, 2014). Cyber law is a multidisciplinary law relating to other branches of science, such as criminal law, civil law, consumer protection, economics, and administration with technological, socio-cultural (ethical) and legal approaches (Ersya, 2017). Cybercrime is a dark side of the advancement of information and communication technology, which brings enormous implications in all areas of life especially closely related to economic crime (Jhon, 2018). Therefore, there are several approaches to maintaining security in

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

cyberspace: legal, technological, social, cultural, and ethical. The legal approach is absolute to overcome security disturbances in the operation of electronic systems because without legal certainty, the problem of using information technology is not optimal.

Several work teams were formed under state agencies/institutions that focused on responding to information security issues such as teams under the auspices of the Ministry of Communications and Information Technology, there were also other teams within the Indonesian National Police working environment. Law enforcement is an important thing in the life of society and the state. POLRI as law enforcers who have the function, duty and authority to realise security and public order, so strict action is needed in law enforcement against cyber crimes.

In addition to investigators of state police officers of the Republic of Indonesia, certain civil servants within the government whose scope of duties and responsibilities are in the field of information technology and electronic transactions are given special authority as investigators as referred to in the Law on Criminal Procedures to carry out investigations of criminal acts in Indonesia. information technology and electronic transactions. Investigations in the field of information technology and electronic transactions are carried out with due observance of the protection of privacy, confidentiality, the smooth running of public services, and the integrity or integrity of data by the provisions of laws and regulations. The criminal procedure law shall carry out search and/or confiscation of electronic systems related to alleged criminal acts in the field of information technology and electronic transactions. In conducting searches and/or confiscations as referred to in paragraph (3), investigators are obliged to maintain the maintenance of the interests of public services.

Civil Servant Investigators are authorized to:

1. receive a report or complaint from someone about a criminal act in the field. information technology and electronic transactions;
2. summon any person or other party to be heard and examined as a suspect or witness in connection with an alleged criminal activity in the field of information technology and electronic transactions;
3. examine the correctness of reports or information relating to criminal acts in the field of information technology and electronic transactions;
4. conduct examinations of persons and/or business entities that are reasonably suspected of committing criminal acts in the field of information technology and electronic transactions;
5. examine tools and/or facilities related to information technology activities suspected of being used to commit criminal acts in the field of information technology and electronic transactions;
6. conduct searches of certain places suspected of being used as places to commit criminal acts in the field of information technology and electronic transactions;
7. carry out sealing and confiscation of tools and/or facilities for information technology activities that are suspected to be used in a manner that deviates from the provisions of laws and regulations;
8. make a data and/or electronic system related to criminal acts in the field of information technology and electronic transactions so that they cannot be accessed;
9. request information contained in the electronic system or information produced by the electronic system to the electronic system operator related to criminal acts in the field of information technology and electronic transactions;
10. request expert assistance required in the investigation of criminal acts in the field of information technology and electronic transactions; and/or

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

11. stop the investigation of criminal acts in the field of information technology and electronic transactions by the provisions of the criminal procedure law.

The threat of punishment for any person who knowingly and without rights distributes and/or transmits and/or makes electronic information and/or electronic documents accessible which contain:

1. Violating decency, shall be punished with imprisonment for a maximum of 6 (six) years and/or a fine of a maximum of Rp1.000.000.000 (one billion rupiahs).
2. Gambling, shall be sentenced to a maximum imprisonment of 6 (six) years and/or a maximum fine of Rp1.000.000.000 (one billion rupiahs).
3. Insult and/or defamation, shall be sentenced to a maximum imprisonment of 4 (four) years and/or a maximum fine of Rp750.000.000 (seven hundred and fifty million rupiah).
4. Extortion and/or threats, shall be punished with imprisonment for a maximum of 6 (six) years and/or a fine of a maximum of Rp1.000.000.000 (one billion rupiahs).

In addition, any person who intentionally and without rights spreads false and misleading news that results in consumer losses in electronic transactions, as well as disseminates information intended to cause hatred or hostility to certain individuals and/or community groups based on ethnicity, religion, race, and between groups (SARA) shall be sentenced to a maximum imprisonment of 6 (six) years and/or a maximum fine of Rp1.000.000.000 (one billion rupiahs). Any person who intentionally and without rights sends electronic information and/or electronic documents containing threats of violence or intimidation aimed at personally, shall be punished with imprisonment for a maximum of 4 (four) years and/or a fine of a maximum of Rp750.000.000 (seven hundred and fifty million rupiahs).

Utilization of information technology and electronic transactions are carried out based on:

1. The principle of legal certainty, the legal basis for the use of Information Technology and Electronic Transactions, and everything that supports its implementation, which has received legal recognition inside and outside the court.
2. Benefits, principles for using Information Technology and Electronic Transactions are sought to support the information process and improve the community’s welfare.
3. Prudence, the principle for the use of Information Technology and Electronic Transactions is strived to support the information process to improve the welfare of the community.
4. In good faith, the principles used by the parties in conducting Electronic Transactions are not intended to intentionally and without rights or against the law cause harm to other parties without the knowledge of the other party.
5. Freedom to choose technology or be technology-neutral. The principle of the use of Information Technology and Electronic Transactions is not focused on using certain technologies so that they can follow developments in the future.

Utilization of information technology and electronic transactions are carried out with the aim of:

1. educating the nation's life as part of the world's information society;
2. develop trade and the national economy to improve the welfare of the community;
3. improve the effectiveness and efficiency of public services;
4. open the broadest possible opportunity for everyone to advance their thinking and abilities in the field of optimal and responsible use and utilization of Information Technology; and
5. provide a sense of security, justice, and legal certainty for users and information technology providers.

Law Number 11 of 2008 concerning Information and Electronic Transactions (UU ITE) is the first law in the field of information technology and electronic transactions as a product of legislation that is very much needed and has become a pioneer in laying the basis for regulations

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

in the field of utilizing information technology and electronic transactions. However, in reality, the implementation journey of the ITE Law has encountered problems. The challenges faced relating to law enforcement on the regulations that have been set, namely how the substance of the contents in these regulations is. Some decisions of the Constitutional Court state that criminal acts of insult and defamation in the field of electronic information and electronic transactions are not merely a general crime, but a complaint offence. The affirmation of the complaint offence is intended to be in line with the principles of legal certainty and a sense of community justice.

The provisions regarding searches, confiscations, arrests, and detentions regulated in the ITE Law create problems for investigators because criminal acts in the field of information technology and electronic transactions are so fast and perpetrators can easily obscure crimes or evidence of a crime. The characteristics of cyberspace virtuality allow illegal content such as information and/or electronic documents that have content that violates decency, gambling, insults or defamation, extortion and/or threats, spreading false and misleading news resulting in consumer losses in electronic transactions, and acts of spreading hatred or hostility based on ethnicity, religion, race, and class, and sending threats of violence or intimidation aimed at personally can be accessed, distributed, transmitted, copied, stored for re-dissemination from anywhere and anytime.

The use of any information through media or electronic systems concerning a person's personal data must be carried out with the consent of the person concerned. For this reason, it is necessary to guarantee the fulfillment of personal protection by requiring each electronic system operator to delete irrelevant electronic information and/or electronic documents under their control at the request of the person concerned based on a court order. In addition, the public can play a role in increasing the use of information technology through the use and operation of electronic systems and electronic transactions by the provisions of the law. The role of the community can be carried out through institutions formed by the community.

CONCLUSION

The results show that the Indonesian government has issued a law on information and electronic transactions. Furthermore, several work teams have been formed under state agencies/institutions that focus on responding to information security issues, such as a team under the auspices of the Ministry of Communication and Information, there are also other teams within the Indonesian National Police working environment. The challenges faced are related to law enforcement on the regulations that have been set, namely how the substance of the contents in these regulations can accommodate the protection/guarantee of information security and technology in Indonesia, which continues to develop. In addition, the government's responsiveness and responsiveness, supported by the ability of human resources, facilities, and infrastructure, is also a factor in the success of guaranteeing the security protection of the use of information and communication technology.

REFERENCES

Ardiyanti, Handrini. (2014). Cyber-Security dan Tantangan Pengembangannya di Indonesia. *Jurnal Politicia*, 5(1), 95-110. https://doi.org/10.22212/jp.v5i1.336

Akub, M Syukri. (2018). Pengaturan Tindak Pidana Mayantara (Cyber Crime) dalam Sistem Hukum Indonesia. *Jurnal Al-Ishlah: Jurnal Ilmiah Hukum*, 21 (2), 85-93 . https://doi.org/10.33096/aijih.v21i2.19

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Bawono, Bambang Tri. (2019). Reformation of Law Enforcement of Cyber Crime in Indonesia. *Jurnal Pembaruan Hukum*, VI(3), 332-349. https://doi.org/10.26532/jph.v6i3.9633

Chotimah, Hidayat Chusnul. (2019). Tata Kelola Keamanan Siber dan Diplomasi Siber Indonesia di Bawah Kelembagaan Badan Siber dan Sandi Negara. *Jurnal Politica,* 10(2), 113-128. https://doi.org/10.22212/jp.v10i2.1447

Ersya, Muhammad Prima. (2017). Permasalahan Hukum dalam Menanggulangi Cyber Crime di Indonesia. *Journal of Moral and Civic Education*, 1(1), 50-62. https://doi.org/10.24036/8851412020171112

Hartono, Bambang., Hapsari, Recca A. (2019). Mutual Legal Assistance pada Pemberantasan Cyber Crime Lintas Yurisdiksi di Indonesia. *Jurnal SASI*, 25(1), 59-71. https://doi.org/10.47268/sasi.v25i1.136

Indirwan, Sarah Safira Aulianisa. (2020). Critical Review of the Urgency of Strengthening the Implementation of Cybersecurity and Resilience in Indonesia. *Lex Scientia Law Review* 4(1), 33-48. https://doi.org/10.15294/lesrev.v4i1.38197

Irwansyah. (2021). *Penelitian Hukum, Pilihan Metode & Praktik Penulisan Artikel*, Edisi Revisi. Mirra Buana Media. Yogyakarta

Jhon, R. M. (2018). Existence of Criminal Law on Dealing Cyber Crime in Indonesia. Indonesian *Journal of Criminal Law Studies,* 3(1), 25-34. https://doi.org/10.15294/ijcls.v3i1.16945

Noor Halimah Anjani. (2021). *Perlindungan Keamanan Siber di Indonesia, CIPS: Center for Indonesian Policy Studies*. Jakarta

Prastini, Endang. (2018). Kebijakan Kriminal Pemerintah terhadap Kejahatan Dunia Maya (Cyber Crime) di Indonesia. *Jurnal Surya Kencana Dua: Dinamika Masalah Hukum dan Keadilan*, 5(2), 594-610. https://doi.org/10.32493/SKD.v5i2.y2018.2341

Republik Indonesia, *Undang-Undang Nomor 11 Tahun 2008 tentang Informasi dan Transaksi Elektronik*

Republik Indonesia, *Undang-Undang Nomor 19 Tahun 2016 tentang Perubahan atas Undang-Undang Nomor 11 Tahun 2008 tentang Informasi dan Transaksi Elektronik*

Setiyawan, Wahyu BM., Churniawan, Erifendi., Faried, Femmy Silaswaty. (2020). Upaya Regulasi Teknologi Informasi Dalam Menghadapi Serangan Siber Guna Menjaga Kedaulatan Negara Kesatuan Republik Indonesia. *Jurnal USM Law Review,* 2(2), 275-295. https://doi.org/10.26623/julr.v3i2.2773

Setyawan, David Putra., Sumari, Arwin Datumaya Wahyudi. (2016). Diplomasi Pertahanan Indonesia dalam Pencapaian CyberSecurity Melalui ASEAN Regional Forum On CyberSecurity Initiative. *Jurnal Penelitian Politik,* 13 (1), 1-13. https://doi.org/10.14203/jpp.v13i1.250

Legal Policy of The Personal Data Protection Bill in Indonesia

Hevi Dwi Oktaviani[1], Muhammad Rusli Arafat[2]
[1,2] Faculty of Law, Universitas Singaperbangsa Karawang, Indonesia
e-mail: hevi.dwi@fh.unsika.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

Indonesia currently does not have comprehensive regulations governing the protection of personal data. This causes a lot of theft or data retrieval without permission which can harm interested parties. Whereas the constitution mandates that everyone has the right to the protection of his personal, family, dignity, and property under his control. However, so far personal data protection has only been limited to provisions on paper. The Personal Data Protection Bill (RUU PDP) has not yet been passed in the House of Representatives (DPR). RUU PDP cannot be postponed any longer because its main purpose is to protect citizens' rights regarding personal data so that they are not used against their wishes or obligations by both the private sector and the government and are increasingly urgent for ratification because it will also regulate supervisory agencies with clear authority and strength. The existence of the RUU PDP is expected to restore the sovereignty of personal data to the public. This paper examines how the legal policy of personal data protection regulations related to its implementation and regulation in the future. The legal policy is a legal direction that determines the direction, form, and content of the law that will be formed by state administrators. To obtain comprehensive results, this research uses a normative juridical method with a law approach, data is collected through literature study and document study. The data was collected through a literature study, then the data was analyzed qualitatively. This paper tries to provide an overview of the legal policy of the personal data protection bill in Indonesia.

***Keywords**: Cyber Security, Legal Policy, Personal Data Protection*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

Interaction through electronic media with digital systems carried out society, time this already penetrate all line sector life, like industry tourism, e-commerce, e-payment, transportation, e-government. Coverage took from the interaction that covers storage, processing, collection, shipping, and production from and to industry or public according to effectiveness and fast (Sinta Dewi, 2015, p.165).

Various activities that have led to digitization it's not completely free from various crimes. Related to that, that moment this often occurs is the appearance of several cases of personal data leakage. Naturally, it is very detrimental and violates the right human rights in the field of personal data protection.

Personal data theft is nothing that can be ignored by someone. Personal data theft could cause enough loss big for somebody or a company. For individuals, the losses caused by the theft of personal data, namely existing crime steal targeted (phishing) accounts or type attack manipulation social (Hermon, 2021).

Case sufficient personal data theft phenomenal that is theft of personal data 533 million Facebook site users. Stolen personal data, namely information name complete, number phone, location, date of birth, Facebook ID, gender, occupation, country of origin, marital status, to e -mail address (Galuh Putri Riyanto, 2021).

Case others that are also troubling society also comes from application service borrow money-based technology information or normally called with loan online (Stella Maris, 2021). Notes other issued by the National Cyber and Crypto Agency, in the report explained that in 2020 there are 2,549 cases of theft information with destination crime and 79,439 accounts whose data was burglarized (Pratiwi Agustin, 2021).

Cases personal data theft the more bloom happens, however not yet there is regulation legislation that comprehensively gives protection to personal data in Indonesia. Product governing law regarding personal data is still separate. Among them, regulation the legislation in question consists of Law Number 19 of 2016 concerning Changes to the Law Number 11 of 2008 concerning Information and Transactions Electronics (UU ITE), Law Number 10 of 1998 concerning Banking (Banking Law), Law Number 23 of 2003 concerning Administration Population (Aminduk Law), Regulations Government Number 71 of 2019 concerning maintenance System and Transaction Electronics, and Regulation of the Minister of Communication and Information Number 20 of 2016 concerning Personal Data Protection.

Implementation regulation legislation the not yet maximum because supervision is conducted by sectoral. That thing is explained in an article written by Erlina and Mery from the Center for Research and Studies Case and Management at The MKRI library entitled " Formulas Legislation Personal Data Protection in Revolution Industry 4.0", the article the confirmed that regulation protection of personal data in Indonesia when this still set by Partial in various type legislation (Erlina and Mery, 2020, p.162).

Personal data protection is very important to every citizen because is part of the right basic. Personal data protection is already mandated in Article 28G paragraph (1) and Article 28H paragraph (4) of the 1945 Constitution of the Republic of Indonesia (UUD 1945). Article 28G paragraph (1) of the 1945 Constitution of the Republic of Indonesia states that everyone has the right to protection self personal, family, honor, dignity, and property the thing below his power, and is entitled to security and protection from threat fright for do or don't do something that is right basic. Article 28H paragraph (4) states that everyone has the right to have right owned by a person and rights owned by it can't be taken over arbitrarily by anyone. Based on provisions in Article 28G paragraph (1) and Article 28H paragraph (4) of the 1945 Constitution of the Republic of Indonesia, the state is obliged to for to do all efforts protection to self

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

somebody good that protection to one 's body and soul, and to what does each one has including data.

Efforts government to make regulations special about personal data protection proved with the emergence of the proposed RUU PDP in 2014 (Christophorus Ristianto, 2019), in the period of the DPR RI year 2019–2024. RUU PDP in in Prolegnas 2022. Discussion of the RUU PDP continues delayed because the DPR and the government haven't reached yet a point meet related with the institutional status authority personal data supervisor (Nikolaus Harbowo and Iqbal Basyari, 2022).

Legal policy according to Mahfud MD in his book entitled Legal Politics in Indonesia has defined as a policy the law that will or has been implemented by the government. Satjipto Rahardjo says that political law has a destination social and legal, so that destination could be beneficial for society. Based on the thing that, then could say that political law regulation legislation must-have benefit for public straight away. Personal data protection is one form of the right that should be obtained by society, as poured in UUD 1945 Article 28 D paragraph (1), namely the right to get protection. The right to get protection is the mandate contained in the constitution.

Legal policy teaches that a product law could form based on what society wants. because of that, the legal policy provides room to holder policy legislation for shape law that can ensure or could give protection to the public about what be right public that.

Understanding other legal policies that are as form policy state administrators who are fundamental in determining direction, shape nor contents than the law that will be formed and about what is made criteria for punishing something. With this, legal policy (Padmo Wahjono, 1986) is related to laws that apply in the future come.

METHODOLOGY

This article uses the method approach juridical normative, that is study of the law carried out with the method researching ingredient references or secondary data as an ingredient base for research with stage search to regulation currently related discussed (Soerjono Soekanto and Sri Mamudji, 2010).

Data used in composing the article this in the form of secondary data obtained through studies bibliography. Secondary data covers ingredient primary and secondary law. Ingredient primary law used is regulation-related legislation with the protection of personal data. Ingredient law secondary obtained from the RUU PDP and the data that has been collected next will be analyzed qualitatively (Denico Dolly, 2021).

RESULTS AND DISCUSSION

Cases data leaks that have occurred in Indonesia since 2019, namely (Oktarina Paramitha Sandy, 2021):

1. Bukalapak

In 2019, a Pakistani hacker under the alias “ Gnosticplayers ” claimed to have hacked a database containing 13 million data belonging to Bukalapak users and sold it on the dark web. The data contains information such as email, phone number, and the user's date of birth. After this data leak case emerged, Bukalapak investigated internally and admitted that there was a data leak. However, Bukalapak claims this data leak has no impact on sensitive information such as usernames, addresses, and financial information.

2. Tokopedia

In early May 2020, Tokopedia experienced a hack that affected the data belonging to 91 million Tokopedia users. This hacking and data leak report was first revealed by Under the

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Breach, an Israeli cybersecurity company. The findings were based on hacker uploads who shared a database of 15 million Tokopedia users on the internet forum, RaidForums. Shortly after the incident was revealed, Tokopedia notified all of its users while starting an investigation and ensuring users' accounts and financial information were not affected by this hack. The data leak case was immediately investigated by the Ministry of Communication and Information. After going through a long process, Tokopedia was finally given a written sanction by the Ministry of Communication and Information.

3. Bhinneka.com

Shortly after the Tokopedia leak case was revealed, in May 2020, as much as 1.2 million personal data of Bhinneka.com consumers was sold along with user data of 9 other companies on RaidForums for US $ 1,200 or equivalent to Rp. 18 million by hackers named ShinyHunters. In response to the news, Bhinneka.com did not explicitly confirm the existence of a data leak on their server. They just say the user's password is safe because it is protected by encryption. As for users' financial information, they don't store it at all. After the data leak case was revealed, Bhinneka.com immediately conducted an internal investigation and coordinated with the National Cyber and Crypto Agency (BSSN). Until now, the results of the investigation of this data leak case are still not available revealed clearly.

4. Voter Data _ Commission Election General (KPU)

In late May 2020, Israeli cybersecurity consultant Under the Breach revealed that the leaked data of 2.3 million Indonesian residents belonging to the KPU was leaked and offered in one of the hacking forums. In the uploaded PDF file, this data contains information such as name, address, Population Identification Number (NIK), Family Card Number, and others. After being traced, the data is voter data in 2013. The KPU RI confirmed that the leaked data was the Permanent Voter List (DPT) in 2013. The KPU confirmed that the DPT data was by existing regulations at that time, where voter data was "open". However, the resolution of this data leak case is still unclear.

5. COVID -19 Data

In June 2020, Raid Forums user " Database Shopping" claimed and sold a database containing data on 230 thousand Indonesian citizens related to Covid-19. The perpetrator said the data was successfully breached on May 20, 2020. However, it did not say where it came from and it was offered on June 18, 2020. Based on the search Cyberthreat. id, sample data offered contains report date, name, nationality, gender, age, telephone, residential address, type of contact, case relationship, risk start date, risk end date, sick start date, outpatient date, outpatient health facilities, date of hospitalization, complaints of illness, date of sampling, type of examination, date of sending samples, date of taking results, final status, date of rapid test, rapid results test, PCR test date, and PCR test results. Not only that but several names have undergone examination. Most of what appears in the sample are data from Bali, some of which are foreign nationals.

6. Creditplus

In early July 2020, Cyble Inc., a cybersecurity company from Atlanta, United States, found 896,170 data belonging to CreditPlus customers for sale on internet forums. A data seller with a “Megadimarus” account (having a credible reputation with GOD status) claims to have a database containing names, email addresses, passwords, physical addresses, telephone numbers, employment data, company data, and family data. Through RaidForums, this Kreditplus customer data began to be offered on June 27, 2020. Then, on July 16, the data was again offered by the ShinyHunters account. Unfortunately, until now there has been no information from KreditPlus and this data leak case just disappeared.

7. Database Police

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

In June 2020, the Founder of the Ethical Community Indonesian hacker, Teguh Aprianto, via his Twitter, revealed the alleged data leak of members of the National Police in an internet forum. He uploaded a screenshot containing the personal information of a member of the police, ranging from a photo of himself, history of position, rank, and others. The Hojatking account claims to have succeeded in breaking into the Polri database on May 31, 2020. Hojatking sold full access to the database for US$ 1,200 (equivalent to Rp. 17 million). Meanwhile, for information on bugs (security loopholes) in the application, it sells for the US $ 2,000 (Rp 28.5 million). Even though it was said to be a hoax, this data leak was reinforced by a video uploaded by the perpetrator of the Polri database breach, which showed how he could enter and access the Polri personnel database like an admin. The database contains data on 14,785 active personnel, 909 personnel outside the Satker, 31 personnel currently in education, 1,594 retired personnel, 515 deceased personnel, 9,081 active positions, and several other data.

8. BPJS Health

In May 2021 a RaidForums user named Kotz sold a database containing personal information of Indonesian residents. The data sold includes NIK KTP, salary, cell phone number, address, and email. Kotz claimed to have obtained the data from the website bpjs-kesehatan.go.id, and would sell the database for 0.15 BTC (equivalent to Rp. 84.3 million or about US$ 6,000). The database consists of 279 million and 20 million of them are equipped with personal photos. Kotz claims the data also contains a list of people who have died.

9. Indonesian Child Protection Commission (KPAI)

In October 2021, a RaidForums user “C77” offered KPAI's proprietary data. It provides sample data to attract buyers. Each data is valued at 8 credits. KPAI has also admitted that it has experienced a data breach that resulted in the exposure of online complaint data on the KPAI website. However, they ensured that the hacking and data theft had no impact on the services on the KPAI website. Judging from the sample data shared, the database is organized in tabular form. CSV contains, among others, identity, name, identity number/KTP, nationality, telephone, cellphone, religion, occupation, education, address, email, place of birth, gender, province, city, and age. The case of the KPAI data leak is being investigated by the Indonesian National Police and there has been no update on the progress of the investigation.

10. Cermati.com

A total of 2.9 million users belonging to the financial service Cermati.com, were also offered on a hacking forum in October 2020. Based on the uploaded sample data, the database belonging to Cermati.com users offered in the form of email addresses, passwords protected by the Bcrypt algorithm, names, home address, telephone, income, bank, tax number, identity number, gender, occupation, company where you work, and biological mother's maiden name.

11. BRI Life Sharia _

In July 2021, data allegedly belonging to 2 million BRI Life insurance customers were offered on a hacking forum by a user named " Recht ". But not long after that the thread he made to offer customer data disappeared. Previously, the Israeli cyber security company, Hudson Rock, had also identified hacks that occurred on several computers belonging to employees of BRI Life and Bank Rakyat Indonesia (BRI). The hack is believed to have allowed the hacker to gain early access to the company. The BRI Life customer data is now being sold on a hacking forum for US$7,000 or the equivalent of Rp100 million. The data seller also attached several data samples which he documented in the form of a 30-minute video measuring 250 GB. The database does not only contain the personal data of 2 million customers. But it also contains 463,000 documents including bank account details, copies of ID cards, results of health checks in a laboratory, and taxpayer data. From the results of the

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

investigation, BRI Life itself has found evidence of hackers infiltrating the BRI Life Syariah system. However, BRI Life claims that the hacked system contained no more than 25,000 thousand individual sharia policyholders, and the data is not related to BRI Life or other BRI Group data.

One element of the country of law is the existence of recognition, protection, and respect for rights and basic human-based on human dignity (Kusniati Retno, 2019, p.80). Related to personal data protection settings, the constitution becomes footing main the settings as has poured in Article 28 G UUD 1945 which states everyone has the right get protection self private, with so right earn protection self becomes right constitutional every Indonesian citizen according to mandate constitution. However, Indonesia has not yet had rule special arranges related to personal data protection only limited to other rules governed by the general.

Several law regulates related protection of personal data, but only the ITE Law regulates enough specific, and the rest are only arranged by the general, not available settings in constitution specifically which regulates personal data protection, the be one trigger still a lot of data leaks occur, besides that the sanctions are given for violators regarding personal data only sentenced penalty administrative and without existence penalty criminal, so do not give effect deterrent for the perpetrator.

Indonesian moment this has regulations regarding personal data protection in Constitution Number 19 of 2016 concerning Change on Constitution Number 11 of 2008 concerning Information and Transactions Electronics (UU ITE) and Ministerial Regulations of the Ministry of Communication and Information Number 20 of 2016 (Permenkominfo). Article 26 of the UU ITE regulates that every use of information through electronic media concerning personal data somebody must conduct with the consent of the person concerned.

Besides that, Permenkominfo has also arranged about shapes protection to personal data, rights owner of personal data, liability user, liability organizer system electronics, solutions disputes, and sanctions.

Regulation other related legislation with personal data protection, namely:

1. Law Number 36 of 1999 concerning Telecommunications;
2. Regulation Government Number 71 of 2019 concerning maintenance System and Transaction Electronics;
3. Regulation Government Number 80 of 2019 concerning Trading Through System Electronics;
4. Regulation President Number 39 of 2019 concerning One Indonesian Data;
5. Regulation President Number 95 of 2018 concerning System Government based on Electronics.

Legal Policy of The Personal Data Protection Bill (RUU PDP)

The type of personal data has various criteria namely personal data that is general and personal data that is specific. Personal data that is general include: a) name complete; b) type gender; c) nationality; d) religion; and/ or e) combined personal data for identify someone .

Besides that, personal data that is specific includes a) data and information health; b) biometric data; c) genetic data; d) life/orientation sexual; e) view politics; f) notes crime; g) child data; h) financial data personal, and i) other data by provision regulation legislation.

The application of the RUU PDP using the principle of extra territorial jurisdiction as stated in Article 2 "Law" applies to every person, public body, and organization/institution that performs deed law as set in the act, whether in the jurisdiction of the Unitary State Republic of Indonesia and outside the jurisdiction of the Unitary State Republic of Indonesia, which owns consequence law in the jurisdiction of the Unitary State Republic of Indonesia and/or for

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Personal Data Owner Indonesian citizen outside the jurisdiction of the Unitary State Republic of Indonesia.

The purpose of the RUU PDP itself is to use give regularity to the life public by ensuring the right privacy of personal data, which is currently this start harassed with carelessness holder supported interests with emptiness law-related personal data protection settings. Besides that the RUU PDP here to use becomes end spear control case related to personal data protection, previously regulations and or other laws that regulate related to personal data protection only set by common, without existence clear and binding rules for perpetrator violator.

Existence regulations governing personal data protection are expected could realize (BPHN, 2021):

1. Protected and guaranteed rights base relevant citizens with privacy on personal data;
2. Increase awareness law public for value right privacy everyone;
3. Guaranteed public for getting service from government, actors business and organization society other;
4. Avoid Indonesian people from all types of exploitation from other nations against the presence of personal data Indonesian citizens; and
5. Increase growth in industry technology, information, and communication.

The RUU PDP consists of 15 chapters which include arranging types of personal data, rights of the owner of personal data, sanctions administrative, prohibition in the use of personal data, settlement disputes, the role of government and society, and provisions criminal. Systematic chapters on the RUU PDP can be spelled out as follows:

Chapter I: Provision General;
Chapter II: Type of Personal Data;
Chapter III: Right Owner of Personal Data;
Chapter IV: Processing of Personal Data;
Chapter V: Obligation Personal Data Controller and Personal Data Processor In Processing of Personal Data;
Chapter VI: Transfer of Personal Data;
Chapter VII: Penalty Administrative;
Chapter VIII: Prohibition In Use of Personal Data;
Chapter IX: Formation Guidelines Behavior Personal Data Controller;
Chapter X: Solution Disputes and Procedural Law;
Chapter XI: International Cooperation; _
Chapter XII: Role of Government and Society;
Chapter XIII: Provision Criminal;
Chapter XIV: Provision Transition;
Chapter XV: Provision cover.

Discussion of the latest RUU PDP in the DPR is explained by the member's commission of the Sukamta (DPR) which stated that: two crucial points must be postponed from the discussion in the RUU PDP, namely related to the position of institution supervisors' data manager and location data center. DPR wants institutions the under President, while the government wants the institution under the Ministry of Communication and Information Technology. Related to the location data center, Commission 1 of the DPR wants to be in the country to ensure personal data security for Indonesian citizens. RUU PDP is estimated could complete in this (Noname, 2022).

From side government, Minister of Communications and Informatics Johnny G. Plate said moment this the discussion of the RUU PDP has experienced progress positively, and the government and Commission 1 of the DPR have to get points to meet related discussion policy.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

One of the things that make the ratification of the RUU PDP is the urgent current hoax this is still coloring news (Hanifah Triari Husna, 2022).

Supervisory Agency Personal Data Protection

Personal data protection rules are spread across various regulation legislation. This thing causes supervision on the implementation of personal data protection character sector, the government not optimal to do personal data protection communities, and institutions that are the responsible answer for protecting personal data are also still not yet integrated.

Moment this, Indonesia yet has an agency in charge for to do supervision of personal data by integration. Supervision for personal data protection moment this still a character sector (Siti Yuniarti, 2019, p.153).

This thing could be seen by sector banking, authorized supervision of customer data located in the territory of the Financial Services Authority (OJK). Besides that, supervision of personal data other located in the territory of the Ministry of Communications and Information Technology (Kemenkominfo).

Based on the background behind the so urgent for shape institution supervisors' protection of personal data. Some articles discuss the importance formation of institution supervisors' protection of personal data, namely Wahyudi Djafar and M. Jodi Santoso in the article Personal Data Protection: Importance Authority Supervision Independent give a perspective that needs the formation of institution authority supervisors independent start from various institutional models authority, independence authority, comparison with other countries, position authority, until describing the structure, function, and authority institution authority protection of personal data (Wahyudi Djafar and M. Jodi Santoso, 2019).

Next post from Denico Doly with the title article Establishment of Supervisory Agency Personal Data Protection in Perspective Establishment of a New State Institution. In the writing explained the urgency formation institution supervisor protection of personal data, namely:

1. Ensure rule personal data protection is implemented;
2. Various countries form institution supervisor protection of personal data;
3. Monitoring and enforcement law on implementation from regulation regarding personal data still weak;
4. Amount subject law protection of personal data in Indonesia;
5. Abundance controller or personal data processor; and
6. Awareness public of personal data protection is still weak.

According to the article, the need made institution supervisors personal data protection as Auxillary State's Organs. The explanation is the formation of institution authority supervisor protection of personal data in Indonesia is more suitable to the model on the formation of institution independent formed by the state through law.

Formation of the auxiliary state's organ in Indonesia can be applied to institutions' supervisor protection of personal data. However, it also needs to be regulated how independence the done. One comparison with institution authority personal data protection could take example institution authority personal data protector established European Union General Data Protection Regulation (EU GDPR). EU GDPR regulates precondition independence an institution's authority protection of personal data. Article 52 of the EU GDPR, states that authority regarding personal data protection at least must be formulated in the five prerequisites of independence.

Besides that, the formation of institution authority protection of personal data in Indonesia can be formed with status as an auxiliary state's organ. In the opinion of Jimmy Asshidiqie, then nature institutions could as institution semi legislative and regulatory, semi-

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

administrative, and semi-judicial. Semi legislative or the regulation in question that is for doing duty shape regulation executor in the protection of personal data. Regulation executor or rules technical institutions established by authority personal data protection is a thing important, so that every activity protection of personal data that is administrative and judicial, there is rule inherent law for institution and stakeholders related with personal data. Semi-judicial, namely for to do solution dispute if there is a dispute among data owner with personal data manager. Semi-administrative meant for carrying out governance letter correspondence and record-keeping registration dispute, document trial, and make letter decision results dispute

CONCLUSION

Problem personal data leak becomes a very serious thing in handling because remember lack of regulation settings and rules law that can trap the violator's protection of personal data, because that the ratification of the RUU PDP becomes constitution becomes an indispensable thing, so there is regulation rule special that can protect right privacy inhabitant society, without afraid will occur data leakage owned and every agency private nor the government is also more be careful and improve system security they in protect personal data community and/or customers. So no anymore there are case data leaks caused by the existence of breaks in systems by cyber. With these, cases of personal data theft in Indonesia can be eradicated by deep because of the existence of clear regulations and rules binding laws for violators/thieves of personal data. In political law, holders of power could evaluate current policy this happens in society. If required, result evaluation could develop with shape regulation in the form of laws that can become base for protection to society. DPR as given institution power to shape the constitution could play a role for push the government to quickly pass the RUU PDP.

ACKNOWLEDGEMENTS

he authors are grateful to the lecturer's Faculty of Law, Singaperbangsa Karawang University, which has wanted to discuss the theme and give input on paper writing.

REFERENCES

Agustin, Pratiwi. (2021). *The Urgency of the PDP Bill and its Surroundings Revision of the ITE Law.* Retrieved from https://aptika.kominfo.go.id/2021/03/urgensi-ruu-pdp-dan-seputar-revisi-uu-ite/

BPHN. (2021). *Script Academic design Constitution about Personal Data Protection*. Retrieved from http://www.bphn.go.id/data/documents/ na protection of private data.pdf

Goddess, Sita. (2015). Privacy on Personal Data: Legal Protection and Forms Settings in Indonesia. *Journal of De Jure*, Vol. 15 No. 2, 165.

Djafar, Wahyudi and Santoso, M. Jodi. (2019). *Personal Data Protection: Importance Authority Supervision Independent.* Jakarta: Elsam.

Doly, Denico. (2021). *Establishment of Supervisory Agency Personal Data Protection in Perspective Establishment of a New State Institution. Jakarta: Research Center for Expertise Secretariat General of the House of Representatives of the Republic of Indonesia.*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Erlina and Mery. (2020). Formulation Legislation Personal Protection in Revolution Industry 4.0. *Journal Rechts Vinding*. Vol. 9, No. 2, 162.

Harbowo , Nikolaus and Basyari, Iqbal. (2022). *Personal Data Protection Bill Abandoned*. Retrieved from https://www.kompas.id/baca/polhuk/2022/03/15/ruu-perlindungan-data-private-terbengkalai

Hermon, (2021). *Personal Data Leaked, this is The Risk that lurks.* Retrieved from https://www.beritasatu.com/nasional/777913/this personal data- leak-risk-that- lurks

Husna, Hanifah Triary. (2022) *Minister of Communication and Informatics: Commission I of the DPR rushes for the PDP Bill".* Retrieved from https://aptika.kominfo.go.id/2022/06/menkominfo-komisi-i-dpr-kebut-ruu-perlindungan-data-private/

Maris, Stella. (2021). *Pinjol Illegal Disturbing the public, this is a suggestion from the DPR*. Retrieved from https://www.liputan6.com/ news/read/4588453/ pinjol-ilegal-meresah-society - ini - saran- dpr

Noname. (2022). *Members of Parliament: Discussion two points crucially the PDP bill was postponed.* Retrieved from https://www.antaranews.com/berita/2946289/member-dpr-pembahan-dua-poin-krusial-ruu-pdp-ditunda

Personal Data Protection Bill.

Retno, Kusniati. (2019). Protection History Right Right basic Man In Relation With The Conception of the Rule of Law. *Journal Innovative Law*, Vol.4, No.5, 80.

Ristianto, Christopher. (2019). *Personal Data Protection Bill will be submitted for Prolegnas DPR priority.* Retrieved https://nasional.kompas.com/read/2019/10/09/17410331/ruu-perlindungan-data-private-akan-dajukan-dalam-prolegnas-prioritas-dpr

Riyanto, Galuh Putri. (2021). *Data of 533 Million Facebook Users Leaked.* Retrieved from https://tekno.kompas.com/read/2021/04/04/09330067/data-533-juta-user-facebook-bocor-including-indonesia?page=all

Sandy, Oktarina Paramitha, (2021). 12 *Cases Data Leakage in Indonesia Since 2019*. Retrieved from https://cyberthreat.id/read/12752/12-Kasus-Data-Leakage-di-Indonesia-Sejak-2019

Soekanto, Soerjono and Mamudji, Sri. (2010). *Normative Legal Research Something Overview Brief*. Jakarta: Kencana Prenada Media Group.

Wahjono, Padmo. (1986). *Indonesia Based on Law*. Jakarta: Ghalia Indonesia.

Yuniarti, Siti Yuniarti. (2019). Legal Protection of Personal Data in Indonesia. BECOSS *Journal (Business Economics, Communication, and Social Sciences), Volume 1, Number* 1, 153.

The Urgention of Personal Data Protection on Metaverse Era: a Potential Threat to Privacy and Security

Rina Elsa Rizkiana[1], Dian Ratu Ayu Uswatun Khasanah[2]
[1,2]Department of Law, Social, and Political Sciences, Universitas Terbuka
e-mail: xxx.elsa1357@gmail.com

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

The development of information technology is growing rapidly, gave a new "brand of life" rises called Metaverse. Metaverse promises some bright opportunities for business, the economy and society. However, the risks associated with privacy tensions and crises as opposed to the characteristics of transparency and openness in virtual communities increased. This has the potential to raise the legal issue of personal data. Thus, the role of government entities in regulating are very important. It shown that there was a gap between the regulation of personal data and the legal certainty. This study analyzed the critical aspects and impacts that may arise in Metaverse Era. Besides, the analyzing personal data protection rules using the legal principle of lex superiori derogat legi inferiori. This research was normative juridical research with a statute approach. The results indicated that the Metaverse Era needed a control system which remains based on an exist norms in society. The legal framework of the personal data protection is a control system used to conceptualize virtual community governance as an appropriate regulatory response.

***Keywords**: Legal Principles, Metaverse, Personal Data Protection, Security*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

Human civilization created the development of technology and information sophisticated and complex from day to day. It aims to make human activities more effective and efficient. These developments have penetrated the boundaries of time and territory. This new technology called Metaverse which shortened the distance and time. This resulted between individuals more fluid and not limited. In other words, space and spatial time are becoming more and more relative, so the boundaries between countries borderless.

Metaverse is a combination of a multiuser 3D virtual space intertwined with the physical world to create a unified and timeless virtual universe. Metaverse is a 3D augmented virtual reality that encourages interest and investment to try the development of 3D reality without limits beyond imagination. In the metaverse, Virtual reality (VR) will be used to create immersive 3D spaces while augmented reality (AR) will allow for tight integration between the virtual world and the physical world. Correspondingly, physical objects are brought in, visualized, and shared into the metaverse. Wearable sensors will allow avatars to mimic real-world movements, while other sensors, such as those embedded in next-generation smart devices, will feed additional real-world data into the metaverse. Metaverse will also feature a marketplace rich in physical goods and virtual goods that will be tied to, and owned by, avatars and will be implemented as non-exchangeable tokens (NFT). The next generation of networking technologies and algorithms will make the metaverse more pervasive than today's social media and social networking platforms.

However, the pandemic had a tremendous impact on many aspects of the world today. The pandemic called for an immediate digital transformation of all human activities and jobs. This can be as a form of recognition and implementation of the Metaverse. The virtual world recognized as a second world where humanity can start and embrace a new life of excellence, where business is growing and developing on a global and rapid scale that has never happened before in the real world, and where the faults and shortcomings of all activities emerge. in the real world the world is reduced to a superior virtual world (Novak, 2012). Thus, Covid-19 pandemic has sparked life in the Metaverse to restore world stability with the mission of digitizing all aspects to support the rapid internationalization process.

Today, digitalization and technological developments have penetrated various sectors of life. This evidenced by the rapid increase in internet use in early 2021, where the number of internet users has increased 15.5% compared to last year which resulted in a total number of 202.6 million people who use the internet today (Galuh Putri Riyanto, 2021). Moreover, the term society 5.0 is known, which is be a development of the 4.0 revolution and integrates physical space with cyberspace in helping to solve problems in human life (Firdaus, 2020). However, this innovation has the potential to raise the misuse issue of personal data which leads to data leakage due to legal uncertainty and human resources. This are still a problem. The increase of prevalent problems are cases of theft of customer data and theft of money. Besides, the increase of scams on social media are flourishing. In fact, the increase of crime modes is diverse. This shows that the protection of privacy and personal data are influencing the digital development.

International legal instruments have set out international recognized principles of privacy and personal data. The instrument issued by the Organization for Economic Co-operation and Development (OECD). The international organization issued Privacy Guidelines which are not legally binding. But it has long been recognized as guidelines for establishing norms for protecting privacy for OECD member countries. Meanwhile, based on the national legal instruments that apply in Indonesia, 1945 Constitution (UUD 1945), it is not regulated on data protection explicitly. But it is implicit stated in Article 28 F and 28 G (1) stating, “freedom to

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

store information and protection of personal data or personal information," which includes personal data. The provisions related to personal data protection in Indonesia spread in various regulations, but unfortunately many of these provisions still overlap. Especially considering the Personal Data Protection Bill (RUU PDP) which has not been ratified yet. In fact, this protection is determining factor for the existence of online trust. Privacy and personal data are important because it concerns how the personal data will be processed, including sensitive data from users which if distributed to irresponsible parties will have the potential to cause financial losses, even threaten the security and safety of the owner. The threats that arise from the weak protection of privacy and personal data result in a reduced level of public trust. Therefore, it is necessary to guarantee the protection of privacy and personal data.

Based on the above case, it shows the urgency of personal data protection, especially in society 5.0 era, where actions in the real world intersect with cyberspace allows to identity theft and illegal access to occur. In fact, the development of digitalization with Metaverse's introduction has turned into a loophole and exploited by individuals on current legal uncertainty. From this case, we can see how important data protection is, and this case creates an urgency to change or make laws and personal data protection innovations to avoid data misuse.

Based on this background, the purpose of this study is answering the following problem formulations: "how effective is the current Indonesian legal on the protection of personal data against the development of Metaverse era?".

METHODOLOGY

This research is normative juridical research in nature terms and legal discipline scope (S.M. Soekanto, n.d.). This study describes the legal norms of personal data protection in Metaverse era. So, the positive laws related to the protection of personal data in Indonesia can be known. Based on typological, this research supported by a statute approach and a conceptual approach which aims to inventory, study, and analyze the reciprocal substance of the personal data protection legal regulation against the principle of state responsibility in human rights law (Sunaryati Hartono, 2006). The research intended to understand and comprehensive analyze the hierarchy and principles of laws and regulations which include the 1945 Constitution, Regulation of the Minister of Communication and Information Technology for Personal Data Protection in Electronic Systems Number 20 of 2016, Financial Services Authority Circular Letter on Governance and Management Information Technology Risks in Information Technology-Based Lending and Borrowing Services Number 18/SEOJK.02/2017, Government Regulation on the Implementation of Electronic Systems and Transactions Number 71 of 2019. Besides, this research conducted by reviewing all laws and regulations related with legal issues (Peter Mahmud Marzuki, 2014). Literature study conducted by exploring concepts, regulations, and implementation. Meanwhile, secondary materials are in the form of books, academic journals, news, opinions, cases, news events, tertiary materials in the form of dictionaries and encyclopedias. The material explored and discussed related to the issue of personal data protection in the Metaverse era in this study.

RESULTS AND DISCUSSION

Metaverse

Metaverse is a virtual universe, or substrate, capable of supporting and connecting many different applications. User can perform as diverse as the applications embedded in them. The unprecedented networking opportunities make it very convenient to engage in social activities. Traditional activities such as making friends with other users, or engaging in audio or video

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

chats and calls will also be supported in the metaverse. This function will become available by integrating existing messaging and video conferencing applications into the metaverse. In addition to these activities which barely represent a port of existing interaction schemes, the virtual spaces of the metaverse will also allow for additional forms of social interaction, for example, interactions between 3D avatars, the typical of massively multiplayer online games (MMOs).

Games and other forms of entertainment including the possibility to participate in performing arts and concerts will represent another large group of metaverse activities. First, as previously anticipated, the metaverse inherits several characteristics from MMOs. Besides, the gaming sector continues to grow, both in terms of revenue and users. The combination of these two factors ensures that gaming and entertainment in general become one of the most engaged activities in the metaverse. In particular, metaverse performances can be virtual originals as in the case of many concerts held in the virtual worlds of online games such as Fortnite, Minecraft, and Roblox5, or physical originals but remain accessible through the metaverse, as in the case of real world concerts that allow metaverse users to participate via VR. Sports and fitness are another group of activities that would benefit from the cyber-physical integration made possible by the metaverse.

In particular, wearable sensors and AR/VR will enable realistic and immersive virtual sports simulations with unprecedented personalization and customization opportunities. The same consideration can be made for learning and other educational activities, which will greatly benefit from the immersion and 3D metaverse capabilities. Finally, the metaverse will also be used for work and business, as well as for commerce. Regarding the former, digital twins, VR, and the availability of embedded messaging and video conferencing apps will allow rich and immersive meetings to take place in the metaverse. In addition, both traditional and new forms of commerce will be supported by one or more online marketplaces, which will feature both physical and digital goods for sale. In particular, the market will connect independent content creators with their potential customers (i.e., metaverse users). It will enabling business opportunities to be scaled to an unprecedented level.

Privacy and security issues in Metaverse Era

1. Privacy

Currently, if the user does not pay for the product or service, then the user data is the product. Social media and social networking platforms are the most important examples of this type. The platform offers free services involving millions or even billions of users, whose preferences are well known to the platform itself so they are able to show users highly accurate micro-targeted ads (Kosinski, Stillwell, & Graepel, 2013). This successful business model is possible because of the platform's ability to accurately profile its users, by analyzing their actions and interactions with the platform's content and with other users, apart from relying on alarming tracking capabilities, thanks to the evolution of cookies and, generally speaking, fingerprinting techniques. (Kosinski et al., 2013). Even with today's technology, the digital devastation we leave behind is already telling a lot about our personalities, tastes, and orientations (e.g., political and sexual). This has been proven since the first study was conducted almost a decade ago (Kosinski et al., 2013). While today predictive capabilities have grown exponentially. Given this assumption, what could happen in the metaverse? In the following subsections, we attempt to envision the data collection capabilities, and associated applications, that the metaverse enables. 1) User profiles in the metaverse: If social network users were products of today's Internet, everything and everyone would be products. Today's social networking platforms act as powerful magnets for Web users. Similarly, the metaverse

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

will become an exponentially stronger magnet for even more users, as well as for content creators, entrepreneurs, and businesses. In other words, it will be a unified meta-platform for users, regardless of their interests and preferred apps (e.g., readers, gamers, students, etc.) as well as for the developers of those apps and the businesses that run them. Open consideration raises major concerns over the amount and type of data such a large platform can collect. Internet 2.0 allows marketers to learn where users move their mouse, where they look on the screen, how much time they spend on certain image items, and which products or users they prefer. Sometimes, and especially for technologically illiterate users, a person is not even aware that such recording and analysis is taking place and, therefore, their privacy may be jeopardized in unexpected ways (Kosinski et al., 2013). In the metaverse, current data collection techniques and related analyzes would be considered amateurish, at best. Indeed, the platform will be able to track our body movements, physiological responses, even brain waves, and real and virtual interactions with the surrounding environment, to cite a few. In addition, this capability will be in addition to all other data that has been collected. How will the data be used and what are the risks to user privacy? In the following, we try to answer the last question.

Regarding user privacy in the metaverse, three areas are particularly relevant: (i) personal information; (ii) behavior; and, (iii) communication. As a result of our previous considerations, each of these areas will provide the platform with more data than they currently have, with new and increasing risks. For example, personal information collected from social networking platforms is already used for doxing—that is, the practice, or threat, of disclosing a victim's personal information for the purpose of extortion or for online humiliation. (Snyder, Kanich, Doerfler, & McCoy, 2017). Given that the metaverse will provide more and more personal information about its users, not only to the platform, but to other users as well, how are we going to continue to avoid doxing? In particular, the personal and sensitive information that will leak through the metaverse will include a large amount of real-world information about the user's habits and their physiological characteristics. While these are difficult to obtain on the Internet today, if not impossible, they will be much easier to obtain in the metaverse, as a result of the closer ties between the virtual and physical worlds. This brings us to risks associated with the privacy of user behavior. In this case, the metaverse will offer an unprecedented opportunity to exploit online immersive experiences and interactions to commit offline (i.e., real-world) crimes and fraud. Indeed, social engineering attacks are already the lion's share of cyber attacks suffered online(Salahdine & Kaabouch, 2019), as also measured during the COVID-19 pandemic. With the metaverse, social engineering attacks are likely to become more convenient and powerful, and thus, more frequent. In addition to social engineering, the metaverse raises additional concerns regarding the privacy of user behavior. Spying and stalking are practical examples of this kind.

In the real world, blinding, following, or harassing someone can be partially hindered by physical constraints, such as the need to be physically close to other people and to move to a specific location, which may also cost money (e.g. time, money). In particular, the penalties cited generally act as an excellent deterrent.

However, the same considerations don't apply in the metaverse, which makes such attacks more convenient. Unfortunately, this already applies to the large number of attacks currently proliferating online, some of which are often carried out by coordinated multiple users, and are likely to skyrocket in the metaverse. (Nizzoli et al., 2020),(Flores-Saviaga, Keegan, & Savage, 2018). These include coordinated harassment and assault, shaming, cyberbullying, video call bombing, and shitstorming. (Flores-Saviaga et al., 2018). Some of this behavior has been used as a form of "denial of service". For example, in an online game which would be one of the main uses of the metaverse some gamers are toxic enough to repeatedly ruin the game for all

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

other participants (Flores-Saviaga et al., 2018). In addition, many cyberattacks that initially start on a specific platform or are related to a specific topic (e.g., games) can then expand to other platforms or topics, thereby involving additional users and communities, as was the case in the case of the #Gamergate campaign or in Second Life (Flores-Saviaga et al., 2018). In a metaverse characterized by multiple interconnections between communities, spaces and applications, these risks are unavoidably amplified. Finally, more connections imply more interpersonal communication, leading to an increase in the amount and way information can be collected and misused, and cybercrimes can be committed. Privacy concerns about metaverse communications are not limited to the obvious risk of a corporate data breach, but involve other forms of communication between users as well. Call it sexting, the practice of exchanging sexually explicit messages which is currently done via cell phones (Flores-Saviaga et al., 2018).

Sexting, or other forms of sexually oriented communication and interaction, can become common in the metaverse, also thanks to the rich and multi-sensory 3D world (Bardzell, Street, & Bardzell, n.d.). What if the privacy of the private communication is threatened? On Internet 2.0, revenge porn. The distribution of sexually explicit text, images, or videos of individuals without their consent is largely confined to certain unsafe for work (NSFW) platforms. Similarly, toxic users huddle on fringe Web platforms or in communities largely isolated from like-minded peers (Zannettou et al., 2018).

Disgruntled employees have little way of publicly damaging their company's reputation in any measurable way. Yet each of these important issues—but, by far, the periphery—could become mainstream in a massively interconnected metaverse. What can be done to address the threats exposed above? The preliminary discussion is presented in the following sub-chapters.
3) Countermeasures: Given the many privacy risks that metaverse users face, some experts have begun to envision ways to enforce user privacy in the 3D social metaverse (Lee et al., n.d.). Among them, several solutions have been proposed based on a combination of three basic strategies: (i) creating a mannequin or multiple clones of one's avatar to shadow one's own activities; (ii) create a private copy (for example, an instance) of a public space for the exclusive use of a user, or temporarily lock another user from a public space; and, (iii) enable the user's teleportation, invisibility or other form of disguise. The meaningful combination of the above strategies can also be used, such as applying a disguise to one's avatar after exiting a designated space, to avoid being recognized and chased.

Regardless of the privacy solutions that metaverse implements, these must be available to users (for example, via the privacy menu) so that they can choose the level of privacy they want, also depending on their activity, and how the privacy features are chosen. However, all (few) solutions imaginable so far are designed for the simple metaverse, which has existed until now. As such, they're likely not enough to withstand the risks and attacks of a massively complex, immersive, interconnected multiverse, as Meta Zuckerberg envisions. To this end, new and better solutions must be devised, an exciting and daunting research challenge.

2. Security

The innovative combination of various advanced technologies that will play a role in the metaverse will trigger a burst of security threats, in addition to the privacy concerns already discussed. Some of them are highlighted as follows. First, humans in and out of circles: Some of these security concerns stem from the metaverse's inherent complexity. In fact, it is easy to imagine that a meta-platform that connects a larger order of more users, services, applications, goods and ultimately, handles more data, than is managed by today's Web platforms will inevitably require metaverse administrators to encourage automation, i.e. to handle more tasks with algorithms, not with human operators. The need to delegate tasks and operations to

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

algorithms, especially those implemented with cutting-edge AI techniques, arises both from the need to achieve great scalability as well as efficiency and performance. However, in today's versions of the Internet, we are beginning to understand the dire implications of delegating socially relevant tasks to algorithms that, despite achieving unmatched performance, are affected by several issues. Among them are biases that can prevent a fair outcome (Corbett-Davies, Pierson, Feller, Goel, & Huq, 2017), lack of transparency (Corbett-Davies et al., 2017), vulnerability to attack and manipulation (Cresci, 2020) and the large computational and energy requirements of complex AI models (e.g., deep learning), which limit their affordability and sustainability. Each of these issues represents an open scientific challenge that will require a lot of concerted efforts from different scientific communities (e.g., AI and machine learning, security, ethics, and more) to tame and solve. Meanwhile, our reliance on "problematic" algorithms leads to worrying problems. Moreover, always more often than not, problems stemming online have offline consequences, as in the landmark cases of the January 2021 Capitol Hill riots that resulted from the dramatic polarization of our online social environment, or the spread of COVID-19 and vaccine misinformation that cost many people human life (Hartman-Caverly, 2021). Second, integrity and authentication in the metaverse: As a practical and relevant example of the problems caused by algorithms and automation, we can mention the security issues of content integrity and user authentication. Even on today's social networking platforms, most of our interactions occur with inorganic or artificial content (e.g., machine-generated text) and with inauthentic users (e.g., fake human-operated personas that trap other users, or even accounts fully automated like bots). For example, regarding software-driven accounts, it has been shown that humans can be “fingerprinted” and reproduced digitally on social media, without other humans or detection algorithms being aware of it. Moreover, it is also envisaged that future AI advancements will make such automated accounts completely indistinguishable from humans. In the metaverse, this human-machine interaction will become more frequent and, at least for certain activities, even mandatory. Think for example the need to switch to chatbots and in-game bots, to provide a rich, immersive and credible user experience.

This capability raises new and additional security issues. For example, how easy is it to fake your age, gender, occupation, or other attributes? Can we tell the difference between humans and machines? How will human or platform vulnerabilities be exploited by automated accounts and machine-generated content, in such a complex, immersive and persuasive world? Previous attempts to exploit the vulnerabilities of contemporary platforms have successfully shaken the foundations of our democratic society. The next wave of attempts may prove fatal. 3) Polarization and radicalization in single worlds: While previous security concerns arose from the need to rely on algorithms and automation to manage large virtual worlds, other problems will arise as a consequence of the uniqueness of the metaverse, the characteristic of being single. Indeed, the metaverse is essentially a large aggregator of applications, services, goods and thus, users. As all platforms collect, aggregate, and deliver content, their success will depend on their capacity to act as a centralized access point for that content.

In particular, this characteristic is in stark contrast to the current structure of the Web, which features many different platforms, some of which are mainstream and large while others are fringe and very small. In other words, the plurality of existing Web platforms will be replaced by, at most, several massive metaverses. The plurality of the Web also means that every user, regardless of his tastes and preferences, is likely to find an online platform or community of users with similar tastes and preferences. This is the reason why fringe and minuscule Web platforms exist in the first place: despite their overall marginality, they serve a useful purpose (at least to those who explore them). In contrast, a single metaverse will force

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

the simultaneous presence, coexistence, and interaction of all users, including those with special interests and opposing viewpoints, as well as those who will never be in touch on the Web. While, to some extent, this is already the case in today's versions of the Internet, the relatively limited interrelationships and filter bubbles of today's virtual spaces (e.g., platforms and applications) ensure that different types of users primarily come from different online communities, perhaps even on a fully autonomous and independent platform. However, when very different—perhaps even opposing—user groups come together, the consequences can be severe. For example, we know from massively multiplayer online role-playing games (MMORPGs) that certain types of players tend to systematically harass other types, as in the case of low-skill male players with respect to female players. (Kasumovic & Kuznekoff, 2015). What, then, will happen when all the different kinds of communities come together in a centralized and shared metaverse? To some extent, every user who populates the online space, such as today's social networks and the upcoming metaverse, has his or her own interests and ways to enjoy them. In other words, each user behaves in a different way. Some users can thus exploit the way they "behave" in the metaverse to trap, harass, or otherwise take advantage of other users, in new and unexpected ways.

Analysis of Personal Data Protection Regulations

Permenkominfo 20/2016 states that data obtained and collected directly must be verified to the owner of personal data. Unfortunately, it is not explained further about the form of verification itself. Meanwhile, in SEOJK 18/SEOJK.02/2017 Part 1 Number 12 regulates, verification and authentication tools in the form of electronic signatures or signatures consisting of electronic information attached, associated, or related to other electronic information as referred to in the Law Law No. 11 of 2008. It is clear that Permenkominfo 20/2016 as a higher position regulation must revise its content by explaining the form of verification required, namely in the form of an electronic signature as stated in SEOJK 18/SEOJK.02/2017.

Because looking at the rules contained in the Permenkominfo it is actually less clear when compared to SEOJK 18/SEOJK.02/2017, which although the content is clearer and more specific, the Permenkominfo can override it with a higher position.

Permenkominfo 20/2016 article 5 paragraphs 1 and 2 as well as article 28 D, every electronic system operator must have internal rules to carry out the processing of personal data. Whereas in article 9 paragraphs 1 and 2, the rules for processing personal data must be based on the consent of the data owner. The provisions relating to these internal rules are not elaborated further on what must exist and be regulated, this ambiguity triggers legal uncertainty regarding what must be regulated to process data. And this rule can potentially be made internally or unilaterally. Then, whether approval is a more important condition than the requirement to form internal rules. Furthermore, regarding the conflict in processing data, whether based on internal rules or agreements. Finally, whether the consent must be included in the internal rules.

PP 71/2019 shows that there is overlapping content regarding reporting in the event of a failure. If there is a failure in the protection of the personal data it manages, the electronic system operator is obliged to notify the data owner in writing. Furthermore, regarding the duration of reporting failures in the electronic system, it is regulated, in which the organizer must report the failure at the first opportunity to law enforcement and authorized institutions. Meanwhile, Permenkominfo stipulated that a written notification must be sent to the data owner within a period of no later than 14 days after becoming aware of a failure. If they do not provide written notification, the data owner can complain about the situation to the Minister. If it does

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

not provide or exceeds the time limit in providing written notification to the data owner, the service provider is required to report to the Minister.

Permenkominfo 20/2016 clearly states the maximum duration of reporting for failures is no later than 14 days and that there is a follow-up reporting scheme if the data owner does not receive a written report. On the other hand, there is an obligation for reporting procedures when the service provider does not make or does but is late in providing the report. Meanwhile, PP 71/2019 only explains that if a system failure occurs, it is necessary to immediately report it at the first opportunity. The article indicates that the duration of the phrase 'first opportunity' is unclear, whether it is immediately when a failure is discovered by the system, or when the failure occurs. And in PP 71/2019 there is no further elaboration on the follow-up scheme as regulated by Permenkominfo 20/2016. In this case, it can be seen that there are different arrangements for the duration aspect and a more specific reporting scheme. Moreover, with regard to the failure itself, the Permenkominfo has specifically stated that the failure in question is a failure in the realm of Personal Data Protection, meanwhile in PP 71/2019, the failure in question is general because it still involves problems with the electronic provider system. So from the results of the analysis above, it can be seen that there are obstacles where given the principle of lex superiori derogat legi inferiori, that a higher law rule can override a lower law rule. So that although the regulation is more specific than the more general rules, its implementation is hampered because of its degree in the composition of the legislation.

Article 16 stipulates that if the data owner is no longer a user, the electronic system operator is obligated to keep the data according to the time limit as referred to in Article 15 paragraph (2) starting from the last date the personal data owner became a user. In article 19, if the data storage time has exceeded the time limit as referred to in Article 15 paragraph (2), personal data in the electronic system can be deleted unless it will still be used or utilized in accordance with the original purpose of its acquisition and collection. Meanwhile, Article 15 paragraph (2) itself only explains that personal data stored in an electronic system must be in the form of encrypted data. There is absolutely no explanation whatsoever regarding the time period referred to in the previous two articles. However, the regulation that discusses the storage period is instead regulated in Article 15 paragraph (3) a and b, personal data must be stored in an electronic system in accordance with the provisions of the legislation that regulates the obligation for the storage period of personal data in accordance with the supervisory and sector regulatory agencies or a minimum of five years if it turns out that there is no arrangement. So it can be seen that there is a legal defect in the preparation of the rules, where the verse in question does not regulate at all but is instead regulated in the next paragraph which is not a reference.

Innovation in Ensuring Personal Data Protection

Another important point related to the protection of personal data is the establishment of an independent authority which can be divided into three types. First, the authority whose basic authority is related to the rule of law, such as the establishment of a child protection authority, is based on similar rules. Second, the authority model that separates the authority of authority with related tasks. For example, the Information Commission and the Ombudsman, where the authority to supervise public services is separated from the authority to provide information to the public. Third, the institutional model that combines the powers of the previously established authorities.

In addition, cyber education, curriculum and certifications related to technology and data must be made. As implemented by the Data Protection Trustmark (DPTM) which is a voluntary certification related to data protection practices (IMDA, n.d.).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

In optimizing customer data protection, Professor Stefan Koos' theory can be applied because it is based on two facts, legal protection in rights violations and the active participation of parties to inform what happened. (Koos, 2021) So that the active participation of data owners whenever there is a problem can help secure data and not depend on technology, this can increase the guarantee of personal data protection in the Metaverse era.

CONCLUSION

The presence of Metaverse can optimize technology. However, there are drawbacks and challenges to using Metaverse. Metaverse that is borderless or provides unlimited space, raises greater engagement that must be faced. However, Indonesia does not yet have a legal umbrella that specifically regulates the protection of personal data. Therefore, special regulations regarding personal data are urgently needed, coupled with continuous implementation of innovations to ensure data security for all citizens is guaranteed.

Based on this research, there is an urgency to establish a relevant legal framework and take advantage of innovation as well as a control system used to better conceptualize virtual community governance as a response to appropriate regulations and ensure legal certainty of personal data protection in Indonesia, especially in the midst of the development era. Metaverse.

ACKNOWLEDGEMENTS

Thank you to the Faculty of Law, Social Sciences, and Political Science, Indonesia Open University and those who have participated in this writing for all forms of support given to the authors.

REFERENCES

Bardzell, S., Street, W. M., & Bardzell, J. (n.d.). *Docile Avatars: Aesthetics, Experience, and Sexual Interaction in Second Life*.

Corbett-Davies, S., Pierson, E., Feller, A., Goel, S., & Huq, A. (2017). Algorithmic decision making and the cost of fairness. Proceedings of the ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, Part F129685, 797–806. *Association for Computing Machinery*. https://doi.org/10.1145/3097983.3098095

Cresci, S. (2020). A decade of social bot detection. *Communications of the ACM*, 63(10), 72–83. https://doi.org/10.1145/3409116

Firdaus, S. T. . M. T. . P. D. (2020, July 6). *Mengenal Society 5.0 'Sebuah Upaya Jepang untuk Keamanan dan Kesejahteraan Manusia.* Retrieved June 7, 2022, from https://ee.uii.ac.id/2020/07/06/mengenal-society-5-0-sebuah-upaya-jepang-untuk-keamanan-dan-kesejahteraan-manusia/

Flores-Saviaga, C., Keegan, B. C., & Savage, S. (2018). *Mobilizing the Trump Train: Understanding Collective Action in a Political Trolling Community*. Retrieved from http://redditmetrics.com/r/The

Galuh Putri Riyanto. (2021, February 23). *Jumlah Pengguna Internet Indonesia 2021 Tembus 202 Juta.* Retrieved June 7, 2022, from

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

https://tekno.kompas.com/read/2021/02/23/16100057/jumlah-pengguna-internet-indonesia-2021-tembus-202-juta

Hartman-Caverly, S. (2021). Long tail metaphysics: The epistemic crisis and intellectual freedom. *IFLA Journal*. https://doi.org/10.1177/03400352211057146

IMDA. (n.d.). *Data Protection Trustmark Certification.* Retrieved June 8, 2022, from https://www.imda.gov.sg/programme-listing/data-protection-trustmark-certification

Kasumovic, M. M., & Kuznekoff, J. H. (2015). Insights into sexism: Male status and performance moderates female-directed hostile and amicable behaviour. *PLoS ONE*, 10(7). https://doi.org/10.1371/journal.pone.0131613

Koos, S. (2021). Artifical Intelligence as Disruption Factor in the Civil Law: Impact of the use of Artifical Intelligence in Liability, Contracting, Competition Law and Consumer Protection with Particular Reference to the German and Indonesian Legal Situation. *Yuridika*, 36(1), 235. https://doi.org/10.20473/ydk.v36i1.24033

Kosinski, M., Stillwell, D., & Graepel, T. (2013). Private traits and attributes are predictable from digital records of human behavior. *Proceedings of the National Academy of Sciences of the United States of America*, 110(15), 5802–5805. https://doi.org/10.1073/pnas.1218772110

Lee, L.-H., Braud, T., Zhou, P., Wang, L., Xu, D., Lin, Z., … Hui, P. (n.d.). *All One Needs to Know about Metaverse: A Complete Survey on Technological Singularity, Virtual Ecosystem, and Research Agenda.* Retrieved from https://www.roblox.com/

Nizzoli, L., Tardelli, S., Avvenuti, M., Cresci, S., Tesconi, M., & Ferrara, E. (2020*). Charting the Landscape of Online Cryptocurrency Manipulation.* IEEE Access, 8, 113230–113245. https://doi.org/10.1109/ACCESS.2020.3003370

Novak, T. P. (2012). Quality of virtual life. *Transformative Consumer Research: For Personal and Collective Well-Being*, 225–246. https://doi.org/10.4324/9780203813256

Peter Mahmud Marzuki. (2014). *Penelitian Hukum.* Jakarta: Kencana Media Prenanda Group.

S.M. Soekanto. (n.d.). *Penelitian Hukum Normatif; Suatu Tinjauan Singkat.* Jakarta: Raja Grafindo Perkasa.

Salahdine, F., & Kaabouch, N. (2019). Social engineering attacks: A survey. *Future Internet*, Vol. 11. MDPI AG. https://doi.org/10.3390/FI11040089

Snyder, P., Kanich, C., Doerfler, P., & McCoy, D. (2017). Fifteen minutes of unwanted fame: Detecting and characterizing doxing. Proceedings of the ACM SIGCOMM Internet Measurement Conference, IMC, Part F131937, 432–444. *Association for Computing Machinery*. https://doi.org/10.1145/3131365.3131385

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Sunaryati Hartono. (2006). *Penelitian Hukum di Indonesia Pada Akhir Abad ke-21*. Bandung: Alumni Publisher.

Zannettou, S., Cauleld, T., Blackburn, J., De Cristofaro, E., Sirivianos, M., Stringhini, G., & Suarez-Tangil, G. (2018). On the origins of memes by means of fringe web communities. *Proceedings of the ACM SIGCOMM Internet Measurement Conference, IMC, 188–202. Association for Computing Machinery*. https://doi.org/10.1145/3278532.3278550.

The Legality of Marriage for Giving Dowry in The Form of Money in The Metaverse According to The Perspective of Islamic Law

Nur Sulistiyaningsih
Fakultas Hukum Universitas Sebelas Maret
e-mail: nursulis@staff.uns.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

This study aims to examine the validity of marriage for the giving of dowries in the metaverse world from the perspective of Islamic law. Observing marriage is a sacred bond, in addition to the rapid and dynamic development of technology, so this research is important to do to highlight the validity of marriage. This article was compiled using a normative legal research method using a conceptual approach and a statutory approach. Sources of research information using secondary legal materials, namely legal books, legal articles, journals and provisions of laws and regulations related to the topic being studied. The technique of collecting legal materials is carried out using content analysis and drawing conclusions using deduction to answer the formulation of the problem. The results of the analysis and discussion, the author concludes that the giving of a dowry in the form of money in the metaverse must meet the requirements for a valid dowry, namely: valuable property, the object is sacred and can be taken advantage of the goods are not ghasab goods, not goods whose circumstances are not clear and are money owned. In addition, there should be no elements of gharar, dharar and qimar. If these conditions are not met, then the marriage contract is still valid, but the dowry is invalid, and the husband should replace it with another dowry object agreed with his wife.

***Keywords**: Legality of Marriage, Dowry, Money, Metaverse, Islamic Law*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

PENDAHULUAN

Perkawinan merupakan akad suci yang menghalalkan dan membatasi hak dan kewajiban antara laki-laki dan perempuan yang bukan muhrim. Islam sangat memuliakan dan menghargai kedudukan seorang perempuan dengan memberi hak-hak kepadanya, salah satunya pemberian mahar/mas kawin (Fitri, 2018). Mahar bukanlah pembayaran yang seolah-olah menjadikan perempuan yang hendak dinikahi telah dibeli seperti barang, namun pemberian mahaw tersebut dalam syari'at Islam dimaksudkan untuk mengangkat harkat dan derajat kaum perempuan yang sejak zaman jahiliyah telah diinjak-injak harga dirinya. Dengan adanya mahar status perempuan tidak dianggap sebagai barang yang diperjualbelikan (Saebani, 2001).

Namun dalam implementasi pemberian mahar, ulama berbeda pendapat dalam menetapkan hukumnya. Sebagian mengatakan sebagai rukun dan sebagian yang lain menjadikannya sebagai syarat. Misalnya Ibnu Rusyd, dalam Bidayah al Mujtahid ia mengatakan bahwa Mahar merupakan syarat sahnya perkawinan (Amir Nuruddin & Azhari Akmal Tarigan, 2004: 65). Sebaliknya, menurut salah satu mazhab Syafii mengatakan bahwa mahar merupakan rukun nikah. Berbeda pula dengan pernyataan Kompilasi Hukum Islam sebagai salah satu kitab rujukan utama para hakim Agama di Pengadilan agama (PA) yang mengatakan bahwa mahar bukan rukun juga bukan syarat.

Teknologi digital yang berkembang pesat sejak tahun 2021 adalah *Metaverse*. Gaung *Metaverse* dimulai ketika Facebook resmi berganti nama menjadi *Meta*, sebagai bentuk bisnis baru teknologi digital berbasia *virtual and augmented reality* (VR/AR) (Arkeman, 2022). *Metaverse* merupakan ruang digital yang yang memungkinkan para penggunanya dapat berinteraksi dengan orang lain secara *realtime* dan merasakan pengalaman seperti di dunia nyata. Dalam dunia *Metaverse* ini, pengguna satu dapat bertemu secara virtual dengan pengguna lain yang sedang daring dalam dunia digital 3D (tiga dimensi). Setiap pengguna "diwakili" oleh avatar 3D. Inilah yang membedakan *Metaverse* dengan internet 2D.

Dalam penelitian ini, Penulis tertarik mengkaji tentang pemberian mahar berupa uang di dunia *Metaverse*. Bitcoin yang merupakan aset kripto paling populer di dunia *Metaverse*, kegunaannya juga berkembang menjadi mahar (mas kawin). Pasangan Jordan Simanjuntak dan Johana Dwi Utami menjadikan Bitcoin sebagai mas kawin perkawinan yang digelar pada 11 Desember 2021 (Putriadita, 2022).

Tidak hanya pemberian mahar saja, di tahun 2022, ada pasangan India yang melangsungkan perkawinan dengan dihadiri oleh 500 tamu di *Metaverse* (Pertiwi, 2022). Selanjutnya, Pada 2 Juli 2022, yang notabene masih masa pandemi, ada pasangan suami istri di Yogyakarta yang memanfaatkan *Metaverse* untuk menggelar resepsi perkawinan. Berdasarkan beberapa fenomena ini, *Metaverse* berkembang dan sangat diminati oleh masyarakat untuk kehidupan sosial mereka, contohnya adalah memberikan mahar uang dan trend menyelenggarakan perkawinan di *Metaverse*.

Terkait dengan pemberian mahar uang di *Metaverse*, ada beberapa hal yang perlu dicermati dan dikaji lebih mendalam mengenai regulasi dalam perspektif hukum Islam. Mengingat mayoritas penduduk Indonesia beragama Islam. Terlebih lagi, *cryptocurrency* yang notabene digunakan sebagai mata uang dan alat transaksi di *Metaverse* telah diharamkan oleh Majelis Ulama Indonesia (MUI).

Berdasarkan latar belakang yang dipaparkan di atas, ada permasalahan yang urgen untuk dikaji yaitu mengenai keabsahan perkawinan sehubungan dengan pemberian mahar berupa uang di dunia *Metaverse* dalam perspektif hukum Islam. Hal ini sebagai bukti bahwa hukum islam mampu mengimbangi perkembangan zaman, salah satunya dunia *Metaverse* yang berimplikasi tidak hanya pada aspek sosial, melainkan juga ekonomi, politik dan agama.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

METODOLOGI

Artikel ini disusun menggunakan metode penelitian hukum normatif. Pendekatan penelitian dilakukan dengan menggunakan pendekatan konseptual dan pendekatan perundang-undangan. Dalam penelitian hukum tidak dikenal adanya data, sebab dalam penelitian hukum khususnya yuridis normatif sumber penelitian hukum diperoleh dari kepustakaan bukan dari lapangan, untuk itu istilah yang dikenal adalah bahan hukum (Marzuki, 2008). Dalam penelitian hukum normatif bahan pustaka merupakan bahan dasar yang dalam ilmu penelitian umumnya disebut bahan hukum sekunder. Sumber informasi penelitian menggunakan bahan hukum sekunder, yaitu buku-buku hukum, artikel hukum, jurnal, dan ketentuan peraturan perundangan-undangan terkait keabsahan perkawinan terkait pemberian mahar dalam hukum Islam. Teknik pengumpulan bahan hukum dilakukan dengan menggunakan analisis substansi (*content analysis*) serta penarikan kesimpulan menggunakan deduksi untuk menjawab rumusan permasalahan.

HASIL DAN PEMBAHASAN

Mahar atau mas kawin tidak menjadi salah satu syarat dan rukun perkawinan sehingga sebuah perkawinan tanpa mahar dan atau tanpa menyebut mahar pada saat akad nikah berlangsung tetap sah sepanjang memenuhi syarat dan rukun perkawinan. Namun demikian, kedudukan mahar sangat penting dalam perkawinan karena merupakan pemberian wajib dari mempelai laki-laki kepada mempelai perempuan yang diucapkan saat akad nikah berlangsung ataupun yang tidak diucapkan (Maris, 2016).

Selanjutnya, dalam hukum Islam ada 2 macam mahar, yaitu: mahar musamma dan mahar mitsil (Halomoan, 2015).

1. Mahar *musamma* adalah mahar yang disepakati oleh pengantin laki-laki dan pengantin perempuan yang disebutkan dalam redaksi adat. Dr. H. Abd. Rahman Ghazali mendefenisikan bahwa mahar *musamma* adalah mahar yang sudah disebut atau dijanjikan kadar dan besarnya ketika akad nikah (Abdurrahman, 2006)
2. Mahar *mitsil* adalah mahar yang tidak disebutkan besar kadarnya pada saat sebelum maupun ketika terjadi pernikahan, atau mahar yang diukur (sepadan) dengan mahar yang telah diterima oleh keluarga terdekat, dengan mengingat status sosial, kecantikan dan sebagainya.

Mahar *musamma* dapat dibayar tunai dalam akad nikah atau sesudahnya, dapat pula dibayar bertangguh, sesuai persetujuan dua belah pihak. Sementara mahar *mitsil* biasanya dibayar tunai dalam akad nikah dan dapat pula dibayar bertangguh, sesuai persetujuan kedua belah pihak (Sarong, 2005).

Dalam fiqh munakahat telah disebutkan ada beberapa macam syarat sahnya mahar yang diberikan kepada calon istri, adapun syarat tersebut sebagai berikut. (Mubarok, 2002)

1. Harta berharga. Tidak sah mahar dengan yang tidak berharga walaupun tidak ada ketentuan banyak atau sedikitnya mahar, mahar sedikit tapi bernilai tetap sah disebut mahar.
2. Barangnya suci dan bisa diambil manfaatnya. Tidak sah mahar dengan memberikan khamar, babi, atau darah, karena semua itu haram dan tidak berharga/suci.
3. Barangnya bukan barang ghasab. Ghasab artinya mengambil barang orang lain tanpa seizinnya namun tidak bermaksud untuk memilikinya karena berniat untuk mengembalikannya kelak. Memberikan mahar dengan barang ghasab tidak sah.
4. Bukan barang yang tidak jelas keadaannya. Tidak sah mahar dengan barang yang tidak jelas keadaannya, atau tidak disebutkan jenisnya.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Penyebutan secara jelas tentang jumlah mahar, kadarnya, dibayar tunai atau bertangguh dalam akad nikah hukumnya sunnah. Ketentuan ini senada dengan Kompilasi Hukum Islam juga dijelaskan bahwa (Tarigan, 2004):

1. Pasal 35 yaitu (1) apabila suami yang mentalak isterinya qabla ad-Dukhu>l wajib membayar setengah mahar telah ditetapkan dalam akad nikah. (2) Apabila suami meninggal qabla al-dukhul, seluruh mahar telah ditetapkan menjadi hak penuh isterinya. (3) Apabila perceraian terjadi qabla al-dukhul akan tetapi besarnya mahar belum ditetapkan, maka suami wajib membayar mahar mitsil.
2. Pasal 36 yaitu apabila mahar hilang sebelum diserahkan, mahar dapat diganti dengan barang lain sama bentuk dan jenisnya, atau dengan barang lain yang sama nilainya, atau dengan uang senilai dengan harga mahar yang hilang.
3. Pasal 37 yaitu apabila terjadi selisih pendapat mengenai jenis dan nilai mahar yang ditetapkan, penyelesainya diajukan Pengadilan Agama.
4. Pasal 38 yaitu (1) Apabila mahar yang diserahkan mengandung cacat atau kurang, tetapi calon mempelai wanita tetap bersedia menerimanya tanpa syarat, maka penyerahan mahar dianggap lunas. (2) Apabila isteri menolak untuk menerima mahar karena cacat, maka suami harus menggatinya dengan mahar lain yang tidak cacat. Selama penggantinya belum diserahkan, mahar masih dianggap belum dibayar.

Mahar boleh berupa uang, perhiasan, perabotan rumah tangga, binatang, jasa, harta perdagangan, atau benda-benda lainnya yang mempunyai harga. Diisyaratkan bahwa mahar harus diketahui secara jelas dan detail misalnya seratus lira atau secara global semisal sepotong emas, atau sekarung gandum (Mughniyah, 1999). Senada dengan pendapat Jaih Mubarok, menurut Ahmad Sarwat, secara umum ulama sepakat bahwa mahar harus memenuhi syarat tertentu agar sah dijadikan sebagai mahar:

1. Benda halal yang suci. Suatu benda yang akan dijadikan mahar harus terhindar dari unsur-unsur haram, karena itu mahar harus bisa dimiliki atau diperjual belikan atau dimanfaatkan, maka tidak sah mahar dengan minuman keras, babi, darah dan bangkai karena diharamkan agama Islam.
2. Benda yang berharga. Tidak sah mahar yang tidak memiliki harga. Maksudnya adalah mahar tidak boleh diambil dari benda-benda yang halal namun tidak ada harganya atau tidak bisa dinikmati oleh penerimanya, misalnya sampah, buah dan sayuran yang busuk dan lain-lain. Karena perbuatan itu berarti mempermudah perintah agama, seharusnya mahar diambil dari usaha terbaik calon suami, sebagaimana perintah infaq yang harus dikeluarkan dari hasil terbaik dari kerja seseorang.
3. Benda yang dimiliki. Mahar juga harus berupa benda yang dimiliki oleh seseorang dan dapat diserahkan kepada pengantin perempuan tersebut, dengan demikian mahar tidak boleh seperti burung yang terbang di udara atau ikan yang di laut yang belum dimiliki, karena yang demikian itu mengandung unsur tipuan, sebagaimana tidak diperbolehkannya jual beli atas sesuatu yang tidak bisa dimiliki (Ghaza, 2015)

Mahar yang rusak bisa terjadi karena barang itu sendiri atau karena sifat-sifat dari barang tersebut tidak diketahi atau sulit diserahkan, mahar yang rusak karena zatnya sendiri yaitu seperti khamar yang rusak karena sulit dimiliki atau diketahui, pada dasarnya disamakan dengan jual beli yang mengandung lima persoalan pokok (Sahrani, 2014).

1. Barangnya tidak boleh dimiliki
2. Mahar digabungkan dengan jual beli
3. Penggabungan mahar dan pemberian
4. Cacat pada mahar
5. Persyaratan dalam mahar

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Seiring berkembangnya teknologi, saat ini dunia metaverse sedang menjadi sorotan. Dengan teknologi *metaverse* yang ditunjang teknologi internet 5G, proses kolaborasi secara daring dirasa lebih mudah dan efektif. Dunia metaverse seperti dua sisi mata uang yang memiliki dampak positif dan negatif. Umumnya, metaverse sangat identic dan berkaitan dengan kripto yang sering digunakan sebagai pembayaran transaksi di metaverse. Namun, kontroversi asset kripto, yang merupakan mata uang di dunia metaverse menjadi topik hangat di tahun 2021. Ada yang pro dan kontra mengenai penggunaan crypocurrency sebagai mata uang. Sejumlah pemerintahan negara telah melarang aktivitas perdagangan kripto.

Setelah melewati pembahasan panjang, Majelis Ulama Indonesia melalui *Ijtima* Ulama Komisi Fatwa se-Indonesia ke-VII yang berlangsung dari 9-11 November 2021 menetapkan bahwa penggunaan *cryptocurrency* atau mata uang kripto hukumnya haram (redaksi, 2021). Adapun isi Keputusan MUI mengenai *cryptocurrency,* adalah sebagai berikut:

1. Penggunaan *cryptocurrency* sebagai mata uang hukumnya haram, karena mengandung *gharar, dharar* dan bertentangan dengan Undang-Undang nomor 7 tahun 2011 dan Peraturan Bank Indonesia nomor 17 tahun 2015.
2. *Cryptocurrency* sebagai komoditi/aset digital tidak sah diperjualbelikan karena mengandung *gharar, dharar, qimar* dan tidak memenuhi syarat *sil'ah* secara syar'i, yaitu: ada wujud fisik, memiliki nilai, diketahui jumlahnya secara pasti, hak milik dan bisa diserahkan ke pembeli.
3. *Cryptocurrency* sebagai komoditi/aset yang memenuhi syarat sebagai sil'ah dan memiliki *underlying* serta memiliki manfaat yang jelas hukumnya sah untuk diperjualbelikan.

Pada akhir 2021, ada seorang pria yang memberikan mahar berupa bitcoin untuk mempelai wanitanya. Selanjutnya, pada tahun 2022, pasangan di India telah melangsungkan perkawinan yang dihadiri 500 tamu undangan di metaverse. Hal ini mengindikasikan bahwa dunia Metaverse sangat berkembang dan diminati, sehingga urgen untuk dibuatkan model regulasi yang jelas sebagai bentuk kepastian hukum bagi para penggunanya. Salah satunya tentang pemberian mahar uang di dunia metaverse, yang memang belum ada pengaturan yuridisnya.

Lalu bagaimana jika ke depan ada pasangan muslim yang ingin memberikan mahar berupa uang di dunia metaverse? Apakah hal tersebut diperbolehkan dan perkawinannya sah? Mengingat, MUI telah mengeluarkan fatwa tentang haramnya penggunaan *cryptocurrency* sebagai mata uang. Mencermati hasil fatwa MUI pada poin 1 dan 2, jika mahar uang tersebut mengandung gharar dan dharar tentu saja tidak diperbolehkan.

Gharar dalam hukum Islam berarti keraguan, tipuan atau tindakan yang bertujuan untuk merugikan orang lain. Gharar juga dapat diartikan suatu akad yang mengandung unsur penipuan karena tidak adanya kepastian, baik mengenai ada atau tidak adanya objek akad, besar kecilnya jumlah, maupun kemampuan menyerahkan objek yang disebutkan di dalam akad tersebut.

Dharar berarti transaksi yang dapat menimbulkan kerusakan, kerugian, ataupun ada unsur penganiayaan. Dharar memiliki dampak yang dapat mengakibatkan terjadinya pemindahan hak kepemilikan secara bathil. Menurut keterangan dari Ubadah bin Shomit, sesungguhnya Rasululloh SAW menghukumi bahwa tidak boleh seseorang merusak (diri, harta, kehormatan) orang lain.

Menurut Penulis, jika mempelai laki-laki tidak bertujuan untuk membuat tipu muslihat, keraguan dan merugikan orang lain serta mampu membuktikan bahwa mahar uang yang akan diberikan kepada mempelai wanita bersifat jelas dan pasti, hukumnya boleh. Tujuan

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

perkawinan untuk membentuk keluarga yang *sakinah*, *mawadah wa rahmah*, dan pemindahan kepemilikan mahar dalam kondisi ini bukan merupakan transaksi jual beli karena mahar adalah pemberian dari suami kepada istri atas apa yang telah disepakati.

Pada poin 2, jika *cryptocurrency* berlaku sebagai komoditi/aset digital tidak sah diperjualbelikan karena mengandung *gharar*, *dharar*, *qimar* dan tidak memenuhi syarat *sil'ah* secara syar'i, yaitu: ada wujud fisik, memiliki nilai, diketahui jumlahnya secara pasti, hak milik dan bisa diserahkan ke pembeli. Dalam hal ini, ada penambahan kriteria mengenai alasan mengapa MUI mengharamkan *cryptocurrency*. Adapun Qimar merupakan suatu bentuk permainan yang didalamnya dipersyaratkan. Secara ilustrasi diartikan jika salah seorang pemain menang, maka ia akan mengambil keuntungan dari pemain yang kalah dan sebaliknya. Prinsip ini juga sejalan dengan syarat sah mahar yang telah dikemukakan Penulis.

Ada pengecualian terkait kebolehan *cryptocurrency* yang digunakan sebagai komoditi/asset. Objeknya harus memenuhi syarat sebagai sil'ah dan memiliki *underlying* serta memiliki manfaat yang jelas hukumnya sah untuk diperjualbelikan. Jika dikaitkan dengan mahar yang akan diberikan dalam perkawinan, jika *cryptocurrency* memenuhi syarat sebagai sil'ah dan memiliki *underlying*, hukumnya sah. Apalagi tujuan dan manfaatnya jelas sebagai mahar dalam perkawinan.

Selanjutnya, berdasarkan syarat sah mahar, jika objek uang di *Metaverse* memenuhi kualifikasi sebagai harta berharga, barangnya suci dan dapat diambil manfaatnya, barangnya bukan barang *ghasab*, bukan barang yang tidak jelas keadaannya dan merupakan uang yang dimiliki. Jika proses pemberian mahar uang tidak mengakibatkan kerugian, syarat mahar tersebut sah dan terpenuhi.

Dalam perkembangannya, ternyata tidak hanya *cryptocurrency* yang berlaku sebagai mata uang dalam *Metaverse*, melainkan rupiah juga sedang dikembangkan oleh beberapa bank. Saat ini, Bank Nasional Indonesia (BNI) menyatakan dalam melakukan transaksi komersial di dalam metaverse akan dilakukan dengan mata uang rupiah, jadi tidak harus *cryptocurrency* (Pratomo, 2022). Pernyataan ini semakin membuktikan jika ke depan, mata uang rupiah akan digunakan sebagai alat transaksi, bahkan dapat digunakan dan difungsikan sebagai mahar dalam perkawinan.

Menurut analisis Penulis, mahar bukan termasuk rukun dan syarat perkawinan. Namun demikian, pemberian mahar merupakan suatu kewajiban bagi calon suami terhadap calon istrinya ketika hendak melangsungkan perkawinan. Menurut seluruh mazhab, kecuali madzab Malikiyah, mensyaratkan bahwa mahar harus diketahui secara jelas dan riil atau secara global mengenai jumlahnya. Apabila tidak terpenuhi syarat tersebut, akad perkawinan tetap sah tetapi mahar tersebut batal. Sedangkan menurut Malikiyah, berpendapat jika syarat mahar tersebut tidak terpenuhi, maka akad perkawinannyanya *fasid* (tidak sah) dan di-*faskh* sebelum terjadi percampuran, tetapi bila terjadi percampuran maka akad dinyatakan sah dengan menggunakan mahar *mitsil*.

SIMPULAN

Di dunia *Metaverse* yang sedang tren sejak tahun 2021, setiap orang dapat membangun jaringan dan berinteraksi secara virtual hologram. Banyak peluang untuk menghasilkan uang yang notabene dapat dijadikan dalam mahar perkawinan. Berdasarkan hasil analisis dan pembahasan, penulis bersimpulan bahwa pemberian mahar berupa uang di *Metaverse* harus memenuhi syarat sah mahar, yaitu harta berharga, barangnya suci dan dapat diambil manfaatnya, barangnya bukan barang *ghasab*, bukan barang yang tidak jelas keadaannya, dan merupakan uang yang dimiliki. Selain itu tidak boleh ada unsur *gharar*, *dharar*, dan *qimar*. Jika tidak terpenuhi syarat tersebut, akad perkawinan tetap sah tetapi mahar tersebut batal dan

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

sebaiknya suami mengganti dengan objek mahar lain yang disepakati dengan istrinya. Hingga saat ini, belum ada pengaturan yuridis yang mengatur mengenai *Metaverse* secara jelas dan rinci, padahal perkembangannya sangat dinamis. Selain memiliki banyak peluang dari sisi ekonomi, sosial, budaya, dan agama. Namun, ada beberapa dampak negatif lainnya yang menyertai sehingga peran pemerintah sangat dibutuhkan untuk andil dalam membuat perangkat hukum yang terkait dengan inovasi pada teknologi informasi atau teknologi digital saat ini. Perlu adanya pembaharuan hukum dan pengembangan *digital authority* untuk memastikan adanya sinkronisasi dan harmonisasi kebijakan digital yang menjamin kepastian hukum.

DAFTAR PUSTAKA

Abdurrahman, A. b. (2006). *Syarah Bulughul Marom*. Jakarta: Pustaka Azzam.

Arkeman, Y. (2022, June 27). Retrieved from Republika.id: https://www.republika.id/posts/23931/bersiap-mengarungi-metaverse

Fitri, A. B. (2018). Eksistensi Mahar Pernikahan dalam Islam. *Jurnal Usratuna* Volume 2 Nomor 1, 29.

Ghaza, L. U. (2015). *Tafsir Ahkam*. Ciputat: UIN Press.

Halomoan, P. (2015). PENETAPAN MAHAR TERHADAP KELANGSUNGAN PERNIKAHAN DITINJAU MENURUT HUKUM ISLAM. *JURIS* Volume 14, Nomor 2, 112.

Maris, H. (2016). Konsep Mahar dalam Perspektif Hukum Fikih dan Perundang-Undangan. *Jurnal Yudisial* Vol. 9 No. 1, 22.

Marzuki, P. M. (2008). *Penelitian Hukum*. Jakarta: Kencana Prenada Media Group.

Mubarok, J. (2002). *Kaidah Fiqh Sejarah dan Kaidah Asasi*. Jakarta: Raja Grafindi Persada.

Mughniyah, A. M. (1999). *Fiqih lima mazhab: Ja'fari, Hanafi, Maliki, Syafi'i, Hambal*. Indonesia: Lentera Basritama.

Pertiwi, W. K. (2022, June 27). tekno.kompas.com. Retrieved from kompas.com: https://tekno.kompas.com/read/2022/02/16/10010027/kemeriahan-pernikahan-perdana-di-metaverse-yang-dihadiri-500-tamu?page=all

Pratomo, G. Y. (2022, February 15). Retrieved from Liputan6.com: https://www.liputan6.com/crypto/read/4887791/bni-tetap-pakai-rupiah-meski-buka-cabang-di-metaverse

Putriadita, D. (2022, June 26). investasi.kontan.co.id. Retrieved from kontan.co.id: https://investasi.kontan.co.id/news/bitcoin-rp-719-juta-dijadikan-sebagai-mas-kawin

redaksi. (2021, November 12). Retrieved from mui.or.id: https://mui.or.id/berita/32209/keputusan-fatwa-hukum-uang-kripto-atau-cryptocurrency/

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Saebani, B. A. (2001). *Fiqh Munakahat 1*. Bandung: Pustaka Setia.

Sahrani, T. d. (2014). *Fikih Munakahat Kajian Fikih Nikah Lengkap*. Jakarta: Rajawali Pers .

Sarong, H. A. (2005). *Hukum Perkawinan Islam di Indonesia*. Banda Aceh: Yayasan Pena.

Tarigan, A. N. (2004). *Hukum Perdata Islam di Indonesia*. Jakarta: Prenada Media Group.

Readiness Of the Government in Legal Regulations to Face the Metaverse Era

Yeni Santi[1], Dian Ratu Uswatun Hasanah[2]
[1,2]Universitas Terbuka
e-mail: yenisanti@ecampus.ut.ac.id

Article Info

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Article of OSC 2022

Abstract

The development of science and technology brings humans into the digital era which opens a broad view of the community for the activities they do. When entering the world of technological advances, the metaverse era where the metaverse is described as a virtual world that can be visited by people through Virtual Reality (VR) devices. With technology in the metaverse era, humans can limit and space that was previously difficult to reach and possess.
This rapid technological development does not necessarily have a positive impact, because it turns out that with these technological advances in the use of the metaverse world there are gaps for negative impacts and risks that arise. One of the impacts that arise is cyber crime or Cyber Crime with various modes of crime that arise. Metaverse is a new thing, especially in Indonesia, the need for government readiness to prepare clear regulations as a legal umbrella in the metaverse era facing cyber crime
The research method used in this study is a combination of normative research supported by empirical data from field research. Government readiness in determining regulations is an important aspect by developing legal principles that are flexible and can adapt to increasingly fast technological developments.

***Keywords**: Legal Regulation, Cyber Crime, Metaverse*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

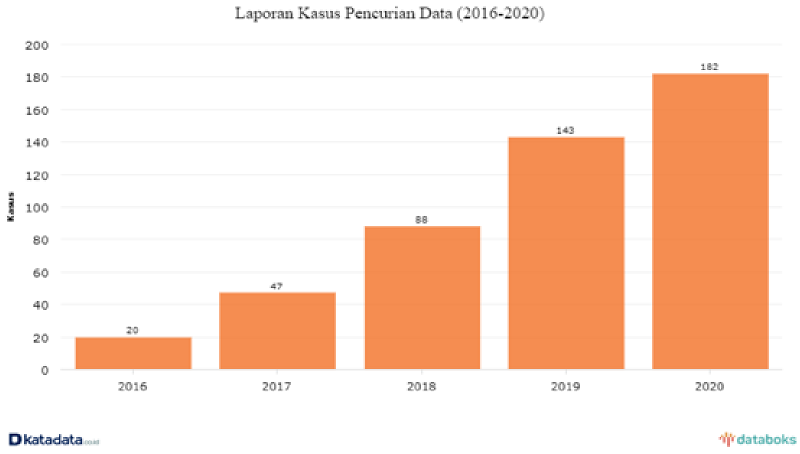
INTRODUCTION

The development of science and technology that is increasingly rapidly affecting all aspects of human life, science that is currently developing has entered the era of technological progress. Humans are required to carry out all activities quickly, effectively, and efficiently. These technological advances bring changes to society both from the mindset, lifestyle and even the world of work.

Metaverse is a new technology that has started to enter Indonesia, metaverse is described as a virtual world that can be visited by people through Virtual Reality (VR) devices. With technology in the metaverse era, humans can break through boundaries and spaces that were previously difficult to reach and possess. Metaverse technology is also capable of infiltrating all lines of the economy. As many as 25% of the population is estimated to spend one hour per day in the metaverse in 2026. The Ministry of Communication and Informatics targets 5G to be evenly distributed in Indonesia in 2024 to 2025. Therefore, the ministry is aggressively reorganizing spectrum or refarming to build a 5G ecosystem[1]. Metaverse is transformed into something that has the potential to change life experiences for the better broad and can be used by anyone to be able to enter all lines as well as various digital activities and activities.

This increasing use of digital makes digital experiences not always pleasant and positive, from the use of existing technology in the metaverse that presents something fun, there is another side that can have negative and detrimental impacts arising from cybercrime. Information Technology is like a double-edged sword, because apart from contributing to the improvement of human welfare, progress, and civilization, it is also an effective means of unlawful acts[2]. legal actions that often occur in cyberspace that can also occur in the metaverse as one of the technological innovations are the theft of personal data. The cyber police recorded that 182 cases of data theft were reported by the public. This figure increased by 27.3% compared to the previous year which was 143 reports. Over the past five years, the increase in data theft reports increased by 810% from 20 reports in 2016[3]. as shown in the following table:

Table 1. Data Theft Case Reports (2016-2020)



Source: Cyber Patrol

[1] Potensi Adopsi Metaverse di Indonesia Tergantung Pengembangan 5G”, https://katadata.co.id/desysetyowati/digital/624c68b160f17/potensi-adopsi-metaverse-di-indonesia-tergantung-pengembangan-5g

[2] Ahmad M. Ramli, Cyberlaw dan HAKI dalam Sistem Hukum di Indonesia, 2004, hal. 1.

[3] Pencurian Data Pribadi Makin Marak Kala Pandemi https://databoks.katadata.co.id/datapublish/2021/09/07/pencurian-data-pribadi-makin-marak-kala-pandemi

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

The increasing number of Cyber Crime cases in Indonesia is a negative effect that needs special attention from the government. The government must prepare regulations and policies to tackle crimes that occur in cyberspace. Legal regulations related to information technology and digital technology to meet the metaverse era still need to be prepared and structured so that legal policies can respond to today's dynamic technological developments. The government needs adequate tools to ensure security in activities carried out by people in cyberspace, the government needs to prepare and develop laws related to activities carried out in the metaverse era. On the issue of protection personal data information only, the Indonesian government's legal regulations are still at the Draft Law stage, even though technology continues to develop, the government Undang-undang Nomor 11 Tahun 2008 Tentang Informasi dan Transaksi Elektronik[4] it is still not enough to overshadow the problems that occur in cyberspace today, while the metaverse era has come before us with all the problems that will be present, not only problems with the protection of personal data information but other aspects related to security and legal guarantees that become the umbrella metaverse society law.

Based on the description above, the problem that needs to be discussed and studied is how is the Government's Readiness in Legal Regulations Facing the Metaverse Era?

METHODOLOGY

The research method used is normative research supported by empirical data with a qualitative approach paying attention to the symptoms that occur to the government's readiness to determine the right regulations to face the metaverse era. This study also uses primary data from binding data and secondary data obtained from reading sources as initial data information.

RESULT AND DISCUSSION

Government Readiness in Legal Regulation to face the Metaverse Era

Technological progress cannot be separated from the development of science, the metaverse era is a new world where humans face everything with the sophistication of virtual technology that is close to reality. Metaverse is virtual community world that is built to connect with each other. In this community, people can meet, work, play and even transact like in the real world with the help of Augmented Reality (AR) and Virtual Reality (VR) technology. Transactions in this virtual community usually use crypto currency, so it is widely interpreted as the meaning of the crypto metaverse[5].

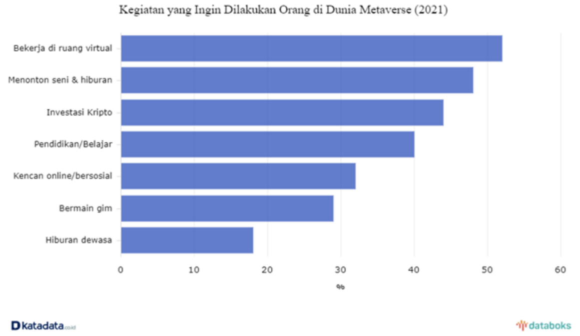
With all the activities carried out in the metaverse world, there are many people who are interested in carrying out activities in the metaverse world, such as Statista once conducted a survey of 1,000 respondents to find out what activities they want to do in the Metaverse world. And it turns out, around 52% of respondents said they wanted to go there to get experience working in a virtual workspace. A total of 48% of respondents wanted to enter Metaverse to watch live art and entertainment performances in a virtual space. Then 44% said they wanted to invest in cryptocurrencies and non-exchangeable tokens. Furthermore, 40% of respondents wanted to have a learning experience in the Metaverse virtual space, while 32% of respondents wanted to do online dating and socializing. Finally, 29 % of respondents want to play games, and another 18% want to watch adult entertainment on Metaverse[6].

---

[4] Undang-undang Nomor 11 Tahun 2008 Tentang Informasi dan Transaksi Elektronik
[5] "Apa itu Crypto? Uang Digital untuk Alternatif Investasi" https://www.qoala.app/id/blog/keuangan/investasi/apa-itu-crypto/
[6] "Survei: Banyak Orang Ingin Masuk ke Metaverse untuk 'Ngantor' Virtua"

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Table 2. Activities People Want to Do in the Metaverse World (2021)



Source: Statista, 4 Februari 2021

From this data, it shows that the potential development of metaverse technology in Indonesia has a good response, this potential can be used as a business opportunity to increase financing and business activities so that it can open new jobs with activities in the metaverse world. However, all these activities are not only the benefits, the greater the influence of technology in human life, the higher the risks to be faced.

As technology advances, it causes the emergence of accompanying crimes that are included in cyber crimes or cyber crimes. Technological developments always have an impact both directly and indirectly, both in positive and negative terms and will greatly affect every attitude and mental attitude of every member of society[7]. Crimes caused by technological equipment are still called transnational legal violations that have legal implications in Indonesia[8]. Based on data from the National Cyber and Crypto Agency (BSSN) from January to August 2020, there were nearly 190 million attempts at cybercrime[9].

Table 3. Data on the Number of Cyber Attacks January - August 2019/2020

Source: Pusat Operasi Keamanan Siber Nasional

[7] Andi Hamzah. 1992 Aspek-Aspek Pidana Di Bidang Komputer. Jakarta, Sinar Grafika. Hal.10.
[8] Jawade Hafid, (2014) "Kajian Yuridis dalam Antisipasi Kejahatan Cyber" Jurnal Pembaharuan Hukum, Volume I No.1 Januari –April 2014.
[9] "Kejahatan Siber di Indonesia Naik 4 Kali Lipat Selama Pandem" https://tekno.kompas.com/read/2020/10/12/07020007/kejahatan-siber-di-indonesia-naik-4-kali-lipat-selama-pandemi

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

The increase in cyber attacks shows that there is a need for government readiness in protecting a strong cyber defense, especially in the face of this era metaverse that can make humans dependent on technology. The government needs to be prepared to provide a clear legal umbrella for the community so that they feel protected for these activities in cyberspace. The government needs to take policies on regulations that are in accordance with technological developments. But the law can also be a criminogenic factor if it is inconsistent with reality, separated from the values of society so that there is an attitude of distrust regarding the effectiveness of the legal system[10]. For this reason, the government needs serious attention to seek things that can be applied in carrying out and forming clear and definite regulations.

Legal regulations according to the Big Indonesian Dictionary are regulations. Regulation in Indonesia is defined as a formal source of law in the form of statutory regulations that have several elements, namely a written decision, formed by a state institution or authorized official, and binding on the general public[11].

Indonesia already has legal regulations to anticipate the development of digital technology, namely the existence of Law Number 11 of 2008 concerning Information and Electronic Transactions. The government also has Peraturan Pemerintah Nomor 71 Tahun 2019 tentang Penyelenggaraan Sistem Transaksi Elektronik[12]. As well aseraturan Menteri Kominfo Nomor 5 Tahun 2020 tentang Penyelenggaraan Sistem Elektronik Lingkup Privat[13].

Regulations owned by the government even though they already exist, need to follow the presence of modern law where there is a past history that involves a reciprocal relationship between law and society with modern developments such as what happened in the metavers era where later regulatory regulations were made on problems that had occurred in the past. Modernity itself has the following characteristics:

1. Have a written form;
2. The law applies to the entire territory of the country;
3. Law is an instrument that is used consciously to realize the political decisions of the people[14].

Laws with these characteristics have indeed become a necessity in making regulations or policies. With the existence of written law, it does not cause multiple interpretations in its application. The government is not only sufficient on existing regulations to protect its people, but also needs legal reforms and strategies to deal with the metaverse world. The need for security and control of personal data is a concern. Providing personal data information without sufficient knowledge can be a loophole if the government does not provide appropriate legal regulations to protect its people. This is also one of the things that the government must prepare to deal with technological advances. Regulations for the protection of personal data by the government are still at the Draft Law stage.

CONCLUSION

The government in facing the metaverse era has a positive aspect of technological progress, with human technological advances being faced with something that can provide a new experience and can help everything. Activities become faster and more efficient, and can

[10] Barda Nawawi Arif. 1986. Penetapan Pidana Dalam Perundang-Undangan Dalam Rangka usaha Penanggulangan Kejahatan (Disertasi). Bandung: Universitas Padjadjaran.Hal. 4-5.

[11] REGULASI DALAM PERATURAN PERUNDANG-UNDANGAN INDONESIA BESERTA ASAS-ASAS PEMBENTUKANNYA http://ebookregulasi.pa-tanjungpati.go.id/index.php/66-halaman-depan/1-regulasi

[12] Peraturan Pemerintah Nomor 71 Tahun 2019 tentang Penyelenggaraan Sistem Transaksi Elektronik

[13] Peraturan Menteri Kominfo Nomor 5 Tahun 2020 tentang Penyelenggaraan Sistem Elektronik Lingkup Privat

[14] Satjipto Rahardjo. 1982. Ilmu Hukum. Bandung, PT Citra Aditya Bakti. hal 213-214.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

open up new jobs with the facilities provided so that many people want to carry out activities in the metaverse. However, the development of advanced technology can also have a negative impact on the activities carried out, from year to year the level of cyber attacks in Indonesia has increased as technology advances. For this reason, there is a need for government readiness to develop dynamic legal regulations and strategies that keep up with technological advances, so as to close the gaps that can be exploited by cybercriminals, it is necessary to immediately enact the Bill on the protection of personal data into law as a necessary step. right because it involves the protection of the personal information of cyber users.

REFERENCES

Ahmad M. Ramli. (2004). *Cyberlaw dan HAKI dalam Sistem Hukum di Indonesia.* Bandung, PT. Refika Aditama

Andi Hamzah. (1992). *Aspek-Aspek Pidana Di Bidang Komputer*. Jakarta, Sinar Grafika.

Satjipto Rahardjo. (1982). *Ilmu Hukum*. Bandung, PT Citra Aditya Bakti.

Barda Nawawi Arif. (1986). *Penetapan Pidana Dalam Perundang-Undangan Dalam Rangka usaha Penanggulangan Kejahatan (Disertasi)*. Bandung: Universitas Padjadjaran.

Jawade Hafid. (2014). "Kajian Yuridis dalam Antisipasi Kejahatan Cyber". *Jurnal Pembaharuan Hukum*, Volume I No.1 Januari –April 2014.

Undang-undang Nomor 11 Tahun 2008 Tentang Informasi dan Transaksi Elektronik

Peraturan Pemerintah Nomor 71 Tahun 2019 tentang Penyelenggaraan Sistem Transaksi Elektronik

Peraturan Menteri Kominfo Nomor 5 Tahun 2020 tentang Penyelenggaraan Sistem Elektronik Lingkup Privat

https://katadata.co.id/desysetyowati/digital/624c68b160f17/potensi-adopsi-metaverse-di-indonesia-tergantung-pengembangan-5g

https://databoks.katadata.co.id/datapublish/2021/09/07/pencurian-data-pribadi-makin-marak-kala-pandemi

https://www.qoala.app/id/blog/keuangan/investasi/apa-itu-crypto/

https://databoks.katadata.co.id/datapublish/2022/02/10/survei-banyak-orang-ingin-masuk-ke-metaverse-untuk-ngantor-virtual

https://tekno.kompas.com/read/2020/10/12/07020007/kejahatan-siber-di-indonesia-naik-4-kali-lipat-selama-pandemi

http://ebookregulasi.pa-tanjungpati.go.id/index.php/66-halaman-depan/1-regulasi.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Yayasan Lembaga Konsumen Indonesia. (2020). Retrieved from www.ylki.or.id: https://ylki.or.id/category/beritaliputan-media/.

Potential of Money Laundering in the *Metaverse* Era

Nadia Nurani Isfarin[1], Sani Nur Imamy[2], A. Rachmat Wirawan[3]
Universitas Terbuka
e-mail: nadian@ecampus.ut.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

Money laundering is not new in terms of world crimes, nor the country in particular. It's just that the modus operandi later developed along with the changing times. Technological advances may indicate a metamorphosis of crime that conventionally switches technological bases. Money laundering is no exception, which was with substantial physical assets and then switched to assets in metaphysical virtual space. A meta projection that presents virtual reality, just like actual events in the real world. The process of interaction and transactions in the Metaverse world allows for money laundering crimes to occur, namely through the use of crypto (Virtual Currency), because many activities will use virtual money in the Metaverse world as a means of money laundering crimes through cyberspace. This makes the author research and examine the potential for the occurrence of criminal acts of money laundering utilising user activity.

***Keywords**: Money, laundry, Metaverse, crime*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

Het recht hink achter de feiten aan, which can be interpreted as "the law always lags behind the events", is the correct adage to describe the current situation of digital technology development. A new modus operandi of crime often accompanies the rapid development of this era.

The rapid advancement of digital technology in this era requires that everyone and the social order in society must be able to keep up with the times. One of the implications of the development of digital technology in this modern era is the presence of the *Metaverse*. The word *Metaverse* has been hotly discussed recently, but it is not a new term. If we trace its history, we will recognize this term from Neal Stephenson's cyberpunk novel Snow Crash, released in 1992, and William Gibson's Neuromancer, which describes virtual reality data spaces called matrices. Etymologically, the word *Metaverse* comes from two words, *'meta'*, which means beyond, and *'verse'* which means universe. In this sense, *Metaverse* is a virtual reality in 3D, allowing people to interact, work, play, socialise, and perform other activities virtually. Currently, the real *Metaverse* is not yet at its optimal point[1]. This later in its development will develop towards buying and selling products that will use *Virtual currency* (VC) virtual currency) as the exchange rate.

The term "virtual currency" has traditionally been defined as a unit of value stored on an electronic medium. It is not created by a state or monetary union but by a group of people or legal entities. It is used for the multilateral exchange of goods or services between group members. A virtual currency scheme can be "open" or "closed" (depending on whether or not it can be converted to legal currency)[2]. Its nature, which does not require complete user data (even anonymous), is challenging to track and is extraterritorial, making the virtual currency a new means for criminals to ideally store and process the proceeds of crime[3].

The *Metaverse* world is potentially easy to use by criminals, one of which is the modus operandi of money laundering. This makes the writer worried, considering the declining spirit of law enforcement related to money laundering, especially corruption crimes, after the revision of the Corruption Eradication Law, which the author considers to be increasingly weakening the Corruption Eradication Commission, which can also have an impact on the spirit of eradicating money laundering crimes.

Therefore, the author sees the need for further analysis of how money laundering can work in the *Metaverse*. In addition, it is necessary to study the efforts the Indonesian government can take regarding the readiness of Indonesian legal instruments in their prevention and enforcement efforts. Therefore, the author is interested in making legal writing titled " Potential of Money Laundry in the *Metaverse* Era ".

METHODOLOGY

The method of approach used in this research is normative. Normative legal research is legal research that puts the law as a building system of norms. The norms in question are

[1] Guntur Wibisono, Gereja dan Metaverse (Sebuah Studi Ekslesiologi), Kastara Karya: Jurnal Pendidikan, Vol. 2, No. 2, Mei 2022, hlm. 16

[2] Virtual Currencies Working Group, Regulating Virtual Currencies, France Ministry of Finance and Public Accounts, Paris, 2014, hlm. 3

[3] Maria Minerva M. Dkk, Pencegahan dan Penindakan Penggunaan Virtual Currency Sebagai Sarana Kejahatan Pencucian Uang Melalui Dunia Maya (Studi Kasus Liberty Reserve), Diponegoro Law journal, Volume 6, Nomor 1, Tahun 2017, hlm. 2

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

regarding principles, norms, rules of statutory regulations, court decisions, agreements, and doctrines (teachings)[4].

Research using normative juridical or normative law methods is carried out by examining library materials which are secondary data[5]. Secondary data in the field of law (viewed from the point of view of its binding power) can be divided into:

1. Primary legal materials, namely binding legal materials. [6]In this study, the authors use primary legal materials in the form of conventions and laws and regulations regarding virtual currencies and money laundering, including:
    a. United Nations Convention against TransnationalcOrganized Crime
    b. Law Number 8 of 2010 concerning Prevention and Eradication of the Crime of Money Laundering and other laws and regulations that are still related to the issues raised by the author
2. Secondary legal materials, namely materials that are closely related to primary legal materials and can help analyse and understand primary legal materials[7]. The main sources of secondary legal materials are law books, theses, theses, legal dissertations, and legal journals, including those online[8].
3. Tertiary legal materials, namely materials that provide information about primary legal materials and secondary legal materials[9], including legal dictionaries.

The data or legal materials that have been collected are then analysed to find answers to the research problems. The data analysis method used in this study is qualitative data analysis; namely, the data that has been collected must be separated according to their respective categories and then interpreted to find answers to research problems[10].

RESULT AND DISCUSSION

How Money Laundry works in the Metaverse

Before the author discusses how money laundering can work in the metaverse, it is necessary to understand how and how it works. In short, AR or *Augmented Reality* is a technology that combines two-dimensional and or three-dimensional virtual objects into a natural environment. It then projects these objects in reality in real-time. In comparison, *Virtual Reality* (VR) is a technology that can create simulations. This simulation can be the same as the real world, such as the atmosphere when a person walks around the city and all other forms of activity[11].

To present the metaverse world, AR technology must be combined with VR technology and supported by *Artificial Intelligence* (AI), which is a technology that allows computer systems, software, programs and robots to "think" intelligently like humans. [12]The explanation above describes in a simple way how the metaverse works and various kinds of things that users can do, including virtual activities, gatherings, shopping, logging into games, and

---

[4] Mukti Fajar & Yulianto Achmad, 2019, Dualisme Penelitian Hukum Normatif & Empiris, Pustaka Pelajar, Yogyakarta, hlm. 34

[5] Ronny Hanitijo Soemitro, 1990, Metodologi Penelitian Hukum dan Jurimetri, Ghalia Indonesia, Jakarta, hlm. 11

[6] Soerjono Soekanto, 2008, Pengantar Penelitian Hukum, UI-Press, Jakarta, hlm. 52

[7] Ronny Hanitijo Soemitro, op.cit., hlm. 12

[8] Peter Mahmud Marzuki, 2014, Penelitian Hukum (Edisi Revisi), Prenadamedia Group, Jakarta, hlm. 195

[9] Ronny Hanitijo Soemitro, op.cit., p. 12

[10] Burhan Ashshofa, 2004, Metode Penelitian Hukum, PT. RINEKA CIPTA, Jakarta, hlm. 124

[11] https://pji.uma.ac.id/index.php/2022/03/07/metaverse-di-kalangan-millennial/ accessed Monday 4 July 2022 at 00.03 wib

[12] *Ibid*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

hardware tools. All types of activities above, if the government does not regulate them in this case, can be exploited by criminals because of the nature of the metaverse that is easily accessible, even cross-border, where the author intends to go beyond the territory of a country which should be known together that one of the principles in law enforcement is a territorial principle, which makes it difficult for law enforcement officers to carry out supervision, this is risky to be used as a place for money laundering proceeds from crime.

Non Tangible Tokens:

- An NFT is a unit of data stored on the blockchain, which can be sold and transferred
- The NFT can be associated with a particular digital or physical asset or a license
- NFT'a are not interchangeable, not Fungible, and therefore all have a different value
- Risk of NFT:
- Currently not regulated
- Do not perform "Know Your Customer"
- Huge amounts are spent on NFTs
- The huge amounts that are spent on GAS fees should also seen as a red falg

How to launder money with NFT

- Someone looking to clean dirty money
- Generate an anonymous NFT
- List for sale on the blockchain
- Purchase it from him/herself from an anonymous, unregulated digital wallet with illicit funds
- Recognize the money as legitimate funds from the sale of the artwork

Readiness of Indonesian Legal Instruments in Efforts to Prevent and Enforce Money Laundry in the Metaverse

After briefly understanding what and how the metaverse works, it must be realised that the regulation regarding money laundering must not be left behind with the development of societal events. Therefore, the Indonesian government needs to make several efforts to prevent the use of metaverse (in this case, one of them is the use of Virtual Currency because many activities will use virtual money in the metaverse world) as a means of money laundering crimes through cyberspace, namely:

1. Prevention of money laundering crime through a metaverse

Drawing up special regulations related to VC is an important step. In several developed countries, such as the United States, Japan and Singapore, tax regulations related to VC have been prepared. Technological developments, mainly digital or virtual systems, are taking place rapidly. So, it is predictable that new types of virtual currencies, both similar and more sophisticated and complex than the current ones, will continue to emerge in the future[13].

As one of the countries in Southeast Asia with relatively high virtual currency transactions, Indonesia should make laws and regulations that specifically regulate virtual currency transactions. This is so that virtual currencies can be monitored for their use, so they are not used as a means of money laundering crimes. In its preparation, regulators can refer to international money laundering conventions that have been ratified, such as the Palermo Convention. In addition, the regulator can review the regulations of other countries that have regulated similar efforts to be used as input[14].

[13] Dhoni Siamsyah Fadillah Akbar, "Regulasi Mata Uang Virtual untuk Mencegah Tax Evasion" (Artikel Opini, Kementerian Keuangan Republik Indonesia, 2016), hlm. 2
[14] Maria Minerva M. Etc., Op.cit, p. 8

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

The next effort the government can make is to optimise the role of the KYC (Know Your Customer Principles) principle. Concerning the Implementation of Know Your Customer Principles in Bank Indonesia Regulations Number: 3/10/PBI/2001) could be performed by amending the rules legislation that regulates the principles KYC, including Law Number 8 of 2010 concerning Prevention and Eradication of the Crime of Money Laundering (UU PP TPPU)[15].

The team formulating the PP TPPU Law may make amendments by adding “fiat/official/legal exchanger service providers to virtual money and vice versa” as one of the Reporting Parties. Every exchanger must apply the KYC principle in running its business. In addition, the KYC principle can also be maximised by defining one of the Reporting Parties in the Anti-Money Laundering Law, namely "the organiser of money transfer business activities"[16].

The word "money" in the phrase "provider of money transfer business activities" does not explain what money is meant in what form, whether it is only fiat/official/legal currency or includes money in other forms. Therefore, to prevent the use of VC as a means of cyber laundering crime, it is necessary to make a definition of "provider of money transfer business activities" such as: receiving currency, amount of funds, or other forms of value that replace the currency of a person and sending currency, an amount of money. Funds, or any other form of currency that substitutes for another location or other person in any way. With this definition in place, “money remittance operators” who serve money transfers in the form of VC are required to apply KYC principles in every transaction[17].

Indonesia's position, which does not recognise VC as a legal tender and does not classify it into other forms, such as property, causes all activities that use VC to be non-taxable. Until now, the Directorate General of Taxes has not issued guidance on taxation aspects related to bitcoin or other types of VCs[18].

The absence of tax provisions on VC transactions results in no control over the transactions made. This will increase the possibility of using VC for money laundering through cyberspace. Therefore, the Indonesian government needs to regulate taxation on VC transactions which serve as revenue for the state treasury and as a means of controlling VC transactions. Control over VC transactions aims to prevent using VCs for money laundering through cyberspace.

2. Enforcement of money laundering crimes through a metaverse

In terms of enforcement, the government, in this case, the Police as law enforcers who have the authority to investigate and investigate, can take several steps. In this case, evidence is immediately examined at the search area where the imaging [19]process is carried out on the item. Actions like this are usually carried out on evidence from a computer server that contains the evidence needed to prove the crime. This action was taken because bringing the computer server in would be impossible. After all, it would be impossible if such a server was turned off,

[15] Maria Minerva M. Etc., *Op.cit,* p. 8
[16] Maria Minerva M. Etc., Op.cit, p. 9
[17] Maria Minerva M. Etc., Op.cit, p. 9
[18] Suhut Tumpal Sinaga, “Aspek Perpajakan dari Transaksi yang Menggunakan Bitcoin di Indonesia” yang dimuat dalam Majalah Inside Tax, Juni 2014, hlm.54
[19] Imaging is a process carried out to obtain or copy all data contained in a storage media (e.g., flash disk), both active data and data contained in free space. This process is carried out in such a way as to allow the data obtained or copied to be examined as if the data were original data. See Association of Chief Police Officers, Good Practice Guide for Computer-Based Electronic Evidence, p. 56. Imaging is usually also known as forensic imaging, which is duplicating the contents of physical evidence (sector per sector or bit stream copy) so that the imaging results will be exactly the same as physical evidence. See AL-Azhar, Op.cit, p. 35.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

so if such conditions were known beforehand, investigators at the Police would involve digital/computer forensics experts in the search and confiscation[20].

The Police, when conducting searches and seizures of electronic evidence, always ask for assistance from digital forensic experts to handle electronic evidence that requires special handling and examination. This is done because the Police usually do not have a special department handling electronic evidence. In carrying out searches and confiscations of electronic evidence, investigators at the Police in their implementation procedures only refer to the provisions of the Criminal Procedure Code and its implementing regulations. For digital forensics issues, digital forensic experts do have a Standard Operating Procedure (SOP) in carrying out searches for digital forensic examinations on electronic evidence as regulated in SNI/ISO 27037 concerning Basic Principles of Handling Digital Evidence, including[21]:

1. Initial Handling Procedure at the Crime Scene (TKP)

a. Preparation (preparation)
   Before going to a crime scene to search for cases related to electronic evidence, forensic analysis and investigators must first prepare things or equipment that will be needed during the search process at the crime scene. Things that must be prepared and possessed by forensic analysts and investigators:
   1) Administration of Investigations such as Search Warrants and Confiscation Warrants;
   2) Digital camera used to photograph crime scenes and evidence in forensic photography (general photos, intermediate photos, and close-up photos);
   3) Writing equipment: to record, among other things, the technical specifications of the computer and the statements of witnesses;
   4) Number, measuring scale, agency label, and blank label sticker: to mark each electronic evidence found at the crime scene;
   5) Evidence receipt form: used for the chain of custody purposes, namely the methodology to maintain the integrity of evidence starting from the crime scene;
   6) Triage Tools: used for forensic triage activities against computer evidence found alive.

b. Preserving (maintaining and placing data)
   It is a series of activities carried out by investigators who are experts to ensure that the data collected does not change.

c. Collecting (collecting data)
   It is a series of activities to collect as much data as possible to support the investigation process in searching for evidence.

d. Confirming (set data)
   It is a series of activities to determine the data related to the case.

e. Identifying (recognising data)
   It is a series of activities to carry out the identification process of existing data to ensure that the data is unique and original to what was found at the case scene. For digital data, for example, identifying with hashing techniques (making digital fingerprints on evidence)[22].

[20] Dalam hal bukti elektronik yang diperlukan berada dalam sebuah server computer, maka benda yang disita oleh penyidik adalah hasil imaging dari data yang berada di dalam server tersebut. Lihat apreza Darul Putra Op.cit, hlm

[21] SNI/ISO 27037 tentang Prinsip Dasar Penanganan Bukti Digital.

[22] apreza Darul Putra, Apreza Darul Putra, “Pengaturan Penggeledahan dan Penyitaan Bukti Elektronik Dalam

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

2. Handling Procedures in the Laboratory

a. Admission Administration

At this stage, computer evidence is entered and received by laboratory personnel. In this case, the forensic analysis must be detailed in the log book and the receipt form. The following data should be recorded:

1) The name of the institution that sends electronic evidence;
2) The name of the officer who sent the electronic evidence, including his complete identity;
3) Receipt date;
4) The number of electronic evidence received, equipped with technical specifications such as brand, model, and serial/product number and size;
5) System hashing is a system for checking the authentication of the contents of a file (both image/evidence and logical files) using mathematical algorithms such as MD5, SHA1, and others.

b. Investigation

At this stage, the image file is examined comprehensively to obtain digital data that is by the investigation; this means that forensic analysis must obtain a complete picture of the facts of the case from the investigator so that what is sought and found by forensic analysis is the exact (matching). As expected by the investigator for the development of his investigation. After getting a picture of the case's facts, forensic analysis searches the image file to get the desired file or data.

c. Analyzing (researching data)

After obtaining the desired file or data from the above examination process, the data is analysed in detail and comprehensively to prove what crime occurred and the relationship between the perpetrator and the crime. The results of the digital data analysis are referred to as digital evidence, which must be scientifically and legally accountable in court.

d. Recording (recording data)

Recording the data found and the results of the analysis so that later the data can be accounted for or reconstructed (if necessary) for the findings of the evidence.

3. Report Handling Procedure

a. Reports (Reports)

After obtaining digital evidence from examining the analytical data above per the investigation rules, the digital evidence data is entered into a technical report.

b. Packaging and Sealing

Packaging and sealing of evidence: according to the process of packaging and sealing evidence that has been digitally analysed for forensics to be submitted to the institution that sent it.

c. Report Submission Administration

Furthermore, the digital forensic examination results and electronic evidence report is returned to the investigator or the sending institution.

4. Presenting (presenting data)

Investigators carry out activities to disclose their findings to the authorities or in court. Usually, the presentation of data is done by a forensic expert to explain things difficult for the

Kerangka Pembaruan Hukum Acara Pidana Indonesia", Tesis, Program Pascasarjana Fakultas Hukum Universitas Indonesia, Jakrata, 2013 85

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

general public to understand so that the data can help the investigation process to find the suspect.

In the case of how a judge decides if there is a legal event that is unclear and incomplete, then a judge can use 2 (two) methods of legal discovery; if a statutory regulation is not precise, then the judge can use the method of interpretation. law/interpretation, including[23]:

a. Grammatical Interpretation
b. Systematic or logical interpretation
c. Historical interpretation
d. Theological or sociological interpretation
e. Comparative interpretation
f. Anticipatory or futuristic interpretation
g. Restrictive interpretation, and
h. Extensive interpretation

And if a statutory regulation is incomplete, then the judge can use legal argumentation methods, including[24]:

a. Argumentum of analogy (analogy)
b. Argumentum a contrario
c. Argumentum et populum
d. Legal narrowing (rechtsverfijning).

CONCLUSION

The current technological progress is increasingly unstoppable, and various masterpieces are created to fulfil the desires of modern man. However, along with the conveniences presented, various problems arise due to technology's sophistication. Later, there was a lot of discussion regarding the metaverse, a new world that presents virtual metadata with real-world sensations. Various interactions and transactions can be carried out like in the real world. In addition to ivory happiness for users, this also raises various polemics about the possibility of negative impacts in the form of crimes, but it isn't easy to detect. Crimes such as money laundry can occur in the metaverse world without any restrictions with the supervisory function so that the practice of money laundry crimes can occur in the metaverse world. To anticipate this, it is necessary to have a legal instrument in preventive and repressive efforts to enforce the law of criminal acts in the metaverse.

REFERENCES

Guntur Wibisono. (2022). Gereja dan Metaverse (Sebuah Studi Ekslesiologi), Kastara Karya: *Jurnal Pendidikan*, Vol. 2, No. 2, hlm. 16

Virtual Currencies Working Group. 2014). *Regulating Virtual Currencies, France Ministry of Finance and Public Accounts*, Paris, , hlm. 3

Maria Minerva M. Dkk. (2017). Pencegahan dan Penindakan Penggunaan Virtual Currency Sebagai Sarana Kejahatan Pencucian Uang Melalui Dunia Maya (Studi Kasus Liberty Reserve), *Diponegoro Law journal*, Volume 6, Nomor 1, hlm. 2

[23] Sudikno mertokusumo, 2007, penemuan hukum sebuah pengantar, Liberty, Yogyakarta, hlm 56-64
[24] Sudikno mertokusumo, Op.cit, pp. 67-78

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Mukti Fajar & Yulianto Achmad. (2019). *Dualisme Penelitian Hukum Normatif & Empiris, Pustaka Pelajar*. Yogyakarta, hlm. 34

Ronny Hanitijo Soemitro. (1990). *Metodologi Penelitian Hukum dan Jurimetri*, Ghalia Indonesia,Jakarta, hlm. 11

Soerjono Soekanto. (2008). *Pengantar Penelitian Hukum,*UI-Press, Jakarta, hlm. 52

Ronny Hanitijo Soemitro, op.cit., hlm. 12

Peter Mahmud Marzuki. (2014). *Penelitian Hukum (Edisi Revisi*), Prenadamedia Group, Jakarta, hlm. 195

Ronny Hanitijo Soemitro, op.cit., hlm. 12

Burhan Ashshofa. (2004). *Metode Penelitian Hukum,* PT. RINEKA CIPTA, Jakarta, hlm. 124

https://pji.uma.ac.id/index.php/2022/03/07/metaverse-di-kalangan-milenial/, diakses Senin 4 Juli 2022 pukul 00.03 wib

Ibid

Dhoni Siamsyah Fadillah Akbar. (2016). *"Regulasi Mata Uang Virtual untuk Mencegah Tax Evasion"* (Artikel Opini, Kementerian Keuangan Republik Indonesia,), hlm. 2

Maria Minerva M. Dkk, Op.cit, hlm. 8

Maria Minerva M. Dkk, Op.cit, hlm. 8

Maria Minerva M. Dkk, Op.cit, hlm. 9

Maria Minerva M. Dkk, Op.cit, hlm. 9

Suhut Tumpal Sinaga. (2014). *"Aspek Perpajakan dari Transaksi yang Menggunakan Bitcoin di Indonesia"* yang dimuat dalam Majalah Inside Tax, hlm.54

Association of Chief Police Officer, Good Practice Guide for Computer-Based Electronic Evidence, hlm. 56.

AL-Azhar, Op.cit, hlm. 35.

SNI/ISO 27037 tentang Prinsip Dasar Penanganan Bukti Digital.

apreza Darul Putra, Apreza Darul Putra. (2013). *"Pengaturan Penggeledahan dan Penyitaan Bukti Elektronik Dalam Kerangka Pembaruan Hukum Acara Pidana Indonesia",* Tesis, Program Pascasarjana Fakultas Hukum Universitas Indonesia, Jakrata, 85

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Sudikno mertokusumo. (2007). *penemuan hukum sebuah pengantar*,Liberty, Yogyakarta, hlm 56-64

Sudikno mertokusumo, Op.cit, hlm 67-78

SYNCHRONOUS METHOD: Bimbingan Teknis Pelaksanaan"Take Home Exam" Universitas Terbuka

Steven Anthony
Fakultas Hukum Ilmu Sosial dan Ilmu Politik
Universitas Terbuka
e-mail: steven@ecampus.ut.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

The Covid-19 pandemic has changed the academic services held by the Open University. One of them is the implementation of the Semester Final Examination, which was originally conducted face-to-face, has now changed to using the Take Home Exam (THE) scheme. To overcome technical obstacles that may occur in the implementation of THE, a technical guidance method is needed which is not only in the form of a written guide description and video footage, but also directly by using the Synchronous Method utilizing online technology. So, it is hoped that the technical problems of students can be overcome directly and on target. Technical Guidance is carried out with the stages of planning, implementation, evaluation, and reflection. This article will describe the experience in carrying out guidance for 24 hours throughout the exam. As a result, Direct Technical Guidance helps students a lot in solving technical problems related to downloading questions, uploading answers, and security codes for answers. There needs to be a standardized flow/steps of socialization in the implementation of THE Technical Guidance.

***Keywords**: Synchronous Method, Technical Guidance, THE*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

PENDAHULUAN

Pandemi Covid-19 tak dipungkiri memengaruhi hampir semua sisi kehidupan. Masyarakat dari semua golongan, tidak melihat suku, ras, agama bahkan bangsa ikut terpengaruh. Sektor ekonomi yang pertama kali terpukul. Alur transaksi barang dan jasa menurun drastis seiring aturan pembatasan gerak dan kerumunan, yang bermuara pada menurunnya tingkat daya beli masyarakat serta tergerusnya margin keuntungan baik perusahaan besar maupun kecil serta mikro.

Selain sektor ekonomi, pendidikan pun tak luput dari pengaruh kebijakan meminimalisasi penyebaran pandemi Covid-19. Kelas-kelas ditutup, sekolah-sekolah tak lagi melakukan kegiatan. Di tingkat pendidikan tinggi, kampus-kampus serta merta merubah sistem pembelajaran yang semula tatap muka, menjadi tatap maya. Mahasiswa dan dosen berinteraksi dengan media kelas daring. Semua berubah menjadi e-learning, menyesuaikan diri dengan situasi, berinovasi, bahkan ada yang memberikan porsi tambahan dengan bimbingan melalui grup-grup percakapan maya.

Universitas Terbuka, meski telah lama menerapkan sistem pembelajaran jarak jauh, tetap saja tak bisa lepas dari pengaruh tersebut. Sistem pembelajaran Universitas Terbuka memang didesain agar mahasiswa memiliki keleluasaan menentukan waktu dan tempat, namun ada beberapa aktifitas yang tetap membutuhkan kehadiran mahasiswa di kelas-kelas secara tatap muka. Salah satunya adalah Ujian Akhir Semester (UAS). Jumlah peserta UAS Universitas Terbuka, berkaitan erat dengan angka registrasi matakuliah yang dilakukan oleh mahasiswa di awal semester. Angka tersebut dikurangi dengan beberapa matakuliah yang hanya melakukan kegiatan bimbingan dan penyusunan laporan sebagai penilaian, seperti matakuliah praktik dan matakuliah karya ilmiah.

Jenis Matakuliah Tawar	Registrasi	BJU diunggah
1240 Jenis	1.807.761 matakuliah	1.656.524

Data Pusat Pengujian Universitas Terbuka, 2022

Menurut Statuta Universitas Terbuka yang tertuang dalam Permenristekdikti Nomor 84 Tahun 2017, Ujian merupakan evaluasi hasil belajar untuk mengukur tingkat pencapaian pembelajaran. Lebih lanjut dijelaskan, kegiatan Ujian dilakukan dengan secara tertulis dan/atau berbasis komputer. Penilaian hasil belajar, misalnya berupa Ujian Akhir Semester (UAS), merupakan metode dan proses memperoleh dan menginterpretasi kemampuan, keterampilan, dan perilaku mahasiswa sebagai dasar untuk menentukan suatu keputusan (Rowntree, 1997; Asia Pasific Knowledge Base on Open Distance Learning, 2004). Pendekatan penilaian hasil belajar yang di suatu perguruan tinggi terkait erat dengan kultur akademis di perguruan tinggi tersebut (James, McInnis, & Devlin, 2002). Penilaian tersebut dapat memanfaatkan berbagai sumber, termasuk menggunakan teknologi komputer (Gibson et. al,2000; Sahin, 2007). Penggunaan komputer, khususnya penggunaan internet pada pendidikan jarak jauh tampak semakin luas (Achtemeier et. al,2003; Tsai, 2005). Perubahan kebijakan akademik yang diambil oleh Universitas Terbuka, khususnya pada UAS yang dilakukan dengan skema *Take Home Exam* (THE), merupakan yang pertama kali dilakukan sepanjang sejarah Universitas Terbuka didirikan. Semula UAS dilaksanakan dengan menghadirkan mahasiswa pada satu kelas, baik secara tertulis menggunakan kertas, maupun dengan komputer melalui Ujian *Online*.

Pemanfaatan teknologi komputer dalam evaluasi hasil belajar memiliki berbagai keuntungan (Allen et.al, 2004; Bishop, 2000; Bitzer, 2000; Cassady & Gridley, 2005; Newman, 2000). Namun, penilaian tersebut juga memiliki beberapa kendala, seperti adanya kendala

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

teknis, variasi tingkat keterampilan komputer, kurangnya jaminan keautentikan dan keamanan, ada perasaan cemas akan menemui kesulitan teknologi, tingginya biaya akses, dan lain-lain (Assessing Students Online, 1999; Cassady & Gridley, 2005; Eastin & Larose, 2000; Jones, et. al, 2002; Tsai & Tsai, 2003). Dengan demikian, adanya kendala teknis serta kendala keterampilan komputer serta hal-hal yang berkaitan dengan keamanan, turut memengaruhi kualitas serta terpenuhinya prosedur penyelenggaraan Ujian dengan menggunakan skema THE. Terkadang kegagalan yang dihadapi oleh mahasiswa adalah terkait kendala non akademis, atau lebih ke permasalahan teknis yang seharusnya tidak menjadi penghambat mahasiswa dalam menyelesaikan proses evaluasi hasil belajar.

Petunjuk dan pedoman tertulis terkait pelaksanaan ujian dengan menggunakan skema THE sudah dibuat secara lengkap oleh Universitas Terbuka. Namun masalah yang dihadapi oleh mahasiswa saat pelaksanaan ujian, terkadang tidak tercantum dalam pedoman tersebut. Kendala-kendala teknis yang mungkin menghambat mahasiswa mengunggah jawaban sebagian besar memang mendominasi keluhan yang disampaikan oleh mahasiswa. Sebagai catatan, pada pelaksanaan UAS THE di hari pertama tanggal 18 Juni 2022, kendala *login* dan unduh soal banyak diterima oleh petugas jaga posko UAS THE Universitas Terbuka Palembang.

Jumlah Aduan	**Shift 1**	**Shift 2**	**Shift 3**
337	Login: 121 Tidak muncul soal: 5 Lain-lain: 13	Login: 43 Tidak muncul soal: 3 Lain-lain: 14	Upload: 112 Kode Keamanan: 17 Lain-lain: 9

Data Rekap Aduan Hari 1 Ujian THE

Berdasarkan data di atas, dapat dilihat jika bimbingan langsung terkait proses ujian akhir semester skema THE memang sangat diperlukan oleh mahasiswa sesuai dengan jalur waktu pengerjaan. Proses UAS THE yang berlangsung 24 jam, memberikan batasan waktu pengerjaan 12 jam di hari yang sama terhitung saat mahasiswa mengunduh soal ujian.

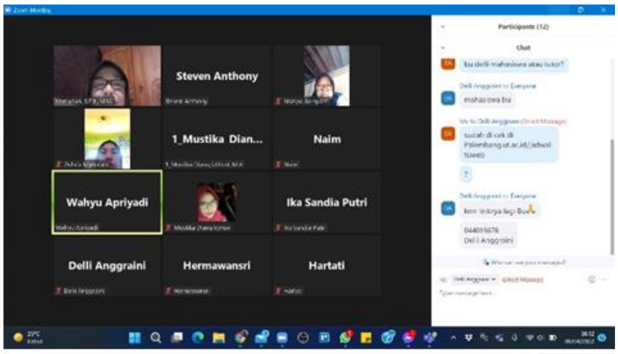
Penelitian ini adalah penelitian deskriptif yang melihat dan menganalisis studi kasus dalam proses pembimbingan pelaksanaan ujian akhir semester skema THE di UPBJJ-UT Palembang. Data diperoleh dengan proses observasi langsung dan studi pustaka terkait pelaksanaan pembimbingan *Synchronous Method* untuk Ujian Akhir Semester skema Take Home Exam

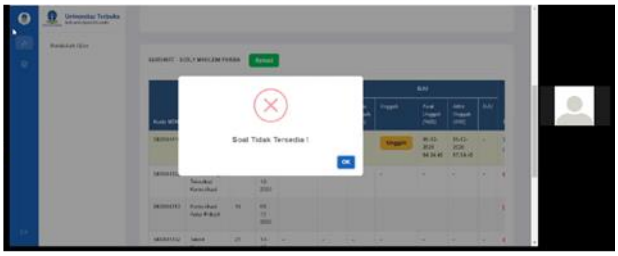
HASIL DAN PEMBAHASAN

Synchronous Method adalah cara percakapan yang dilakukan online dan konferensi video. Komunikasi dilakukan secara *real-time*, layaknya instant messaging yang memungkinkan mahasiswa dan petugas/instruktur untuk bertanya dan menjawab pertanyaan dengan segera dan sinkron (dalam waktu yang bersamaan). Dibandingkan dengan mempelajari panduan/ manual, mahasiswa yang memiliki kendala dalam pengerjaan UAS THE dan menggunakan bantuan yang disediakan dengan *Synchronous Method* dapat berinteraksi dengan petugas/instruktur dan juga mahasiswa selama sesi bimbingan berlangsung.

Agar kegiatan pembimbingan dapat berjalan lancar dan dapat memberikan hasil yang optimal, model bimbingan dibuat lebih santai dan tidak kaku. Bahkan penamaan ruang virtual tempat bimbingan pun diberikan nama yang lebih ringan, yakni Café THE. Tujuan penamaan tersebut agar mahasiswa yang mengalami kesulitan dalam teknis pengerjaan UAS THE, tidak ragu-ragu untuk mampir berkunjung.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4





Jadwal piket untuk menjaga Café THE, menyesuaikan dengan waktu pengerjaan UAS THE dengan pembagian sebagai berikut:

Tabel 1. Pembagian Tim Petugas

TIM A	TIM B	TIM C	TIM D
Irfiani Ayu Dita	Wahyu Apriyadi	Lora Ersitha	Achmad Hasrul W
Hartati	Teguh Sahidan	Triana Sri Gunarti	Steven Anthony
Iis Parilah	Mustika Diana	Redi Pirmansyah	Muhammad Tair A
Taufik Hidayat	Imam Dwinusa	Muhammad Saleh	Arsih Perdananingsih
Wisnu Firdiansyah H	Munyati	Sigit Suhendro	Asnawati
Risa Aprilianida	Adi Purna Utama	Abdul Malik	Jesica Ramadanty
Amrina Rosyada	Adinda Tanjungsari B	Ahmad Ovi Roni	Ika Sandia Putri

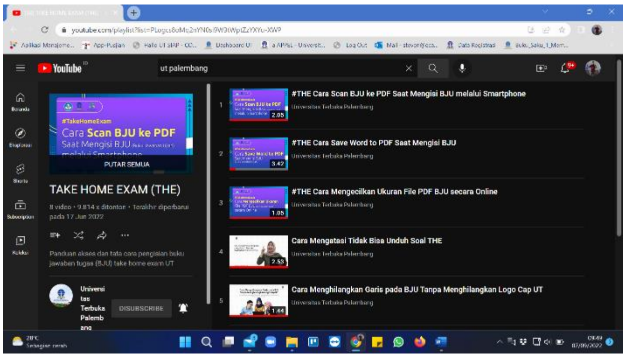
Tabel 2. Tanggal Tugas

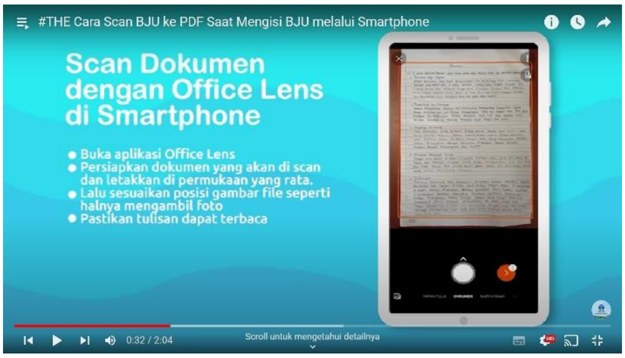
Tanggal / *Shift* Tim	18/06/2022	19/06/2022	20/06/2022	21/06/2022	22/06/2022	25/06/2022	26/06/2022	27/06/2022	28/06/2022	29/06/2022
SHIFT 1 (08.00 – 12.00 WIB)	A	D	C	B	C	D	A	B	C	D
SHIFT 2 (13.00 – 17.30 WIB)	B	A	D	C	B	C	D	A	B	C
SHIFT 3 (18.30 – 23.59 WIB)	C	B	A	D	C	B	C	D	A	B

Video Tutorial Teknis dan Prosedur THE

Mekanisme pelayanan bimbingan *Synchronous Method* yang dilakukan oleh tim Café THE diawali dengan memberikan petunjuk-petunjuk lengkap tentang penanganan masalah dalam pelaksanaan ujian THE, dalam format audio-video, atau sering disebut dengan video tutorial. Format ini dinilai lebih efektif dalam memberikan penjelasan pada mahasiswa dibandingkan dengan format tertulis pada buku panduan.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4





Video tutorial sebagai media pembelajaran memiliki keunggulan dan kelemahan (Batubara, 2020). Keunggulan video tutorial dibandingkan dengan media pembelajaran lainnya adalah sebagai berikut.

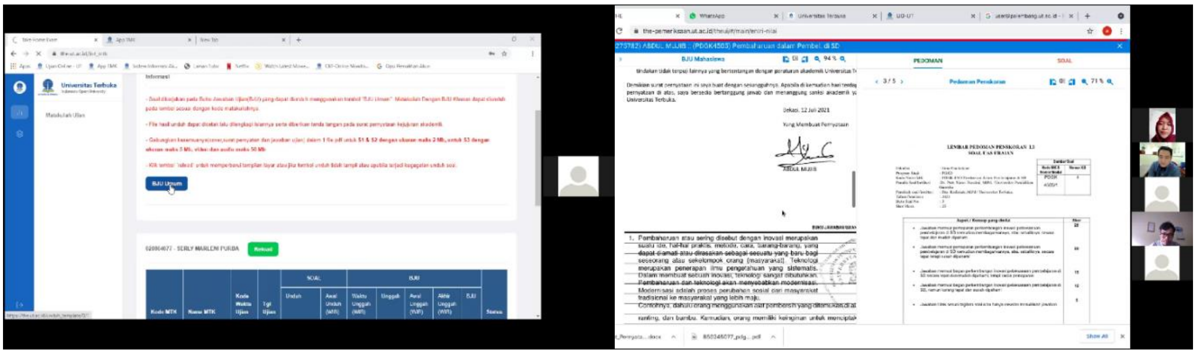
1. Video tutorial sangat jelas dalam mendemonstrasikan suatu fenomena dan prosedur yang melibat suatu gerakan
2. Pengguna video tutorial dapat mempercepat dan memperlambat gerakan video tutorial sehingga materi yang disajikan lebih jelas
3. Video tutorial dapat memanfaatkan animasi untuk mengilustrasikan materi yang abstrak dan bergerak
4. Video tutorial dapat menarik perhatian dan minat siswa melalui media gambar bergerak, audio, dan teks.
5. Mahasiswa sebagai pengguna smartphone cukup mudah dalam menggunakan video tutorial
6. Video tutorial dapat menggantikan kegiatan studi lapangan (Prastowo, 2018, hal. 81–82) (Munir, 2013, hal. 295–296) (Bates, 2019, hal. 390–391)

Sejalan dengan penelitian sebelumnya yang dikemukakan di atas, pada saat pelaksanaan pelayanan bimbingan *Synchronous Method* melalui Café THE, tidak jarang bimbingan sudah dapat menyelesaikan masalah yang dihadapi oleh mahasiswa dengan hanya memutarkan video tutorial yang sesuai dengan kendala teknis yang dihadapi. Mahasiswa kemudian bisa mengulang kembali video, yang sudah disediakan pada platform Youtube, melalui kanal UT Palembang. Cara ini juga efektif untuk menanggulangi keluhan terkait aturan yang dilanggar oleh mahasiswa selama pelaksanaan kegiatan Ujian THE, karena mereka dapat memahami bagian apa yang dilanggar dengan melihat langsung video dan penjelasan terkait pelanggaran tersebut.

Synchronous Method Bimbingan Ujian THE

Manfaat utama dari *Synchronous Method* adalah dapat memungkinkan mahasiswa untuk menghindari perasaan terisolir dalam berkomunikasi dengan orang lain selama proses bimbingan, serta memiliki pemahaman yang lebih baik saat mendapatkan penjelasan tentang kendala teknis yang dihadapinya, karena ia bisa sambil memperlihatkan secara langsung keadaan layar perangkatnya dengan menggunakan fitur berbagi layar pada aplikasi *Zoom*.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4



Gambar 3

Selain fitur berbagi layar, mahasiswa yang mengunjungi Café THE juga dapat langsung memberikan konfirmasi jika diperlukan verifikasi saat membantunya mengatasi kendala teknis. Kegiatan yang memerlukan verifikasi oleh petugas saat melayani mahasiswa adalah:

1. Kendala tidak bisa login karena salah atau lupa password
2. Kendala tidak bisa ubah Buku Jawaban Ujian karena salah kode keamanan
3. Akun sudah mengunduh sendiri soal dan Buku Jawaban Ujian tanpa sepengetahuan mahasiswa
4. Kasus yang berkaitan dengan upaya sabotase ujian
5. Gagal unggah Buku Jawaban Ujian karena kesalahan teknis

Saat melakukan tugasnya, petugas Café THE wajib memberikan pertanyaan dan klarifikasi bagi setiap mahasiswa yang berkunjung dengan kasus-kasus seperti di atas. Hal tersebut untuk menghindari penyalahgunaan fasilitas konsultasi dan perbaikan sandi pengguna pada akun aplikasi THE milik mahasiswa, agar tidak digunakan oleh orang lain yang ingin mengambil keuntungan dari aktifitas tersebut.

Berikut ini langkah-langkah dan standar jawaban yang sudah disiapkan untuk memudahkan petugas saat melayani mahasiswa pada Café THE:

Tabel 3. Standar Jawaban dari Pertanyaan

No	Pertanyaan	Jawaban
1	Boleh dikerjakan dengan ketik word atau tulis tangan?	Keduanya boleh, asal format akhirnya nanti dalam bentuk pdf tidak lebih dari 2 Mb. Khusus untuk tulis tangan harus terbaca dengan jelas
2	Bagaimana urutan berkasnya?	Berkas terdiri dari Cover BJU, Surat Pernyataan Kejujuran Akademik, Jawaban mahasiswa
3	Tandatangan apakah boleh menggunakan gambar yang difoto atau tanda tangan digital?	Boleh, dengan memperhatikan bentuk tanda tangan saat mengumpulkan berkas form tanda tangan saat registrasi pertama
4	Kertas yang digunakan saat mengerjakan?	Menggunakan kertas A4 putih, jika memerlukan garis bantu boleh mengggunakan pensil lalu dihapus jika telah selesai menulis

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

5	Apakah ada tambahan waktu jika ada kendala saat mengerjakan? (Mati lampu, sinyal hilang, alat rusak, paket data habis, sakit, ada acara, mendadak tugas, dll)	Tidak ada, untuk itu mahasiswa harus benar-benar mempersiapkan ujian ini semaksimal mungkin. Manfaatkan 6 jam waktu yang diberikan untuk mencari lokasi dengan sinyal dan kelengkapan perangkat untuk mengupload jawaban. Jika perlu hijrah sementara ke lokasi yang baik sinyal dan fasilitasnya, agar ujian berjalan lancar
6	Adakah video petunjuk mengikuti UAS THE?	Ada, silakan kunjungi Channel Youtube UT TV, lalu cari atau pilih judul : **Panduan Aplikasi Take Home Exam (THE) Universitas Terbuka**
7	Apa maksud waktu ujian pada KTPU?	Waktu ujian yang dimaksud adalah kode tanggal pelaksanaan ujian misal waktu ujian 1.1 berarti tanggal 19 Desember 2021, waktu ujian 1.2 bearti tanggal 20 Desember 2021 dst. Jika mahasiswa bingung silahkan diabaikan saja.
8	Bagaimana cara mencetak KTPU? Link nya dimana?	Silahkan cetak KTPU pada laman sia.ut.ac.id kemudian pilih menu DNU&KTPU dan pilih KTPU silahkan ikuti petunjuk selanjutnya.
9	Bagaimana bentuk soal? Apakah pilihan ganda atau essay?	Soal berbentuk essay dengan tingkat kesulitan HOTS.
10	File apa saja yang ada pada saat mendownload soal?	Berkas terdiri dari Cover BJU, Surat Pernyataan Kejujuran Akademik, BJU, dan Soal.
11	Apakah soal harus ditulis ulang atau jawabannya saja?	Soal boleh ditulis ulang atau hanya jawabannya saja yang penting jawaban jelas .
12	Apabila jawaban saya banyak apakah akan memengaruhi ukuran file yang akan saya upload? Bagaimana solusinya?	Ukuran file yang di*upload* maksimal 2MB. Jika file lebih dari 2MB silahakan ukuran file nya di *compress.* Pastikan setelah memperkecil ukuran file, jawaban kamu masih terbaca dengan jelas.

Panduan jawaban tidak bersifat statis, bisa dikembangkan sesuai keadaan yang terjadi saat proses pembimbingan dilakukan. Petugas Café THE dapat menambahkan data dan keterangan tambahan jika saat pembimbingan berlangsung, mereka memerlukan penjelasan yang lebih rinci.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Angka Berhasil Unggah Tinggi

Kegiatan bimbingan melalui Café THE sebenarnya memiliki tujuan untuk menjaga tingkat keberhasilan unggah Buku Jawaban Ujian agar tetap maksimal. Setiap hari pelaksanaan, masing-masing Unit Program Belajar Jarak Jauh dapat melihat laporan persentase keberhasilan unggah Buku Jawaban Ujian mahasiswa melalui aplikasi Take Home Exam dan Sistem Informasi Peragaan dan Laporan (SIPELAPOR). Berdasarkan data yang ditampilkan dalam SIPELAPOR, UPBJJ-UT Palembang rata-rata mencatatkan angka keberhasilan unggah Buku Jawaban Ujian sebanyak 92-96 %. Angka ini termasuk tertinggi jika dibandingkan dengan yang dicatatkan oleh UPBJJ lain, yang berkisar 88-91% (sumber: Aplikasi SIPELAPOR, 2022). Sejak digulirkannya skema ujian Take Home Exam pada masa ujian 2020.1, Café THE telah diinisiasi oleh UPBJJ-UT Palembang dengan terus menambah fitur-fitur layanan. Keberhasilan Café THE ini juga diadopsi oleh UPBJJ lain dan Pusat Pengujian, dengan membuka posko-posko ujian virtual menggunakan berbagai platform rapat daring, menyesuaikan dengan wilayah masing-masing. Pusat Pengujian melalui **Posko Ujian THE** juga menyediakan pusat layanan bimbingan bagi semua UPBJJ yang mengalami kendala teknis spesifik pelaksanaan ujian di daerahnya masing-masing. Dengan demikian, pelayanan bimbingan *Synchronous Method* melalui Café THE yang diinisiasi oleh UPBJJ-UT Palembang, selain berhasil mengatasi potensi masalah dalam pelaksanaan ujian skema Take Home Exam di wilayah Sumatra Selatan dan sekitarnya, juga berhasil memberikan inspirasi bagi UPBJJ di daerah lain termasuk Pusat Pengujian untuk memberikan angka keberhasilan unggah Buku Jawaban Ujian Take Home Exam yang tinggi pada SIPELAPOR.

SIMPULAN

Berdasarkan penelitian yang dilakukan, dapat ditarik kesimpulan bahwa bimbingan dengan *Synchronous Method* efektif membantu mahasiswa dalam menyelesaikan permasalahan terkait teknis pelaksanaan Ujian THE, seperti kendala dalam pengunduhan soal, pengunggahan jawaban, dan kode keamanan jawaban yang lupa dicatat oleh mahasiswa. Hal ini terlihat dari tingginya angka keberhasilan unggah Buku Jawaban Ujian yang dicatatkan oleh UPBJJ-UT Palembang saat rekapitulasi dilakukan oleh Sistem Informasi dan Pelaporan dari Pusat Pengujian. Selain mengatasi kendala di wilayah Sumatera Selatan dan sekitarnya, pelayanan bimbingan *Synchronous Method* melalui Café THE juga memberikan inspirasi bagi terbentuknya layanan-layanan serupa di UPBJJ lain dan Pusat Pengujian, demi meningkatkan angka keberhasilan unggah Buku Jawaban Ujian yang tinggi.

Meski pelayanan bimbingan Synchronous Method melalui Café THE ini sudah berjalan sesuai tujuan awal pembentukkannya, namun masih ada mahasiswa yang belum mengetahui manfaatnya. Bahkan terkadang, petugas Café THE masih mendapatkan pertanyaan yang sebenarnya di luar konteks ujian skema Take Home Exam. Untuk itu perlu ditingkatkan sosialisasi alur/tahapan yang terstandar dalam pelaksanaan Bimbingan Teknis THE, sehingga mahasiswa yang memerlukan bimbingan dan berada dalam satu ruangan dengan penanya yang mendapatkan giliran bertanya, dapat memperoleh pengetahuan dan manfaat bagi kelancaran pelaksanaan ujiannya.

DAFTAR PUSTAKA

Achtemeier, S., Morris, L., & Finnegan, C. (2003). Consideration for developing evaluation on online course. Journal of Asynchronous Learning Networks, 7 (1). Diambil tanggal 25 Juni 2009, dari http://sloan-c.org/publications/jaln/v7n1/v7n1_achtemeier.asp

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Allen D. Truell, A.D., Alexander, M.W., & Davis, R. E. (2004). Comparing postsecondary marketing student performance on computer-based and handwritten essay tests. *Journal of Career and Technical Education*, 20(2), 69-78

Bishop, P. (2000). *CTI maths and stats workshop 18*. Diambil 12 Desember 2008, dari http://www.bham.ac.uk/crimath/workshops/wass.htm

Bitzer, D. L. (2000). *A comparative analysis of web based testing and evaluation systems*. Diambil 1 Juni 2009, dari http://renoir.csc.nscu.edu/MRA/Reports/WebBasedTesting.html.

Cassady, J. C. & Gridley, B. E, (2005). *The effects of online formative and summative assessment on test anxiety and performance*. Journal of Technology, Learning, and Assessment, 4(1). Diambil 12 Desember 2008 dari http://www.jtla.org

Eastin, M.S., & Larose, R. (2000). *Internet self-efficacy and the psychology of the digital divine*. Journal of Computer-Mediated Communication, 6(1). Diambil 7 Juni 2007, dari http://jcmc.indiana.edu/vol6/issue1/eastin.html

Gibson, E. J., Brewer, P. W., Dholakia, A., Vouk, M. A., & Bitzer, D. L. (2000). *A comparative analysis of web based testing and evaluation systems*. Diambil 07 Juni 2009, dari http://renoir.csc.nscu.edu/MRA/Reports/WebBasedTesting.html

James, R., McInnis, C. & Devlin, M. (2002). *Assessing learning in Australian universities*. Diambil 27 Mei 2007, dari http://www.cshe.unimelb.edu.au/assessinglearning.

Jones. T. (2002). Options and considerations for distance education learner assessment and self-assessment. *Turkish Online Journal of Distance Education –TOJDE*, 3(3).

Mairing, J. (2021). Peningkatan Kemampuan Siswa dalam Menyelesaikan Masalah Matematika dengan Pembelajaran Daring Asinkronous dan Sinkronous. *Edumatica: Jurnal Pendidikan Matematika* (Vol.11), 1-10.

Rowntree. D.(1997). *Assessing Students: How shall we know them?* London: Kogan Page.

Sapriati, A. (2009). Ujian Berbasis Komputer (UBK) : Studi Kasus Penyelenggaraan Ujian. *Jurnal Pendidikan Terbuka dan Jarak Jauh* (Vol.10), 63-72.

Tsai, M., & Tsai, C. (2003). Information searching strategies in web-based science learning: The role of Internet self-efficacy. *Innovations in Education and Teaching International*, 40(1), 43-50

Widiantari, AAKG. (2021). Pengaruh Pembelajaran Daring Dengan Perpaduan Asinkronous Dan Sinkronous Terhadap Minat dan Prestasi Belajar Ekonomi. *Media Komunikasi FPIPS* (Vol.20), 151-160

Transformation and Continuity: An Environmental Anthropology Study on the Digitalization Process by Kelompok Pengawas (POKMASWAS) Taman Kili-Kili Sea Turtle Conservation in Trenggalek

Basyarul Aziz
Universitas Indonesia
e-mail: abasyarul@gmail.com

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

This article examines the issue of "conservation" as the main issue, focusing on the journey of digitalization the Kili-kili turtle conservation in Trenggalek. Following Kottak (1996) and West (2005) I see the digitalization process as part of the ongoing conservation development process and is formed through cultural relations between actors. Conservation is not something static as described in the maintenance of something that is adapted to local conditions. Conceptual articulation is a reciprocity at the level of conservation development that continues to change - which in West's terms is called environmentality. Following this logic, the manifestation of environmentality is the creation of a new environmental management project on conservation management using digital means.

***Keywords**: Conservation, Transformation, Continuity, Environmentality, Digitalization.*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

My interest in studying the issue of the process of digitalization conservation which is part of conservation development started Kottak's article entitled *The New Ecological Study*. In this paper, Kottak discusses the issue of *developmentalism* regarding conservation practices carried out by outside agents by bringing knowledge, values, and management systems applied by the group. Group conservation practices are derived from the minimum standards the group has based its logic on the experience and agreement of the group. Kottak sees this conservation practice as one of the old conservation characteristics that causes conservation to only be interpreted as preservation. Another thing that Kottak pays attention to is the local relationship that occurs between group members called voluntary relations, at this level the group carries out conservation practices by showing how this practice is natural and as an adaptation of the group to the changes that occur (Agrawal, 2005).

In contrast to Kottak, West in his writings entitled *Parks and People: The Social Impact of Protected Areas* discusses the problem of *developmentalism* as a natural stimulus from groups that want change to improve the standards set by the group. The group tends to have an active attitude to seek outside agents to get an idea of the “development project” called *environmentality*. West describes this development project in conservation as a cultural relationship between groups as well as outside agents that are intertwined with reciprocal relationships in every relationship. However, this relationship also leaves community groups with no protection against outside agency intervention that describes as a complex development project. For example, as exemplified by Arun Agrawal (2005) about the process of regulating forest conservation in India by the government. The community initially had access to the forest area, but the intervention from the government through technical means in carrying out conservation caused the community to have different perspectives in efforts to conserve. Arun explained that conservation is not only a technical problem but a social, economic, and ecological problem. This difference is due to the different standards of forest regulation by the government and the community. West in this condition explains about the different representations of conservation as a result of technical relationships. Both have clear borders, but sometimes blurry sides occur. On the clear side, the government has technical management standards through technology, rules, data, research and development arrangements, while the community has social and cultural relations. While on the blur side, people actually want changes with the help of the government. This overlapping condition explains the complexity of the intervention.

As one of the conservation efforts, the Taman Kili-Kili turtle conservation in Panggul, Trenggalek is a conservation area for the conservation of the turtle population which has been regulated by various outside agents. Previously, groups [1]in this area killed turtles because of economic factors. This group received orders to catch and sell turtle meat. The conditions in the Panggul area are unique because this area is close to rice fields and the sea. The people who live in this area have dual jobs as farmers and fishermen. Basyarul Aziz's writing on the Adaptation Strategy of the Kelompok Pengawas Taman Kili-Kili (POKMASWAS), Panggul, Trenggalek (2016) explains that this group has an adaptation strategy through conservation practices in the hot season and rainy season. The adaptation strategy in Bennett's thinking (in Sukadana, 1938:18) describes an active and conscious effort to overcome problems and adapt to the environment, this strategy arises from member interaction, learning and experience. Turtle conservation group members carry out conservation activities depending on the season. In summer, adult turtles will come up to the coast to lay their eggs, group members respond to

[1] Community Monitoring Group (POKMASWAS) Taman Kili-Kili Turtle Conservation, Panggul Trenggalek.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

move turtle eggs to hatcheries for planting and avoid predators. However, during the rainy season, there are only a few turtles to lay eggs and the success of hatching turtle eggs is not optimal. Group members have cooperation with turtle practitioners from the University.

This collaboration is in the form of leasing the first generation *Maticgator* hatchery which is used to increase the hatching percentage of turtle eggs. While using tool, group members are accompanied by practitioners. According to my understanding, the conservation process has progressed both from group members and from supporting facilities.

Conservation has characteristics that can encourage groups to utilize resources and help solve environmental problems. As explained by Almo Farina (2010:158) in " Ecology, *Cognition and Landscape Linking Natural and Social System* "…Almo discusses group problems that have a natural ability to solve environmental problems, Almo calls it a *sense of place. Sense of place* is only owned by groups that directly carry out direct conservation and rely on social systems at the local level. For example, the article "Pre-Existing Fisheries Management System in Indonesia on Lombok and Maluku" by Dedi S. Adhuri, Satria, Arif, Ruddle, Kenneth (2010) The existing fisheries management system in Indonesia existed in the New Order era and is developing again. in the Reformation era. The system is awig-awig and sawen. This traditional fisheries management contains the basic values and norms of coastal resources where in catching fish and taking marine products by applying the principles of sustainability and non-destruction. The concept of marine ownership in Maluku is based on the concept of petuanan laut and sasi where petuanan refers to certain social groups based on rights to access, use and exploitation. While sasi refers to beliefs, rules and rituals regarding temporary prohibitions for petuanan.

Awig-awig, Petuanan laut and Sasi contain important elements for the development of modern fisheries. Communal marine ownership and the combination of inputs and outputs related to the seasons aim to limit the taking of marine products. However, there are fisheries stakeholders who become obstacles in implementing fisheries management instruments. Furthermore, the practice of sasi shows the level of community compliance which is the basis for success in implementing management instruments.

In my opinion, the *sense of place* affects the preservation of resources and easy access for community groups. Cultural treatment of resource conservation has an impact on increasing these resources. However, the *sense of place* is vulnerable to the process of constructing public knowledge that creates various arrangements such as *demand sharing* (Peterson, 1993). This arrangement allows the public to seek knowledge from institutions. The group will process this knowledge to improve environmental and socio-cultural degradation that occurs. As indicated from the case examples regarding *Awig-awig, Petuanan laut,* and *Sasi*.

In terms of the environment, turtle conservation is an *open environment*, meaning that conservation is related to global climate change, the group is at risk of climate change. The group makes a potential consideration of what might be anticipated[2] to address the change. The climate change affects the sex of the eggs that hatch. Climate change will cause eggs to hatch more quickly and produce [3]female hatchlings. This condition causes an unbalanced number of male and female hatchlings. The turtle conservation group maintains a relationship with practitioners to anticipate this condition (Ario, Wibowo, Pratikto, Fajar, 2016).

Another substance is socio-cultural dynamics. Turtle conservation practices that create various activities for social, economic, and environmental interests. Various community groups, turtles as cultural representations. religion, trade. While the other group, turtles as an

[2] Anticipation discussed by Mark Nuttal (2010) means regarding the future or various possibilities that are planned to prepare for the possibilities and opportunities, challenges and effects of events and actions.
[3] Tukik is the name for the newly hatched baby turtles.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

education that is realized by conservation and community participation in supporting the implementation of the conservation. In my opinion, these two forms of socio-cultural representation will not show final results and will proceed in a long space and time (Rudiansjah, 2009). The group processes the time span by implementing strategies to modify previously implemented practices. The group's efforts to make these modifications take into account the potential results to prevent degradation.

The decision of the Minister (*Scietific Authority*) to obtain scientific authority has an influence on modification efforts. The Decree of the Minister of Forestry 447/2003 concerning the administration of conservation, capture and circulation of animals and plants and the Regulation of the Minister of Marine Affairs Number 17/2008 concerning procedures for conducting water conservation are regulations that support the modification of activities. Practitioners as outside agents penetrate knowledge.

In my opinion, modification efforts are a form of transformation. Turtle conservation experiences various dynamics of degradation. Several studies on conservation emphasize the process of community involvement as well as the final outcome of conservation. Maulina Kusumo's research (2011) on Mangrove Conservation Areas explains the group's efforts to overcome the dynamics of ecosystem status and damage. The existence of social relations between communities has a positive impact on the restoration of mangrove land. Maulinna concluded that this effort will generate economic and welfare benefits for the community. Discussions on conservation only focus on problems, processes and outcomes. However, how to understand the process is needed to explain the dynamics of environmental, social and cultural degradation phenomena that occur due to continuity (Rudiansjah, 2009) by viewing turtle conservation as a link between groups, turtles and the environment that is bound by space and time.

Transformation and continuity are intertwined, meaning that in transformation there is continuity and in continuity there is a transformation (Rudiansjah, 2009). Transformation provides another form of old practice by transmitting group knowledge into new practice. This article emphasizes the process of introducing digital technology for the management practice of Kili-Kili turtle conservation in Panggul, Trenggalek. How transformations are formed in continuity will be articulated by the trajectories of groups, turtles, and nature.

METHODOLOGY

To examine the problem of transformation and continuity in the process of digitizing turtle conservation using a phenomenological approach. This approach helps me to see the process of relations between humans, turtles and nature which is demonstrated in social expressions in carrying out turtle conservation practices. The expression here is a form of continuity. Through a phenomenological approach, I can see daily phenomena related to turtle conservation practices. This approach helps researchers to see firsthand how continuity occurs in a transformation.

Saras Dewi explains in her book entitled "Ecophenomenology" conveying ideas about the relationship between humans and nature. Dewi (2015) explains how humans ethically live with their world which is manifested in the concept of dwelling. Dewi interprets this concept from Heidegger (1992) which explains that humans live in the environment and care for it. The fundamental character of humans is to protect the environment. According to Tihurua (2019) Heidegger explains " the problem of humans maintaining the peace of their environment, and adjusting their activities and application of technology ".

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

I continue the research I did in 2015[4]. I want to see how the group transformation process takes place. During the follow-up process in March and April 2021, the season when no turtles go up to lay eggs, I saw some of the same routines but with different practices. I first made observations and then asked about some of the physical facilities added in conservation. Another thing I found was the matigator engine and application used by one of the group members. Then one of the members and I chatted about using the technology and the application. I also conducted interviews with other members to broaden my knowledge about the transformation process of turtle conservation. I also make field notes and then reflect.

Hammersley, M. and P. Atkinson (2007) in their paper "…Problems, Cases and Samples" explains the researcher must know the attitudes, knowledge and behavior in the context taken and the time specified. This will result in an ideal approach. I also make observations using productive recordings and reflections. I did my research by constructing a representation of observing the appropriate turnaround time to observe.

RESULTS AND DISCUSSION

When we discuss turtle conservation, what we think of is the activity or practice of saving turtle populations by involving groups or communities. Studies on turtle conservation are dominantly focused on the effectiveness and outcomes of conservation activities. Whereas in my opinion, more complex than that is how conservation is produced through experience and knowledge by the group and the production process is sustainable with the time span of conservation activities. That is, in the production process by the group there is a cultural continuity that causes the articulation of production to be more complex. The group produces their knowledge and experience to save the turtle because the group is attached to the turtle. Instead, Turtle became immersed with group production. This activity creates "attachment" with nature and culture in the group. But turtle conservation is not something that grows naturally in groups.

Turtle Conservation Group Dynamics

Groups have intrinsic values that are important for conservation practices. This value will continue to be produced by the group and give birth to new values. The phenomenon is that the group has relations with practitioners and various agencies, the new values will relate to the old values applied by the group. In addition to relations, friction also occurs between turtle conservation and the environment and culture. This is what I call "turtle conservation group dynamics" in dealing with environmental, social and cultural degradation.

From Dwelling to Conservation

The process of cultural production in the dynamics of turtle conservation groups not only moves the group to reflect on its interactions with outside agents, but also creates the phenomenon of continuity and transformation that has an impact on psychological conditions to save environmental problems. This phenomenon makes us have to look at the view of dwelling. Heidegger (1992) explains "dwelling is a condition of society in an effort to balance nature so that everything in nature comes alive. Changes in environmental conditions and external pressures affect the psychology and knowledge of the inhabitants. This explanation led me to see how this dwelling works in the transformation process. According to West (2005) " dwelling is a new environmental and power arrangement based on the cultural imagination of the community". For West this imagination is not formed quickly but through a long process.

[4] Research conducted by Basyarul Aziz at Taman Kili-Kili Turtle Conservation which focuses on constraints and adaptation strategies of POKMASWAS in different seasons.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

I focused on group dynamics carrying out turtle conservation activities in different seasons. I found a variety of group activities from both summer and rainy season. In the summer, the group divides the schedule for making predictions for turtle rides by the elders at the conservation. I saw that this elder played a role in predicting the turtle's rise based on the count of Java, the moon and the condition of the waves. This prediction is quite accurate in determining whether the turtle rides or not. This condition affects other members to patrol the search for turtle nests, planting turtle eggs and releasing hatchlings. During the rainy season, the group prepares for the *Ucul-ucul activity* (release of hatchlings).

Kili-Kili turtle conservation group, has 11 members of which 3 members are elders and former slaughterers. The other 8 members are local people. These 3 elders have experience as turtle slaughterers. When I asked these 3 elders, they did it to meet their economic needs when their harvests did not match expectations by selling turtle eggs and turtle meat. In addition, this elder also does it for the purpose of having fun with members of the village community, for example serving turtle meat while drinking alcohol together and playing cards. From here I pondered why turtles are an important object in meeting economic and pleasure needs while agricultural products make the 3 members of this group unhappy? This reflection made me question the concept of *dwelling* between Heidegger and West.

I use a concept from two figures to see the dynamics of the activities of the Taman Kili-Kili turtle conservation group through the *Dusun Penyu phenomenon*[5]. Dusun Penyu is the location where the older generation of turtle slaughterers carried out the slaughter that was inherited from the inheritance from the elders and so on. During the process of inheritance, the ancestors of the elders gave the advice "*lek ndak cukup (tani) yo jupuko, ning ojo kabeh*." "If it's not enough (agriculture), then take the turtles but not all". From here, inheritance is not only in the form of turtle slaughtering activities but also imagining the narratives of the ancestors in the context of economics and pleasure. As explained by Latinis (2000), the source of livelihood for the next generation is guaranteed through a long process of imagination. However, not all turtle in Dusun Penyu carry out turtle slaughter, only certain individuals will do it. This is related to the long inheritance process.

Interestingly, these 3 elders revealed that the turtle slaughter was carried out by performing a ritual beforehand and not all eggs were taken for sale, but some were planted in areas close to the turtle laying eggs with the reason that the turtles could breed. This slaughter process contains rational thoughts from the elders to maintain the balance of the environment and also get the economy.

In 2005, when the conservation was established, outside agents obtained information about the Dusun Penyu by bringing in a conservation development project. The construction of this project involves elders as the key to the success of conservation development. This approach works because the elder gets a full view of development, rules and punishments. In my view, the practice carried out by this elder is an iterative process of turtle conservation, the idea of not taking everything in nature is the key to the success of the approach taken by outside agents. Turtle slaughter at this time is reduced but with an agreement not to slaughter turtles, it is allowed to take eggs on condition that all of them are not taken and for village purposes only.

Between 2006 and 2009, 3 elders were given the power to regulate conservation including the physical development process, finding members and managing finances because they were given incentives every three months.

In 2012, the turtle conservation group had an official name namely Pokmaswas or Community Monitoring Group and consisted of 11 group members.

[5] Dusun Penyu Phenomenon based on the stigma of the insider and outsider about the life of the Kili-Kili sea turtle conservation group

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

The dwelling explanation is also related to the concept *of moment of structural break* from Rudiansjah (2009) which means that the tradition of saving turtles has been formed for a long time but with different practices and powers. This concept through human interaction with turtles and nature creates an intentional relationship that provides new awareness and knowledge for conservation (Marleau-Ponty, 2002).

Intentionality with Turtles and Nature

How do intentional relationships occur? Marleau-Ponty answers this with the concept of the body. The importance of this body for Marley is called "the body as an ontology" where the body as an instrument of a practice, he is a natural object that adapts to something that is outside the human being who has a body. Body of the Kelompok Pengawas that makes it a *habitus*. This body is an object capable of transcending its physical qualities. This quality is able to make him able to interact with other objects. That is, knowledge to anticipate environmental and socio-cultural degradation is the result of the subject's reflection on the intentional relationship with objects outside himself. I use this concept reflection from the story of a turtle conservation informant at Taman Kili-Kili.

Informant 1

A male conservation elder, joined the Kili-Kili Turtle Conservation in 2005 and is a former turtle slaughterer. Having the ability to predict the turtle rising and being able to determine the location for planting turtle eggs after the turtle rises to lay eggs. Informant 1 has the knowledge to carry out conservation from the innate ancestral knowledge to make this knowledge habitus. Informant 1 has difficulty treating the turtles that are being conserved. Conserved turtles become educational materials for people who come to turtle conservation. The difficulty experienced by informant 1 was scientifically planting turtle eggs and cleaning the turtle shells that were conserved.

Planting turtles scientifically means that turtle eggs are taken and then planted at the planting site waiting for 23 to 55 days to hatch. Informant 1 had difficulty arranging turtle eggs to the planting site. Scientifically, turtle eggs are arranged according to the original. Informant 1 tends to leave this to informant 2.

Informant 1 has experience in scientifically planting turtle eggs and how to take hatchlings that hatch. Informant 1 has the view that turtles are free animals that should after the turtles are planted, then hatch into hatchlings and must be released. Turtle conservation for Informant 1 is a care for sea turtles laying eggs.

Informant 1 also acts as a bridge between the community and outside agents to enter into an agreement for the distribution of turtle eggs. Turtle eggs are an important object in conservation, in the past they were objects of commodity sales for the needs of those who ordered turtle eggs. Uniquely, Informant 1 used to serve orders for turtle eggs but did not take all the turtle eggs. This has become Informant 1's knowledge and *habit* now, to bridge the community with outside agents to use some eggs only for the needs of the local community.

Informant 2

Informant 2 is a native of Turtle in Dusun Penyu, joined Kili-Kili Turtle Conservation in 2009, 46 years old male. Work as a farmer but also a member of turtle conservation. Diligent in conducting patrols to look for turtle eggs and often participate in socialization with practitioners related to turtle conservation. For the informants, 2 turtles are objects that must be conserved, apart from being saved, they must also be objects of education to the public.

Informant 2 is skilled in following the conservation stages, starting from patrolling turtle nests, planting eggs, caring for hatchlings, stimulating 6-month-old hatchlings to use fresh

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

water and conducting education. At the beginning of joining conservation, Informant 2 followed the directions of Elder 1 in determining which turtles to go up and find nests for turtles that lay eggs. Starting in 2014, Informant 2 is skilled in reading environmental conditions to determine which turtles rise to lay eggs based on the experience and techniques of Elder 1 as well as socialization.

At the time of the introduction of the *Matigator* technology in 2015 to incubate turtle eggs during the rainy season, informant 2 understood well the instructions from practitioners to operate and position turtle eggs so that they hatched optimally.

Informant 3

Informant 3 is a resident of Turtle in Dusun Penyu, joined the Kili-Kili Turtle Conservation in 2011, 35 years old woman, works as a housewife. Informant 3 is skilled in sorting turtle and hatchling feed, managing finances and being a spokesperson when the media covers and various educations about turtles. Informant 3 is not skilled in patrolling or planting turtle eggs but is skilled in cleaning turtle ponds and turtle shells.

At the time of the introduction of digital applications in 2021 to manage conservation, starting from creating social media accounts, writing articles and using the *Matigator application* to record turtles laying eggs, hatching eggs, marking turtle nesting locations to documentation to be included in the application, informant 3 is skilled in managing this application.

The three informants above not only form a series of events. But how does life between the group and the turtle and nature proceed or in other words is part of the dynamics of human life with turtles and nature.

Turtle conservation is not only a conservation activity and the economy is a side activity apart from their main job. Rather, it is a long-term learning process for members of a conservation group. Their reason is not about how the choice should be to conserve turtles but because turtle conservation has become a habit.

The meeting point of the habits of the informants above is the subject's experience of living with turtles. Informant 1 has been interacting with turtles for a long time, whose experience is gained from knowledge and techniques in treating turtles, while informants 2 and 3 have experience based on direction. Among informants 1,2,3, expressed these experiences with cultural expressions that grew out of intentionality. This expression is an attitude and action from the past, present and future which has a complex network of intentionality (Dewi, 2015). This expression is bound by the space and time in which the informant exists. The fickle expression is not interrupted by the past and is not final.

Environmentality of the Turtle Conservation Group

To understand this discussion, I would like to quote the opinion of West (2005) about environmentality, *"environmental regulation becomes meaningful by using and eliminating relations socio-cultural, human relations and non-human relations"*.

The group carries out various relations between groups, community groups, practitioners' groups, marine fisheries service groups, turtle groups in a conservation environment. Relationships that exist in a conservation environment where the group has intentionality. These conditions create cultural production when transformation occurs.

Kili-Kili turtle conservation group has relationships with humans and non-humans that keep it alive. Relationships will form new knowledge and experiences. Informant 2 was given socialization and training by practitioners on how to use the *maticgator* machine to incubate turtle eggs and did not have knowledge of how to operate the machine. Initially, informant 2

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

asked how to use the machine, what are the components of the machine, how to plant eggs in the machine, the time to warm turtle eggs. This question received a response, then informant 2 conducted an experiment. This experiment was carried out for one month and failed in hatching turtle eggs. In the second experiment, informant 2 was *Maticgator* assisted by practitioners in planting turtle eggs which showed better results compared to experiment 1. When informant 2 did this practice, he actually made this relationship with a companion species (Donna Horroway, 2008) which means an attachment to the one that produces production of new cultures and values.

The same practice is shown by Informant 3, when using the Matigator application. Informant 3 does not know how to use the application and how to collect data. Skills in operating the application are carried out independently. The data collection process was also coordinated by Informant 3 starting from documentation, recording the time of turtle laying eggs, location, number of hatching and unhatched eggs and the type of turtle.

What I have said in this section is that when group members become attached to a new practice, they will become dependent on the new practice. Group members will devote their energies to taking care of conservation. As a result, with this new practice, it creates a new habit where the predictive ability of turtles increases and turtle egg planting from Informant 1 is rarely used. Group members reflect on options using new turtle conservation practices. Reflection on this relationship makes them create knowledge and conservation techniques rationally both in terms of costs, energy and benefits to deal with environmental, socio-cultural degradation.

Post-Conservation

The process of cultural production in a certain time and environment also gives birth to group knowledge and attitudes in implementing good conservation practices combining old and new values. The intensity of the relationship between the group and outside agents provides encouragement for the group to apply new knowledge by using various facilities and technology, both influenced by human (groups, outside agents) and non-human (turtles and digital information technology). West (2005) explains that technological intervention through environmental development projects provides benefits for groups doing conservation in a certain period of time and provides new knowledge and values to overcome environmental degradation. The values exhibited by this group, which West calls *environmentality*, appear in post-conservation. I use "post" instead of "pasca" because the group is still using the old practices of turtle conservation as well as using new practices.

Non-Human Agency in Cultural Production

Environmental, social and cultural degradation experienced by the Taman Kili-Kili turtle conservation group is not only influenced by the group, but as I explained in the introduction to this chapter. Turtles and Digital Information Technology play an important role in influencing environmental regulation.

Agency is a concept used by Anthony Giddens to see the practice of humans where Rudiansjah (2009) conveys *'...human actions must be seen with a series of actions in the dimensions of space and time that lead to certain consequences...'* Turtles have the quality as agency. By referring to what was conveyed by Giddens and Rudiansjah, turtles are positioned as an *unconcious agency*. An agency that is not realized by humans but influences human actions. Just like turtles, digital information technology plays the same role even though it is a new agency.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Turtle as Agency

Turtles are animals that have the capacity as an agency. Does the turtle have the capacity as an Agency? Jones and Cloke (2002) explain *"…nature is not only supported by humans and culture. On the other hands nature "pushes back" with its power manifested in certain material processes..."*. Turtles become stimuli to humans through their relational intentionality which encourages humans to reflect on their interactions, creating knowledge and techniques or practices of turtle conservation. Knowledge and techniques or practices will form in a long time process that will shape cultural formation.

The quality of the turtle described by group members is as an educational animal. Providing space for other ecosystems in one conservation to come alive and the character of this turtle makes the group have the ability to read the environment. Turtles have the ability to identify whether the environment is clean or unclean for laying eggs. Turtles are animals with a long life character and the stability of their population is determined by the adaptation of the turtles themselves to the environment and humans. With a long life, someone in conservation will continue to produce conservation practices for a long time. Someone who may be born later will be the successor of conservation practices, knowing the practices carried out by previous group members.

The quality of turtles is also related to phenomenology, namely that culture is not only born from the power of human knowledge, but is the result of human reflection on nature and other species. Turtles are not something passive, not always governed by humans with the power of reason. Turtles have their own nature, which humans may not understand. Various conservation practices that emerged from the group prove this. Turtles prove actively as an agency.

Digital Information Technology as a New Agency

The main purpose of accepting digital technology by the Kili-Kili turtle conservation group is to adapt to the times and to facilitate group activities. Digital Information Technology used in turtle conservation is the *Maticgator* Application. At the beginning of its introduction in 2021, the *Maticgator* Application was created by practitioners to make it easier to manage information about turtle activities and to make it easier to share information among group members. The importance of the application in turtle conservation depends on the reflection of its users.

At the beginning of the introduction of this application, only 3 informants learned how to be active in using this application. Informant 3 studied privately recognize various features in the application while recording turtle activity in real time. For other members, informant 3 coordinated to report and take photos of all activities related to conservation activities. At this stage, the application functions as a learning tool for turtle conservation.

Meanwhile, practitioners want to expand the reach of users of the Matigator application for conservation and tourism activities. Conservation has a selling value that can be for the welfare of members of the turtle conservation group.

The *Maticgator* application is an object of information exchange for fellow group members and the surrounding community. The group produces information about turtle activities and can then share it with each other. In early 2022, information about various turtle activities is not only enjoyed by groups but can be shared with the community in Dusun Penyu. That is, this digital application has developed from a learning process to a process of sharing information (Ibrahim El, 2009).

How about old conservation activities without using this application? In turtle conservation, there is a paradoxical phenomenon that conservation is carried out to protect the

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

ecosystem with the help of humans turning into humans, requiring various assistances for conservation. This means that groups are no longer doing conservation just to help protect ecosystems but all practices to protect ecosystems including using applications. The Kili-Kili turtle conservation group is still using old conservation practices. This explains that the use of digital information technology as *the second choice* (Bennet, 1995).

The phenomenon of turtle conservation using digital information technology in the form of the *Maticgator* application encourages transformation in conservation management. The *Maticgator* application can be used as a learning tool and information exchange object. The *Maticgator* app can also influence group practice. Mutual influence between groups with the *Maticgator* Application occurs when the first contact with the group goes through a long and complex process, space and time. During one year of using the *Maticgator* Application, this application as an agency is able to influence the group and as a passive object when the group uses it for certain purposes. Implicitly this application is able to encourage transformation in conservation.

Modification of Ucul-Ucul Activities: Transformation and Continuity

The *Ucul-ucul* activity is an annual turtle hatchling activity organized by the Kili-Kili Turtle Conservation. Through this activity, we can describe how the process of continuity and transformation occurs in conservation. *Ucul-ucul* activities are the result of friction between the production of old conservation culture and new interests.

The concept of group activities to conserve certain animals and plants was conveyed by Ellen (1985) according to him, *"...there are many examples of forest conservation and others as well as certain rituals and activities to manage resources and protect resources that are institutionalized and coordinated by institutions or individuals..."* . Ellen said that rituals or activities are ways to manage conservation. The *Ucul-ucul* activity is an annual peak activity as a result of the turtle conservation mechanism carried out by the group.

As already explained, Ucul-ucul relates to group production with conservation mechanisms. The reason is, environmental degradation that occurs affects the level of turtles that go up to lay eggs and hatch. The mechanism used is to clean the coastal area where the turtles lay their eggs and use a *maticgator* machine. This mechanism is also influenced by different seasons, summer and rainy season. In summer, turtle rates are high, the group needs a lot of money to manage the various phases of the turtle's life. During the rainy season, the group tends to do little conservation activities because during this season some group members carry out agricultural activities. Members of the group use a *maticgator* machine for hatching turtles, feeding, cleaning the pond and in one week only patrols 5 times to monitor turtle activity. In addition to conservation activities, the group also conducts educational activities where visitors can give voluntary money to group members and the group makes offers to adopt turtles where visitors can become foster parents for hatchlings and release them directly to the Kili-Kili coast. This mechanism is carried out to cover the costs of caring for the hatchlings and small turtles that are being conserved.

Aware of the activities in different seasons, the concept of releasing hatchlings has actually been carried out by groups, communities and visitors who have adopted hatchlings but not within the stipulated time. In the Ucul-Ucul preparation period, the group prepares for 6 (six) months during the summer (March-August) to monitor the life phase of the turtles being conserved and monitor the environment around the turtles that are used for laying eggs. This activity makes the turtle that rises to lay eggs to be stable. The use of *Maticgator* machines is also used in the hatchery process to improve hatchlings hatching. This whole set of mechanisms

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

is via the *Maticgator* app. The following is some data from the results recorded in real time on the *Maticgator* application:

Table 1. Turtle Data Collection February–April 2022

Turtle Landing	Turtle Type	Estimated hatch	Incubation	Number of hatchlings
PCQM+PR7	Lekang Turtle	98 more days		
PCQM+PR7	Lekang Turtle		51 days (Maticgator)	87
PCQM+PR7	Lekang Turtle	38 more days		
	Green Turtle*			
PCQM+PR7	Lekang Turtle	38 more days		
PCQM+PR7	Lekang Turtle	8 more days		
PCQM+PR7	Lekang Turtle		58 days (semi -natural nest)	93

Notes:
*green turtle eggs donated by Taman Ria Pacitan conservation
The number of each parent

The condition of the group using the strategy can be seen not only for the benefit of the group but also to reduce the risk of the turtle population going down. This is what I call continuity and transformation in turtle conservation.

I would like to borrow a concept from Scott at the beginning of the book Moral Economics of Farmers, Scott (1994) explains *"…the one thing a farmer does is to avoid failure by taking risks…"*. Scott conveys that farmer ethics is rooted in economic activities but also social exchanges in farming communities. Similar to farmers, groups also carry out social exchanges by conducting Ucul-ucul activities. With the social exchange, social relations in Dusun Penyu will increase. The reason is, during Ucul-ucul activities, the intensity of interaction between people and between social classes increases through various activities. Interaction on the one hand increasingly has an impact on the closeness of group social relations.

However, in 2015 and 2016 due to the influence of environmental degradation, Ucul-ucul activities were not carried out. Due to environmental degradation, most of the turtle eggs planted do not hatch and the hatchlings die due to extreme temperatures. The use of the *Maticgator* machine at the beginning of this experiment was also not still ineffective for incubating turtle eggs. Turtle conservation practices are disrupted when environmental degradation occurs. The group has a strategy to overcome the risk of environmental degradation by diversifying the conditions of hatchlings and small turtles.

With the dynamics of Ucul-ucul Activities, I see that turtle conservation is not only about saving turtle populations or saving ecosystems around conservation but also increasing the formation and strengthening of social relations.

CONCLUSION

The findings and discussion above show changes in the articulation of conservation with a long trajectory of time and space in relation to various agents for the benefit of the group. Articulation changes show transformation and continuity in various challenges through environmental degradation and socio-cultural degradation. The relationship shown by the group raises intentionality and environmentality as a reflection of the practices carried out by the group and the values brought by the agent. Apart from humans, there are other agencies that influence the group, namely turtles and digital information technology (matigator applications).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Taman Kili-Kili conservation group has an annual Ucul-ucul activity to hold social exchanges as a result of efforts to overcome various conservation constraints that experience dynamics from time to time.

I want to convey in this paper, the development of digital information technology develops from time to time which requires an environmental and socio-cultural approach. At the conservation group level, the provision of a new technology is prone to friction between old and new values, thus requiring a more intense approach between group members and practitioners to monitor developments in the use of new technologies. At the level of policy makers, environmental development projects, both physical development, human resources and technology, require input from various disciplines by providing opportunities for collaboration between disciplines to achieve common prosperity..

REFERENCES

Agrawal, A . (2005). Environmentality: Community, Intimate Government and the Making of Environmental Subjects in Kumaon, India. *Current Anthropology* Volume 46, Number 2, April 2005.

Aziz, B . (2016). *Strategi Adaptasi Pengawasan Konservasi Penyu Taman Kili-Kili, Desa Wonocoyo, Kecamatan Panggul, Kabupaten Tranggalek*. Vol 5,no 2.

Adhuri, D., Satria, A., Kennet., Ruddle., (2010). *Pre-Existing Fisheries Management System in Indonesia on Lombok and Maluku in Managing Coastal* in Inland Waters (pp 31-55).

Bennett, JW. (1995). *The Ecological Transition: Cultural Anthropology and Human Adaptation*. New York: Paragon Press.

Dewi, S. (2015). *Ekofenomenologi: Mengurai Disekuilibrium relasi Manusia dengan Alam.* Serpong: Marjin Kiri.

Ellen, R. F. (1985). Patterns of Indigenous Timber Extraction from Moluccan Rain Forest Fringes. *Journal of Biogeography,* 12 (6), 559-587

El, I. (2009). *Keragaan Kelembagaan Adat Agroforestri Dusun. Tesis untuk memperoleh gelar Magister Sains pada Program Studi Ilmu Pengetahuan Kehutanan*. Institut Pertanian Bogor.

Farina, Almo. (2010*). Ecology, Cognition and Landscape Linking Natural and Social Systems*. London : Springer.

Hammersley, M. and Atkinson, P. (2007). *Problem, Cases and Samples in Ethnography: Priciples in Practice,* London: Routledge.

Jones, O. & Cloke, P. (2002). *Tree Cultures: The Place of Trees and Trees in their Place*. United Kingdom: Oxford, Berg.

Kottak, C.P. (1999). The New Ecological Anthropology. *American Anthropologist* 101 (1): Page 26.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Merleau-Ponty, M. (2002). *Phenomenology of Perception. (Donald A. Landes,* Translate). London and New York: Routledge Classics.

Nuttal, Mark. (2010). Anticipation, climate change, and movement in Greenland in *Études/Inuit/Studies* Vol 34, pp 21-37

Paige, West. (2005). *Parks and People: The Social Impact of Protected Areas dalam Annuals* Reviews of Anthropology, Vol. 35

Peterson, M. (2003). Anthropology & Mass Communication: Media and Myth in the New Millenium, Berghahn, New York.

Raden, A., Wibowo, E., Pratikto, I., Fajar, S. (2016). Pelestarian Habitat Penyu Dari Ancaman Kepunahan di Turtle Conservation and Education Center (TCEC), Bali in *Jurnal Kelautan Tropis* March 2016 Vol. 19(1):60–66.

Rudyansjah, T. (2009). *Kekuasaan, Sejarah, & Tindakan: Sejarah Kajian tentang Lanskap Budaya*. Jakarta: Rajawali Pers.

Rudyansjah, T. (2011). *Alam, Kebudayaan, & yang Ilahi: turunan, percabangan, dan pengingkaran dalam teori-teori sosial budaya*. Depok: Titian Budaya.

Scott, J. C. (1994). *Moral Ekonomi Petani: Pergolakan dan Subsistensi di Asia Tenggara*. (Hasan Basri, Translate). Jakarta: LP3ES.

Tihurua, O. Z. S. (2019). *Lanskap Budaya Komoditas Kopra: Tinjauan Antropologis Terhadap Dinamika Komoditas Kopra di Yainuelo*. Thesis: Indonesia University.

Wardhani, M.K. (2011). Kawasan Konservasi Mangrove: Suatu Potensi Ekowisata in *Jurnal Kelautan*, Vol 4 No 1.

______. (2009). *Pedoman teknis pengelolaan konservasi penyu*. Jakarta: KKP-Direktorat Jenderal Kelautan Pesisir dan Pulau-Pulau Kecil.

Android-Based Learning Video Innovation to Improve Digital Literacy as A Social Lifestyle in Education for Elementary School Teachers

Dewi Nilam Tyas[1], Sri Sulistyorini[2], Sri Sukasih[3], Desi Wulandari[4], Suparti[5]
[1,2,3,4]Universitas Negeri Semarang, Semarang, Indonesia
[5]SD Negeri Kandri, Indonesia
e-mail: dewinilamtys@mail.unnes.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

Digital literacy is needed by educators as the relevance of student needs to the trend of using digital media which has become a social lifestyle in education. Pra research showed that the digital literacy of teachers in West Semarang is still uneven and not optimal in utilizing technology in developing innovative learning media. This study aims to improve teacher digital literacy through Android-based learning video innovations. This quasi-experimental research involved 36 teachers as research subjects. The research method includes pretest, treatment (training in developing learning media using Canva and VlogNow applications, mentoring) and post-test. The results of the study show that digital literacy skills and android-based learning video skills increase. It is hoped that the quality of learning by utilizing technology as part of a social lifestyle in education will also increase.

***Keywords**: Innovation, Learning Media, Digital Literacy*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

This technological advancement is very useful in helping to learn during the Covid-19 pandemic which is carried out online. In connection with the Covid-19 pandemic which began to enter Indonesia since early March 2020, the government issued this Circular Letter Number 15 to strengthen the Circular Letter of the Minister of Education and Culture Number 4 of 2020 concerning the Implementation of Education in Emergency Periods (Covid-19). In this circular, Corona Virus Disease states that the purpose of implementing Learning from Home is to ensure the fulfillment of students' rights to obtain educational services during the Covid-19 emergency, protect education unit residents from the adverse effects of Covid-19, prevent the spread and transmission of Covid -19 in the education unit and ensure the fulfillment of psychosocial support for educators, students, and parents (Nastiti, 2020).

The application of online learning certainly requires teaching materials that can make students learn actively and independently without the limitations of space and time (Bastudin, 2021), (Amalia, 2017: 45). In addition, the essence of learning should also be conveyed in its entirety through the selected learning media integrated with the appropriate platform. However, this has not been fully implemented in learning activities because there are still quite a number of problems related to learning media used during online learning during a pandemic (Dewi, 2018: 48). One of the problems that arise in the world of education in this era of globalization is the mastery of information technology (ICT) by teachers. It is undeniable that there are still many of our teachers who still do not master information technology. Barriers to teachers in mastering ICT include the lack of ICT training, and opportunities for self-development for teachers (Halidi, 2015: 53-60).

Based on the pre-research that has been done, it is known that teachers use textbooks that are lent to students and are assisted by explanations through WAgroups. However, learning activities like this often make students easily bored and confused because there are things that are not clear. Sometimes, teachers include videos that are relevant to the learning material or theme as variations in learning, but the videos that are available are often not really relevant to learning. The teachers already have cellphones and laptops but in general they have not optimally utilized technology for the development of innovative learning media, such as developing videos as online learning media. The preparation of learning videos is considered difficult, especially if the editing process uses a laptop which is considered complicated, time consuming and less practical.

The development of information technology in the world of education will simultaneously direct human life to a new format as a modern human being characterized by rapid change and a certain identity (Erni, 2016), (Wolf, et.al, 2016). The format and identity of self and social groups are often referred to as lifestyles. This phenomenon also occurs in the world of education where information and communication technology is used in the learning process, but is not studied specifically in a subject but is included in every lesson.

On the other hand, since 2016 the Ministry of Education and Culture (Kemendikbud) has set six basic literacy skills that must be developed through education tri-centers (schools, families, and communities) (Lutfi, A. 2015). These include language literacy, numeracy literacy, scientific literacy, digital literacy, financial literacy as well as cultural literacy and citizenship. To be able to teach digital literacy, a teacher really needs to master this literacy. One type of literacy that is important to master is digital literacy (Kemendikbud, 2016), (Kuswanto, 2018). Digital literacy is very much needed by educators as the relevance of student needs to the trend of using digital in the learning classroom

Mastery of digital literacy is closely related to the ability or competence of teachers and needs to be improved. The professionalism of teachers is not only seen in their ability to

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

develop their knowledge, but also in their ability to carry out interesting and meaningful learning for students (Siyamitri, 2015), (Suyono, 2017). Teachers as learning facilitators are expected to be able to create and use learning media that are in accordance with the scope of KD and indicators, learning materials and student characteristics (Muyaroah, 2017). Referring to the description above, this study aims to improve teacher digital literacy through Android-based learning video innovations.

METHODOLOGY

The type of quasi-experimental research carried out in this study uses random assignment, ie sampling is based on the probability that each sampling unit has the same opportunity to be selected as a sample. It is intended that in the implementation of the research any given treatment takes place naturally and the research subjects can represent the population under study. This is expected to contribute to the validity of the research results. The subjects of this study included 36 teachers in the Srikandhi cluster, West Semarang. The study was conducted in July 2021, which was carried out in a limited combination online and offline by implementing a health protocol.

The independent variable in this study was training in the development of learning media, while the dependent variable was an increase in teacher digital literacy through Android-based learning video innovations. The design used is a one group time series design (using the experimental group only, without using the control group). The sequence of the research carried out included pretest, treatment (training on the development of learning media using Canva and VlogNow applications, mentoring) and post test.

RESULTS AND DISCUSSION

Life style in education today cannot be separated from the technology used in learning, one of which is in the preparation of learning media. In this regard, the teacher must be skilled in using and compiling learning media. To be skilled in compiling learning media, the teacher must have digital literacy skills so that the media that is prepared is not just the result of sticking or combining material but as a result of selecting material that can be taken from various references, but the teacher adapts it to the needs of students.

The research involving 36 teachers as the subject of this study came from school representatives who are members of the Srikandhi cluster, West Semarang. The following distribution of representatives of each school can be seen in Figure 1. The distribution graph of the teacher's school origin as the research subject.The research involving 36 teachers as the subject of this study came from school representatives who are members of the Srikandhi cluster, West Semarang. The following distribution of representatives of each school can be seen in Figure 1. The distribution graph of the teacher's school origin as the research subject.

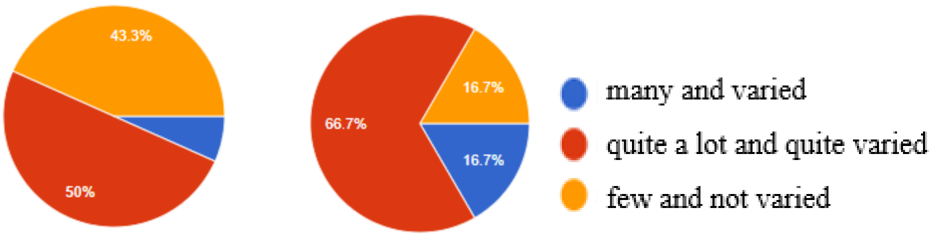
Figure 1. Distribution Graph of Teacher's School Origin as Research Subject

(Source:researcher's personal document)

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

The results of the pretest and posttest related to some data can be observed in the pictures below, the graph on the left is the graph obtained from the pretest results and the graph on the right is the graph obtained from the posttest results.

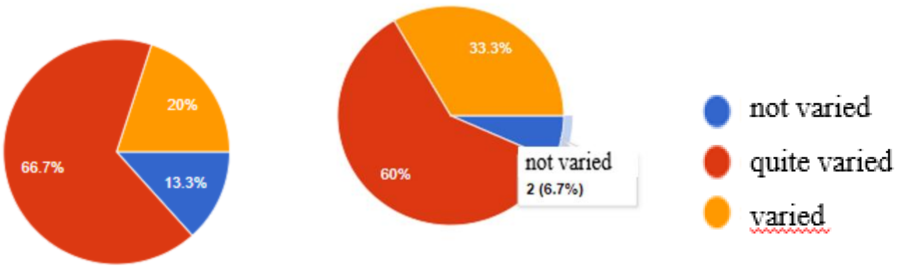
Figure 2. The Number and Variety of Digital-Based Reading Materials Used As A Reference In The Preparation Of Learning Media



(Source: researcher's personal document)

Based on the figure above, it is known that the number and variety of digital-based reading materials used as references in the preparation of learning media has increased. From 6.4% of respondents who used multiple and varied references, it increased to 16.7%. Those who used references in the category were quite a lot and varied enough increased by 16.7%. Meanwhile, those who use the number and variety of readings that are few and not varied experienced a decrease of 26.6%, which means that respondents in this category experienced a change after being given treatment in the form of training in the preparation of android-based learning videos by utilizing various references and packaging them in learning media after the selection was made.

Figure 3. Variations of Learning Media Used During Online Learning

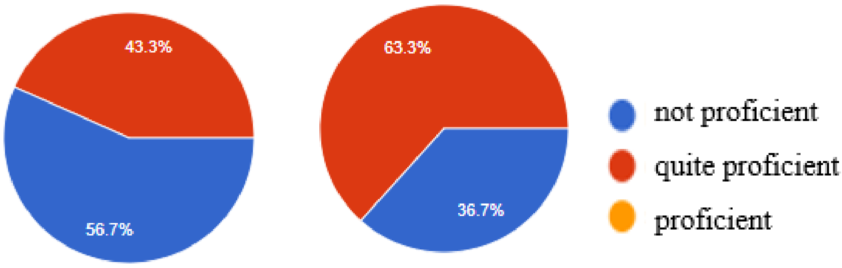


(Source: researcher's personal document)

The next aspect that was observed was the variation of learning media used during online learning, showing that respondents experienced a decrease of 6.8% in the non-variable category and 6.7% in the moderately varied category, respectively. A total of 13.3% have changed to using a variety of learning media. This is in accordance with what is shown in the chart where the variable category has increased by 13.3%.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

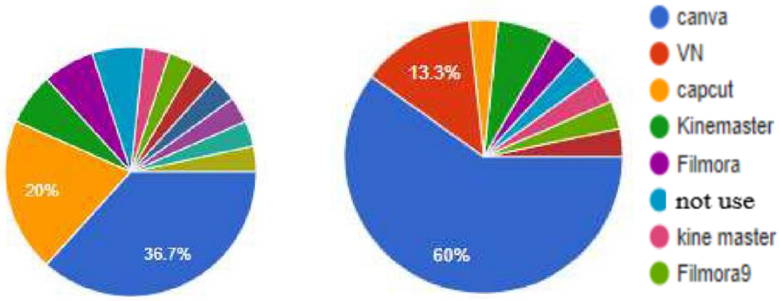
Figure 4. Skills In Compiling Video-Based Learning Media



(Source: researcher's personal document)

The next indicator that is measured is the proficiency in compiling video-based learning media as shown in Figure 4, from 43.3% in the moderately proficient category to 63.3%, which means an increase from previously less proficient to moderately proficient at 20% of the respondents.

Figure 5. Familiar Android-Based Video Creation Application for Teachers



(Source: researcher's personal document)

Figure 5 shows that all respondents are familiar with using Android-based video creation applications, especially Canva and VN because these two applications are the main material in the training as a treatment to improve teachers' digital literacy. The light blue part of the chart that shows that the respondents do not use an Android-based video editing application has also decreased in number, although when the post-test was carried out there were still some who had not used an Android-based video editing application.

The diagrams above illustrate increased IT capabilities and increased digital literacy. Douglas A.J. Belshaw in his thesis What is 'Digital Literacy'? (2011) said that there are eight essential elements for developing digital literacy, which are as follows. 1. Cultural, namely understanding the various contexts of users of the digital world; 2. Cognitive, namely the power of thought in assessing content; 3. Constructive, namely the creation of something that is expert and actual; 4. Communicative, namely understanding the performance of networks and communications in the digital world; 5. Responsible self-confidence; 6. Creative, doing new things in new ways; 7. Critical in addressing content; and 8. Be socially responsible.

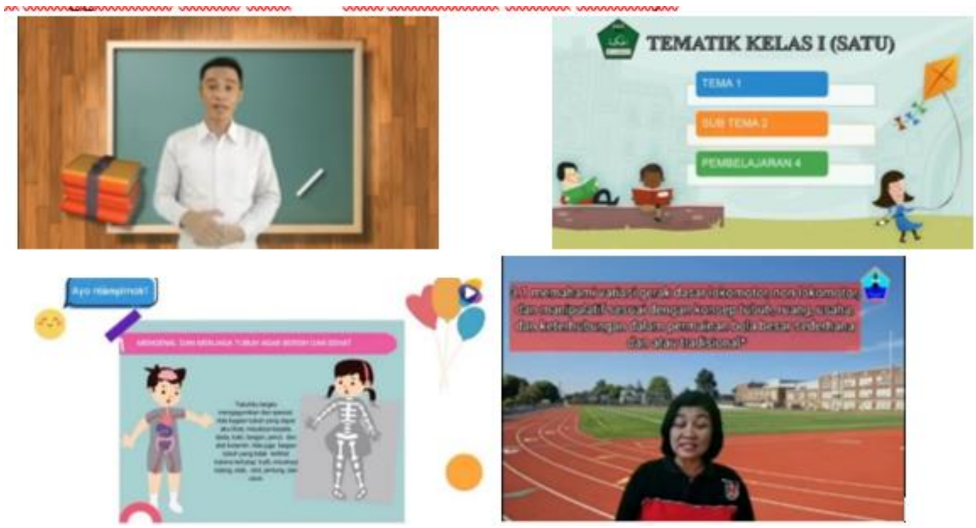
According to UNESCO, the concept of digital literacy overshadows and becomes an important foundation for the ability to understand technology, information and communication devices. For example, in ICT Literacy, which refers to technical capabilities that allow active involvement of community components in line with cultural developments and digital-based public services. The concept of digital literacy, in line with the terminology developed by

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

UNESCO in 2011, refers to and cannot be separated from literacy activities, such as reading and writing, as well as mathematics related to education. Therefore, digital literacy is a skill (life skill) that does not only involve the ability to use technology, information, and communication tools, but also social skills, learning skills, and having attitudes, critical thinking, creative, and inspirational as digital competencies.

The development of learning videos carried out by the elementary school teacher Gugus Srikandhi as workshop participants was accompanied by a research team to help formulate and develop material that would become video content and video editing techniques so that the work compiled was truly applicable to be used in learning activities. In addition, the ability to organize the material in a video and determine which video will be used when the introduction, main or closing will greatly affect the selection of material and the preparation of the video that will be carried out. Figure 6. shows a screenshot of an example video made by a teacher participating in the workshop. Some of these videos were developed using Canva or VN and a combination of the two.

Figure 6. Examples Of Android-Based Learning Videos Developed by Teachers



(source: researcher's personal document)

Increasing digital literacy for teachers plays a role in determining lifestyle in education. Lifestyle is built based on knowledge and social attitudes that have been in an individual's environment. Life that follows a trend (popular) is a form of a person's or group's lifestyle (Erni, 2016), (Chukwuere, et al. 2017). Lifestyle is related to how a person wants to present himself and how other people see him. Therefore, education as a medium of social change is an important thing that cannot be ruled out. This is where the teacher's role is very important to make technology a part of a lifestyle that has a positive influence on students. The effort made in this research is to provide training in video compilation skills as a learning medium to improve teachers' digital literacy. When digital literacy is good, teachers will be more adept at using technology in learning to achieve learning goals. Teachers will be better prepared to accept the changing times that are getting faster and less afraid when they are required to integrate technology in learning.

Furthermore, the learning media that have been compiled can be uploaded to social media to make it easier and wider for the reach of access. Chen et al. (2016) and Rajeev (2015) agreed that social media can contribute very well on education in the way of promoting collaborative

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

learning among students, however when applied correctly. This in turn will lead to a sustainable lifestyle, which is an effort to base behavior on a sustainable life. Lifestyle in education personally or in groups is a synthesis of communication interactions, both verbal and non-verbal. One's lifestyle rolls along with the beat of changing information that is accessed by individuals without anyone being able to limit them. Basic culture, beliefs and religion will act as the main filter for interactions that occur before forming interpretations. (Erni, 2016). So, the role of the teacher in this case is very important.

CONCLUSION

The results show that if digital literacy skills and Android-based learning video development skills on the research subject increase, it is expected that the quality of learning by utilizing technology as part of a social lifestyle in education will also increase.

ACKNOWLEDGEMENTS

Thank you to Faculty of Education Universitas Negeri Semarang; research team and Srikandhi teacher work group, Semarang Barat.

REFERENCES

Amalia, A. F. (2017). Penerapan Metode Blended Learning Berbasis TIK Untuk Meningkatkan Pemahaman Konsep Pada Matakuliah Listrik Magnet ii. *Sosiohumaniora*, 3(1), 43–46.

Bastudin. 2021. *Hambatan Utama Penggunaan TIK Dalam Pembelajaran dan Strateginya*. http://lpmpsumsel.kemdikbud.go.id/site/blog/2020/06/17/hambatan-utamapenggunaan-tik-dalam-pembelajaran-dan-strategi-mengatasinya/

Chen, C. C. Kaewkitipong L & Ractham. (2016). *Using social media to enrich information systems field trip experience: students' satisfaction and continuance intentions*. Computers in

Chukwuere, J. E., & Onyebukwa, C. F. (2017, July). New media and politics: An assessment of 2016 South African local government elections. *In Proceedings of International Academic Conferences (No. 4607534). International Institute of Social and Economic Sciences*.

Dewi, Suci Zakiah dan Hilman Irfan. (2018). Penggunaan TIK sebagai Sumber dan Media Pembelajaran Inovatif di Sekolah Dasar. *IJPE*. 2(2), 48-53.

Erni, S. (2016). *Sustainable Lifestyle Masyarakat Perkotaan (Studi Tentang Gaya Hidup Berkelanjutan Masyarakat Perkotaan di Riau).* 11, 75–86.

Halidi, H. M., Sarjan N. Husain, dan Sahrul S. 2015. Pengaruh Media Pembelajaran Berbasis TIK Terhadap Motivasi dan Hasil Belajar IPA Siswa Kelas V SDN Model Terpadu Madani Palu. *e-Jurnal Mitra Sains*, 3(1): 53-60.

Kemendikbud. (2016). *Peraturan Menteri Pendidikan dan Kebudayaan Nomor 22 Tahun 2016 tentang Standar Proses Pendidikan Dasar dan Menengah*. Jakarta: Kemendikbud

Muyaroah, S., & Fajartia, M. (2017). Pengembangan Media Pembelajaran Berbasis Android dengan menggunakan Aplikasi Adobe Flash CS 6 pada Mata Pelajaran Biologi.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Innovative Journal of Curriculum and Educational Technology, 6(2), 22–26. https://doi.org/10.15294/ijcet.v6i2.19

Nastiti, F., & Abdu, A. (2020). Kajian: Kesiapan Pendidikan Indonesia Menghadapi Era Society 5.0. *Edcomtech Jurnal Kajian Teknologi Pendidikan*, 5(1), 61–66. https://doi.org/10.17977/um039v5i12020p061

Rajeev, M. M. J, (2015). *Effects of social media on Social Relationships*: A Descriptive Study on the Impact of Mobile Phones among Youth

Wolf, D. M, Wenskovitch, J & Anton, B. B. (2016). Nurses' use of the Internet and social media: Does age, years of experience and educational level make a difference? *Journal of Nursing Education and Practice,* 6(2), 68-75.

Mobile Based Exam Training Using Android Controlled by Website: A Prototype

Djoko Rahardjo
Unversitas Terbuka
e-mail: rahardjo@ecampus.ut.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

The purpose of this research is to create a model for a mobile-based exam training that can be administered via a website. The prototyped application was created using an online development tool called MIT App Inventor 2, and the website was created using PHP and MySQL as the database platform. The application was distributed to a random sample of 66 students from Universitas Terbuka's regional offices in Bogor and Malang, Indonesia. The result indicates that students generally accept and can make use of the application during their learning process. Additional research is recommended, including contacting other Regional Offices, and retaining an expert to revise and review the utilities, test material, and pedagogical items.

***Keywords**: Self-Assessment, Summative Test, Mobile Application, Website*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

Today, distance higher education (DHE) is a burgeoning educational system. The rapid development is facilitated in large part by the existence of information and communication technologies (ICT). Universitas Terbuka (UT), as a DHE institution, has used ICT in a variety of ways, both in the classroom and in other academic administrative services. Specifically, UT has provided web-based self-exercise services to students as part of the process of delivering teaching materials to students. However, some students are unable to download the exercise materials to their personal computers. This is because not every personal computer is equipped with the Flash

Player application. Rahardjo (2016) has designed an Independent Exercise successfully using Android, but it is still in the offline mode. The application was installed on Google Play and can be downloaded by students located anywhere in Indonesia who have access to the internet via their smartphone. To supplement this research, an independent exercise utilizing the Android application is required. With the Android application, UT students can practice anywhere and at any time using their Android device, which can be controlled via the website. As a result, the researchers wish to design and develop an autonomous training application based on mobile learning and controlled via a website.

Over the last few years, a growing body of research has demonstrated theimportance of utilizing advancements and Moodle as a Learning Management System (LMS) suitable for upgrading learning through developmental appraisals in advanced education (Romero, Espejo, Zafra, Romero, and Ventura, 2010). According to research, its appropriation rate is increasing among certain teachers (Tshabalala, Ndeya-Ndereya, and van der Merwe, 2014). While innovation cannot supplant the framework for momentum conveyance, it can bolster and improve learning and developmental appraisals. The majority of instructors struggle to effectively integrate innovation into their developmental evaluations. This is viewed as even more challenging in already overburdened colleges due to a lack of resources. Addresses are required in such cases to acquaint their students with the utilization of emerging advances. This examination examined an instance of the office at the University of Zululand’s Faculty of Education, first-year course, one of the recently impeded colleges. Six speakers’; evaluations were used, and teachers communicated with one another in semi-organized meetings.

Additionally, their Moodle stage was examined as a Learning Support Management stage. The investigation sought to determine how instructors in the Education Faculty enhance learning for first-year Education students through developmental evaluation. The examination was designed to provide insight into how instructors perceive and comprehend developmental appraisals. As such, an exploratory research design was used to address the primary inquiry “how would you improve learning through developmental evaluation among first-year students for the first time in a long time?”.

Assessment

Hatie (2009) asserted that when developmental appraisal is well-managed, it has the potential to enhance students' accomplishment. Boud (2000) argued that leading evaluation is not only about learning or achieving learning outcomes, but also a demonstration of social correspondence developed during the instructional setting. Regardless, Michael and Michael (2012) demonstrated that there is no unfathomably limitless supply of developmental evaluations on which various analysts can rely. Dark and William (1998) observed that the purpose of developmental appraisal is for students and speakers to share what they value most about the enduring instructional voyage. Rather than this, it has typically been used as a unit of movement. However, its primary function is to cultivate abilities such as basic reasoning,

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

group work, and the appropriate alumni characteristics necessary for twenty-first-century society (Hattie and Timperley, 2007; Zimmerman, 2002). While the preceding significance acknowledges that expanding the use of developmental appraisal as a means of evaluating learning results in more excellent learning, the extraordinary weight is placed on speakers to improve results for their students while also maintaining their scholarly level in their methodology. Dark and William (1998) demonstrated further that achieving superior developmental evaluation is not straightforward.

Mobile-Based Learning

Z. Baleni (2015). The critical findings are that effective online developmental evaluation can sustain an understudy and appraisal-focused focus through developmental input and advance understudy responsibility through prestigious learning encounters. Continuous reliable appraisal tasks and intuitive developmental criticism were identified as significant highlights that will help overcome barriers to discernment and reliability in the online developmental evaluation environment.

A. Garca et al (2014) In recent years, the use of PC Variable-based math Frameworks (CAS) has aided in the education of mathematics in construction schools. Regardless, the conventional use of CAS in math labs has bred a skewed view among students: CAS is an extra task that is excluded from the learning procedure. The pedantic rules of the European Higher Education Area (EHEA) propose an alternative instructive learning model that is capability-based. We propose that the CAS be used in accordance with the new rules. The purpose of this paper is to present a model for the integrated use of the CAS and to describe and evaluate two trials conducted during the academic year 2011-2012. Our research indicates that incorporating CAS into all learning and appraisal activities has the potential to have a significant impact on capability development.

P. Sorensen (2008). In any case, if social constructivism is one of the most effective methods for adapting, perhaps those online courses that employ such approaches could benefit from certain improvements here. Thus, bringing up the issue through this decision of contextual analysis may be relevant not only as a nonexclusive model that adheres to the e-Instructor standards, but also in terms of content, despite the fact that this may not have appeared to members at first. This final point was reflected in a portion of the assessment comments provided by guides associated with the materials. Thus, someone instructing online courses with multiple understudies should seriously consider the specific issues of social constructivist figuring out how to be unimportant and essentially impossible for them to attempt.

K. K. Bhagat and J. M. Spector (2017). In general, research demonstrates that innovation can enhance developmental appraisal in order to sustainably improve learning execution, learning disposition, and learning inspiration across multiple orders. There is no doubt that innovation can be used to aid developmental appraisal, despite the fact that innovation has historically been used to facilitate access to and association with educational resources. Given the historical context of emphasis on developmental appraisal and the capacity of new innovations to expand developmental evaluation into complex critical thinking spaces, the potential for a more notable effect of developmental evaluation on improving fitness for higher request learning is high. Promising advancements include stealth appraisals, automated concept map-based evaluations, representations for developmental appraisal and self-guided aptitudes, and instruments to advance systems administration and collaborative effort.

Jesus Garcia Laborda et al., (2015) Current trends in educational innovation have demonstrated the growing significance of cell phones in language learning. The requirement for advanced gadgets that can facilitate long-term adaptation regardless of where the

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

understudies are. Encouraging adaptation, on the other hand, implies that understudies must be surveyed using the same conveyance models as their learning mode. Cell phones, iPads, and Tablet PCs are frequently used to learn dialects. Whatever the case, testing techniques have remained consistent over the last 40 years. By and large, computer-based test assignments are excessively similar to those administered via pen and paper. This article describes a pilot study conducted at the Universidad de Alcala (Madrid, Spain) using tablet PCs, demonstrating both its strengths and weaknesses. The examination concludes that additional research is necessary to actualize such a beneficial strategy for test delivery.

V. Terzis et al (2013). To conclude, this investigation provides potential confirmations regarding the social impact of CBA recognition. Engineers, specialists, and educators may find the findings favorable, and they should consider them in the future development of (1) CBA frameworks. (2) examines the use and acceptance of LMS and CBA frameworks, with a particular emphasis on enthusiasm for social measurements and their application to training, and (3) the implementation of new and increasingly customized instructional practices. Further research should be directed in this direction in order to produce increasingly valuable and critical outcomes.

J. Hattie and H. Timperley (2007) Although input has a significant effect on learning and achievement, this effect can be either positive or negative. While its capacity is frequently mentioned in articles about education and learning, shockingly few ongoing studies have examined its significance methodically. This article conducts a measured examination of criticism and audits the evidence pertaining to its effect on learning and achievement. This demonstrates that, despite the fact that input has a significant impact, the type of criticism and how it is delivered can be differentially viable. After recommending a model of input that distinguishes the properties and conditions that make it powerful, some frequently contentious issues are discussed, including criticism planning and the effects of positive and negative criticism. Finally, this examination is used to suggest ways to improve the adequacy of input in homerooms.

Mthwa (2018). Constructivist hypotheses are the focus of this contextual investigation. While utilizing advancements in education cannot supplant current delivery frameworks, it can support and enhance learning by adapting to emerging technologies that promote developmental appraisal. Six instructors'; information was gathered through semi-organized meetings. Their developmental evaluations were analyzed, as well as how they used Moodle as their Learning The board Framework. Subjective examination revealed several variables that influenced teachers'; decisions not to emphasize persuasive and effective developmental evaluation. The survey highlighted and recommended careful enrollment in emerging advances such as usability, support, collegiality at college, and a commitment to proficiently integrating HCI with communitarian learning. Moodle was found to be ineffectively used by instructors due to a lack of PCs on campus. Future research will examine the use of cell phones as emerging advancements for communicating with understudies; it will also examine the technology used by various departments within the organization in order to ascertain the imperatives and possibilities for effectively managing developmental appraisal.

METHODOLOGY

This is a model development project that will result in an Android application model. This study utilizes communication technology, beginning with an Android application, to assist students with exam practice. Then, students submit the results of their self-training via an automatically linked website. Lecturers, in their capacity as supervisors, can monitor the independent training activities recorded on the website by students.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Purposive sampling was used to recruit students from the Communication Studies Program. The sample used to evaluate the Android application’s usability was 66 Communication Studies Program students with an active registration status.

The instrument used in this study is a mobile learning application built on Android that is controlled via a website and a list of questions used as a guide during Focus Group Discussions. The Davis questionnaire (1989) is used to generate a list of questions about application utilization, specifically Ease of Use, Usability, and Intention to Use.

RESULT AND DISCUSSION

Basic System

The development of an independent training application in this study makes use of online software, specifically MIT APP INVENTOR 2, which can be accessed at the following URL: http://ai2.appinventor.mit.edu/.

Developing Android Application

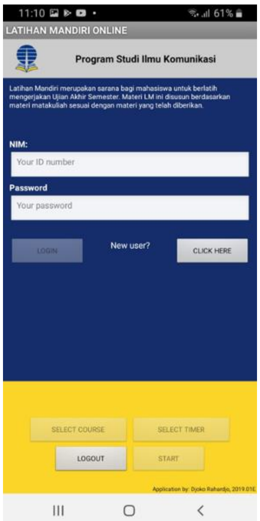
A Summative Test for an Android Application are developed using an online-based application development tool called MIT App Inventor 2. The application is divided into two sections: Screen and Block. The term "screen" refers to the method by which an image, text, or other utility is positioned on a mobile device's screen. Blocks are a type of user-friendly code that is used to manage data and the screen itself. This application has three primary screens: the Opening Screen (Register User, Course Selection, and Timer Selection), the Formative Test Screen (Timer, Feedback, and Current Score), and the Result Screen (Correct Status Respond each Number, Total Score and Comment)

Users with Restrictions. The application is only available to enrolled students. MySQL databases were used to store the student list. The application constantly checks the availability of students wishing to use it. When users access the site via a mobile device. It will communicate to the website's database whether or not users have registered.

Multiple Choice and feedback. The application presents you with randomly generated multiple-choice questions. Each question is used to provide feedback to students, who can then apply it to their learning process.

Timing device. The test subjects may select their own timer. The timer is divided into three modes: short, medium, and normal (the same as when they face the real test or exam).

Screen



ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Developing A Website Hosting

The Website is operated under the domain name http://www.dewaweb.com. Host. The platform for this website is PHP, with the database MySQL serving as the record data system. The data of test subjects and their interaction with the website are recorded and stored in the website's database. The data can be used to revise and correct multiple-choice test items in the future.

Users' Application Demonstration

After completing and testing all applications locally, and ensuring that no bugs were discovered, the application was tested on student users. The application was distributed to 66 student respondents from Regional Office Malang and Bogor. The following table summarizes the application's trial results.

The criterion to consider is whether students can generally access applications in their area of residence. However, because the availability of WIFI is not excessively high, it can be concluded that there are some locations in the two regions where wifi is not available. Whereas, when students were asked about their attitudes toward smartphone use (questions 1.4, 1.5, and 1.6), they generally liked it more than 91 percent of the time. This is reinforced by the relatively high proficiency of 83 percent in downloading application files. Questions about the application of formative tests (numbers 2.1 to 2.9) were generally well-received by respondent students.

Table 1. Student Response Index

No.	QUESTION	INDEX
1.1	In the area where I live there is an internet network.	78.48
1.2	I have a smartphone / tablet that can access the internet.	78.18
1.3	Around where I live is available Wi-Fi for internet access.	67.88
1.4	I have knowledge in using the internet.	77.88
1.5	I am skilled in using a smartphone / tablet for internet access	82.42
1.6	I love / like to use a smartphone / tablet for internet access	91.82
1.7	I am able to download / download application files for smartphones / tablets easily.	83.03
2.1	I would like the LM Android application for my learning process at UT	72.42
2.2	ICON on the LM Android application is interesting?	70.00
2.3	Front page display on Android LM is quite good	67.88
2.4	The sign-up process for the LM Android application is quite easy	70.00
2.5	In my opinion the problem in LM Android is quite good	66.67
2.6	When the transfer from one question to the next problem smoothly?	73.64
2.7	Feedback provided by the LM Android application can help my learning?	72.73
2.8	Reports at the end of each training session on LM Android can help evaluate my learning achievement	72.12
2.9	The selection feature for the long training time on the LM Android is quite convenient	71.82

CONCLUSIONS

Experts review the application's design to ensure that it is ready for development. The modeling results are then validated locally and reviewed by experts. Stage 3 application results are then communicated to students in person, via email, and via online tutorials. Although the design of an Android-based independent exercise application that is controlled via the Website is complete and operational, the training aspect, the application's appearance, and the database

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

management system have not been reviewed by experts in their fields. As a result, additional research is required to accomplish this.

REFERENCES

Baleni Z. (2015). Online formative assessment in higher education: Its pros and cons. *The Electronic Journal of e-Learning Volume 13 Issue 4 2015*, (pp228-236) available online at www.ejel.org

Bhagat, K. K., & Spector, J. M. (2017). Formative Assessment in Complex Problem-Solving Domains: The Emerging Role of Assessment Technologies. *Educational Technology & Society*, *20* (4), 312–317.

García, A., García, F., Del Rey, T.M., Rodríguez, G., De la Villa, A. (2014). Changing assessment methods: new rules, new roles. *Journal of Symbolic Computation* Volume 61-62, Issue 1, February–March 2014, Pages 70-84

Hattie, J. and Timperley H., (2007). The power of feedback. *Review of Educational Research Vol. 77, No. 1, pp. 81-112*

Jesus Garcia Laborda, Royo TM, Lazaro NR, Marugan LF. (2015). Facilitating language tests delivery through tablet pcs. *Procedia - Social and Behavioral Sciences 197: 1302 – 1306*

Mthethwa, LC. (2018) Enhancing Learning through Formative Assessment for First Year Education Students. *Proceedings of the International Conference on e-Learning, ICEL* 2018-July, pp. 269-276

Sorensen P. (2008) Feedback and Assessment. *Malaysian Journal of Distance Education 10*(2), 81-100

Terzis, V., Moridis, CN., Economides, A A., & Rebolledo-Mendez, G. (2013). Computer Based Assessment Acceptance: A Cross-cultural Study in Greece and Mexico. *Educational Technology & Society*, *16* (3), 411–424.

Komunikasi Manusia di Era Transformasi Digital: Literature Review

Windra Irawan
Program Studi Ilmu Komunikasi, FHISIP, Unversitas Terbuka
e-mail: windra@ecampus.ut.ac.id

Article Info

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Article of OSC 2022

Abstract

Digital transformation of business processes or services has now become one of the goals of institutions or companies. Transformation is considered necessary to balance the needs of consumers, the market as well as the demands of advances in information technology. However, there is a shift in the effort to change the process and function of human communication. The article uses the literature search method to explain the position of human communication in the process of the digital transformation. Some of the sources of articles that were explored were articles and writings that had been published in scientific journals. Digital transformation is the use of new digital technologies, such as social media, cellular telephones, data analytics, and other technologies to improve business by providing a better experience for users or customers, streamlining business operational processes, or creating new business models. Ongoing digitization increases connectivity between people and things and has the potential to re-design social interaction and communication patterns in personal spaces, workspaces, or public spaces.

***Keywords**: Human Communication, Digital Transformation*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

PENDAHULUAN

Komunikasi merupakan aspek kunci dari interaksi sosial manusia. Komunikasi adalah alat penting dalam bertahan hidup dan pondasi hubungan manusia (Liu et al., 2019). Cara berkomunikasi telah berubah secara terus menerus, dari penggunaan bahasa lisan hingga munculnya alat komunikasi. Komunikasi dianggap sebagai pusat pengalaman manusia yang telah berkembang sejak awal keberadaannya. Di masa lalu, manusia mengandalkan bentuk komunikasi primitif seperti mendengus dan memberi isyarat untuk menyampaikan maksud. Namun setelah mampu mengembangkan bahasa dan tulisan, manusia mulai mampu mengungkapkan ide-ide yang lebih rumit dan kompleks (Waridah, 2016).

Saat memasuki era modern, komunikasi manusia bergerak lurus mengikuti perkembangan teknologi (Srivastava, 2005). Saat ini telah terbuka akses ke banyak alat komunikasi, mulai dari perangkat keras seperti ponsel hingga teknologi perangkat lunak seperti media sosial. Sekarang komunikasi dapat dilakukan kepada orang-orang di seluruh dunia secara real-time menggunakan jejaring maya. Jaringan internet telah memudahkan orang mengekspresikan pikiran dan perasaan mereka tanpa harus bertatap muka (King et al., 2006). Munculnya media sosial membuat orang terhubung satu sama lain dengan cara yang lebih bermakna (Mundt et al., 2018). Era digital telah memudahkan orang berinteraksi melalui cara yang tidak bisa terbayangkan pada sebelumnya.

Jaringan digital dan internet membuka seluas-luasnya untuk berbagi pemikiran dan ide dengan audiens yang lebih luas. Internet telah merevolusi cara manusia berkomunikasi, berbelanja, dan melakukan tugas sehari-hari (Sima et al., 2020). Hal ini juga memungkinkan bisnis untuk memperluas jangkauan mereka ke pasar baru serta memasuki basis pelanggan global. Transformasi digital adalah proses membawa perubahan signifikan dalam infrastruktur teknologi organisasi agar dapat lebih memenuhi kebutuhan pelanggannya (Sima et al., 2020), karyawan dan pemangku kepentingan lainnya (Li et al., 2021).

Transformasi digital dapat diterapkan pada banyak industri dan aspek kehidupan. Transformasi digital adalah perubahan mendasar dalam cara orang berinteraksi dengan dan tawaran produk, layanan, proses, atau sistem yang diberlakukan. Perubahan yang terjadi akan menggambarkan bagaimana orang berkomunikasi dan menghabiskan waktu *online* mereka (Bilyalova et al., 2020), bagaimana mereka berbelanja barang dan jasa, bagaimana mereka terlibat dengan layanan pemerintah (ElMassah & Mohieldin, 2020) dan bagaimana mereka mengelola keuangan mereka.

Teknologi digital mengubah bisnis dan kehidupan pribadi. Teknologi ini juga telah mengubah rutinitas harian masyarakat, aplikasinya menjadi kebutuhan untuk berkomunikasi melalui email, pesan teks, dan panggilan suara, artinya masyarakat sekarang cenderung bergantung pada komputer atau teknologi komunikasi (Nguyen et al., 2020). Dunia bisnis menggunakan teknologi digital untuk menghubungkan klien dengan pemasok, karyawan dengan pelanggan, dan sebaliknya. Tugas sehari-hari diotomatisasi melalui perangkat elektronik dan programnya. Hal tersebut membantu mengurangi tenaga kerja manual dan menghemat waktu (Dwivedi et al., 2020).

Transformasi digital menyatukan berbagai teknologi termasuk analisis data, kecerdasan buatan, dan otomatisasi (Zaki, 2019). Perlahan tanpa disadari masyarakat telah mengubah aktivitas dan perilakunya ke ranah digital (Susser et al., 2019.). Setiap aspek kehidupan manusia sekarang terhubung melalui platform digital, aplikasi ponsel, jaringan *online*, situs media sosial, komputasi awan, dan sebagainya. Sehingga bisnis perlu berevolusi untuk memenuhi permintaan pelanggan yang berubah dan beradaptasi dengan tren baru tersebut (Frank et al., 2019). Oleh karena itu, bisnis tidak dapat berhenti berinvestasi dalam

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

menciptakan penawaran dan layanan inovatif yang memenuhi kebutuhan dan harapan pelanggan, dan menawarkan keunggulan kompetitif.

Transformasi Digital ternyata tidak bisa dihindari. Transformasi digital menawarkan cara inovatif baru kepada bisnis untuk mengembangkan produk dan layanan. Ini melibatkan perubahan metode komunikasi (Zaki, 2019). Langkah pertama dalam mencapai transformasi digital mencakup pemahaman perilaku pelanggan *online* termasuk analisa perilaku. Segera setelah pelanggan menyadari perlunya perubahan, mereka mulai mencari solusi. Pencarian ini berlanjut sampai pengguna menemukan pemasok dengan pengalaman yang relevan. Transformasi digital memungkinkan perusahaan untuk terhubung langsung dengan konsumen dan memberikan umpan balik segera (Matarazzo et al., 2021).

Proses mengintegrasikan teknologi digital ke semua bidang bisnis, menghasilkan perubahan mendasar pada cara bisnis beroperasi dan bagaimana mereka menciptakan nilai bagi pelanggan. Hal ini terjadi karena ketersediaan teknologi digital yang mendisrupsi model bisnis tradisional dan menciptakan peluang baru bagi bisnis untuk bersaing dalam ekonomi digital (Watanabe et al., 2018). Transformasi digital sudah berlangsung, dan bagi yang tidak menerimanya berisiko tertinggal atau ditinggalkan. Untuk bertahan dan berkembang di era digital, bisnis perlu memahami peluang dan tantangan yang dihadirkan oleh teknologi digital, dan membuat perubahan yang diperlukan untuk organisasi dan operasi mereka.

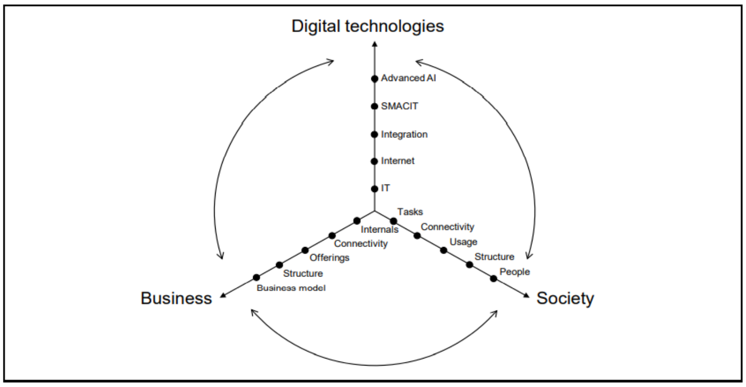
Transformasi digital memunculkan perbedaan di antara para ahli ilmu komunikasi dimana digitalisasi dianggap semakin menggeser perilaku komunikasi manusia. Setiap perubahan tentu membahwa konsekuensi terhadap perubahan kebiasaan dan tatanan yang sudah berlaku. Muncul asumsi kekhawatiran tentang bagaimana hal itu memengaruhi masalah-masalah seperti komunikasi manusia secara langsung akan terus berkurang. Direct communication antara sesama manusia yang selama ini melibatkan banyak sensor dan indera manusia akhirnya hanya fokus pada audio dan visual. Kekayaan stimulasi kemudian dibatasi hanya apa yang dilihat dan apa yang didengar.

HASIL DAN PEMBAHASAN

Para ahli telah banyak memberikan definisi dari transformasi digital, diantaranya yang sederhana diartikan oleh Stolterman & Fors (2004) *The changes that the digital technology causes or influences in all aspects of human life.* Definisi lebih kompleks dikemukakan oleh Ismail dan Khater (2017), yaitu proses di mana perusahaan mengintegrasikan banyak teknologi digital yang muncul, ditingkatkan dengan konektivitas di mana-mana, dalam upaya untuk mencapai tingkat produktivitas yang lebih tinggi dan mempertahankan keunggulan kompetitif, dengan mengubah beberapa dimensi bisnis, termasuk model bisnis, pengalaman pelanggan (terdiri dari produk dan layanan yang dimungkinkan oleh teknologi digital), dan operasi (terdiri dari proses dan keputusan), sementara pada saat yang sama berdampak pada manusia (termasuk keterampilan, bakat, dan budaya) dan jaringan (termasuk seluruh sistem nilai). Pengertian yang lebih moderat diberikan oleh Van Veldhoven & Vanthienen (2019) Interaksi yang terus meningkat antara teknologi digital, bisnis, dan masyarakat, dengan efek transformasional, peningkatan kecepatan, skala, dan dampak dari proses transformasi.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Gambar 1. The Digital Transformation Framework (Z. Veldhoven & J. Vanthienen, 2019)



Transformasi digital memiliki jangkauan yang lebih dari sekedar pergesertan penggunaan teknologi namun memiliki efek pada perubahan budaya (Hemerling et al., 2019), organisasi, dan operasi organisasi dengan mengintegrasikan secara cerdas teknologi, proses, dan kemampuan digital di semua tingkat dan fungsi, secara bertahap dan strategis (Siachou et al., 2021). Secara luas, transformasi digital mengintegrasikan teknologi digital ke dalam semua bidang bisnis, yang mengarah pada perubahan mendasar pada cara bisnis bekerja dan cara mereka memberikan nilai kepada pelanggan (Ismail et al., 2017; Zaki, 2019).

Transformasi digital adalah transformasi mendalam dari aktivitas, proses, kompetensi, dan model bisnis dan organisasi untuk memanfaatkan sepenuhnya perubahan dan peluang dari portofolio teknologi digital dan dampaknya yang berkembang pesat terhadap masyarakat, secara strategis dan diprioritaskan, dengan mengambil langkah-langkah terkini dan transformasi masa depan diperhitungkan. Bagaimana Mengembangkan Strategi Transformasi Digital Transformasi yang sukses dimulai dengan visi, yang menguraikan bagaimana teknologi digital berbasis komputer dapat digunakan untuk memenuhi tujuan strategis, yang dibangun di sekitar model bisnis digital organisasi.

Transformasi Digital dan Komunikasi Manusia di Lingkungan Kerja

Pada dasarnya yang diharapkan dengan adanya transformasi digital adalah untuk membantu perusahaan menjembatani penerapan teknologi mutakhir dan tenaga kerja (Alenezi, 2021). Meskipun teknologi digital tidak akan pernah sepenuhnya menggantikan komunikasi tatap muka (Serhan, 2020), perusahaan atau institusi bertujuan bahwa digitalisasi akan memberikan kesempatan menciptakan konteks dan nuansa dimana karyawan merasa dilibatkan (involved) dan terhubung dengan segala informasi institusi (*well informed*) (Guzmán et al., 2020).

Pergeseran dari analog ke digital dalam dunia kerja memerlukan keterlibatan dan pemahaman setiap individu melalui komunikasi internal yang efektif (Trenerry et al., 2021). Hal tersebut dibutuhkan karena perubahan tersebut mampu merubah pondasi dan budaya institusi/perusahaan. Itulah mengapa meningkatkan komunikasi internal, bagi sebagian besar merupakan proyek yang paling penting. Penanggung jawab keterlibatan karyawan digital ditempatkan di bagian atas organisasi yang menjadikannya bertanggung jawab membantu transformasi digital yang akan dilaksanakan (Guzmán et al., 2020; Ismail et al., 2017; Siachou et al., 2021; Stolterman & Fors, 2004).

Keberhasilan menuju digitalisasi tergantung para pemimpin instisi atau perusahaan, mereka harus mampu memanfaatkan kekuatan teknologi untuk keuntungan unitnya, sambil

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

memastikan bahwa lembaga tetap mempertahankan budaya yang berfokus pada individu. Seiring perubahan perusahaan, platform seperti tempat kerja digital dapat lebih memfasilitasi tempat kerja yang positif dan berdaya bagi karyawan, memberi mereka kesempatan untuk menjadi lebih terlibat dan berbagi pengetahuan dan ide mereka di tempat kerja digital. (Trenerry et al., 2021).

Tempat kerja digital dapat digambarkan sebagai organisasi yang menyediakan tenaga kerja dengan teknologi dan lingkungan untuk berkomunikasi, berinovasi, berkolaborasi, dan bekerja sama secara lebih efisien untuk memenuhi tujuan bisnis. Tempat kerja digital membantu karyawan tetap produktif dan terlibat, menawarkan ruang untuk kolaborasi, komunikasi, dan koneksi dengan orang lain (Attaran et al., 2019). Tempat kerja digital adalah solusi untuk menciptakan saluran komunikasi yang efektif, karena memungkinkan organisasi dan karyawannya menjangkau semua orang setiap saat, menghubungkan mereka. Ruang digital bersama seperti intranet adalah alat yang sangat baik untuk menciptakan jaringan sosial, yang memungkinkan atasan atau mitra untuk berkomunikasi secara efektif, mengukur produktivitas, dan meningkatkan keterlibatan dan retensi karyawan di tempat kerja(Attaran et al., 2019; Trenerry et al., 2021).

Komunikasi digital memungkinkan orang untuk bekerja lebih efektif, meningkatkan peluang kerja, dan memungkinkan karyawan mengatasi waktu dan jarak untuk berkolaborasi secara global (Defilippis et al., 2020). Kemampuan tim yang meningkat pesat untuk beroperasi secara virtual pada platform teknologi yang berbeda tidak diragukan lagi telah mendorong komunikasi yang berorientasi pada :

1. Tugas yang berbasis pada hubungan profesional antara anggota tim, akan menghasilkan hasil interaksi yang positif, seperti *sharing* pengetahuan (Tønnessen et al., 2021).
2. Aliran informasi yang lebih baik menghasilkan berkoordinasi tugas yang lebih baik dan transparan (Attaran et al., 2019; Cui, 2021; Defilippis et al., 2020; Trenerry et al., 2021)

Melalui teknologi digital, komunikasi yang terjadi belum sepenuhnya mampu menggantikan interaksi tatap muka (Putri et al., 2021). Namun, ruang kerja digital memiliki potensi untuk menciptakan lingkungan di mana karyawan merasa terinformasi dan terlibat. Komunikasi digital telah mengubah tempat kerja, membuatnya lebih mudah dari sebelumnya bagi karyawan untuk tetap terhubung. Sehingga pegawai atau karyawan akan tetap produktif dan melakukan pekerjaan mereka. Perubahan ini juga akan membuka cara yang sama sekali baru bagi pegawai tertentu untuk melakukan pekerjaannya dengan lebih baru dan kreatif (Attaran et al., 2019; Cui, 2021). Komunikasi digital yang ditingkatkan dianggap mampu memperbaiki alur kerja yang lebih cepat, tanpa sekat, meningkatkan efisiensi di seluruh perusahaan. Idealnya, ini juga membantu menghilangkan kecanggungan, meningkatkan eksposur karyawan kepada pemimpin dan departemen lain (Trenerry et al., 2021).

Tempat kerja digital adalah solusi untuk menciptakan saluran komunikasi yang efektif, karena memungkinkan organisasi dan karyawannya untuk menjangkau dan terhubung satu sama lain kapan saja. Tempat kerja digital membantu karyawan untuk tetap produktif dan terlibat sambil menyediakan ruang untuk kolaborasi, komunikasi, dan koneksi dengan orang lain. Tempat kerja digital dapat digambarkan sebagai organisasi yang menyediakan tenaga kerja dengan teknologi dan lingkungan untuk berkomunikasi, berinovasi, berkolaborasi, dan berkolaborasi secara lebih efisien untuk memenuhi tujuan bisnis (Attaran et al., 2019; Cui, 2021; Defilippis et al., 2020; Dwivedi et al., 2020; Tønnessen et al., 2021; Trenerry et al., 2021).

Pergeseran adanya transformasi digital, yaitu pegawai harus terbiasa dan memiliki kemampuan berkomunikasi secara digital. Hal itu membuatnya lebih responsif untuk berbicara dengan orang lain. Ia bisa fleksibel bekerja dari rumah, mengatur pertemuan dengan banyak

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

pegawai sekaligus. Pekerjaannya bisa dilakukan penuh waktu, jarak jauh, atau bahkan hibrida. (Nenonen & Sankari, 2022)

Sementara transformasi digital tempat kerja telah menunjukkan sejumlah manfaat bagi bisnis dan karyawan, perubahan tidak selalu dipandang positif, dan reaksi negatif terhadap perubahan dapat menyebabkan tantangan budaya dalam lingkungan kerja. Memahami dan menerapkan teknologi yang paling sesuai dengan keadaan tertentu dapat membantu mengurangi dampak negatif.

Komunikasi saat ini banyak di mediasi oleh teknologi, denganya perbincangan dan diskusi langsung dapat dengan mudah berkurang. Sementara kecepatan dan volume komunikasi meningkat melalui email, pesan suara, dan pesan instan, beberapa dialog tatap muka dan sentuhan pribadi mungkin mulai memudar. Sementara smartphone membawa peluang baru bagi bisnis dan karyawan, menggunakan komunikasi digital alih-alih percakapan langsung memiliki kelemahan.

Dalam menghadapi perubahan teknologi dan transformasi digital, penting untuk memperhitungkan efek negatif teknologi terhadap stres dan kebahagiaan terkait pekerjaan, karena hal ini akan berdampak pada produktivitas dan kepuasan karyawan di tempat kerja. Organisasi dan pemimpinnya juga harus mewaspadai efek negatif yang tidak diinginkan dari perubahan teknologi dan transformasi digital pada karyawan, dan mengurangi dampak pada kesehatan dan kesejahteraan terkait pekerjaan dengan mempromosikan ketahanan dan kemampuan beradaptasi pada individu dan tim, dengan dukungan yang sesuai (García-Peñalvo, 2021). Kemajuan pesat teknologi digital yang muncul di tempat kerja tidak dapat dihindari dan akan mendorong perubahan di seluruh perekonomian, meningkatkan kekhawatiran akan masa depan pekerjaan di antara organisasi dan pekerjanya (Marsh et al., 2022).

Komunikasi Pribadi dan Sosial pada Transformasi Digital

Transformasi digital sering dikaitkan dengan teknologi yang canggih, AI (artificial intelligence), *big data*, *deep learnig machine*, semuanya dianggap alat yang membuat bisnis lebih cepat dan sesuai zaman. Namun demikian, transformasi digital tidak akan berjalan tanpa penggunanya. Sehingga untuk benar-benar berhasil di proses digitalisasi yang berkelanjutan, harus memanfaatkan dan mempertahankan budaya mengutamakan manusia (Patricia Mefi & Nambei Asoba, 2021).

Di lingkungan digital, perusahaan harus lebih kreatif dengan media yang mereka gunakan untuk memungkinkan cara baru yang lebih cepat dalam menyelesaikan pekerjaan. Perubahan pola pikir dan perilaku yang cepat sangat dibutuhkan. Cara berinteraksi dan berkomunikasi, baik secara pribadi maupun profesional, telah berubah secara drastis sejak teknologi digital diperkenalkan dan diadopsi. *Hiperkonektivitas*, atau peningkatan konektivitas digital antara orang dan benda, berpotensi membentuk ulang (*redesign*) pola interaksi sosial, karena komunikasi tatap muka dapat digantikan dengan interaksi melalui media (Mazzarello Martina and Ratti, 2021)

Komunikasi tatap muka langsung adalah ketika dua orang atau lebih berinteraksi dan berkomunikasi, terlihat satu sama lain. Ini memungkinkan pertukaran informasi yang lebih baik karena pembicara dan pendengar dapat melihat dan menafsirkan bahasa tubuh dan ekspresi wajah. Mampu melihat sinyal nonverbal satu sama lain membantu seseorang memahami apa yang dikatakan orang lain dengan lebih mudah. Namun tranformasi digital menggeser medium komunikasi tatap muka, di mana video konferensi memungkinkan untuk bertatap muka secara pribadi dengan rekan kerja, meskipun secara fisik tidak berada di ruangan yang sama dengan mereka (Julião & Gaspar, 2020).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Pembahasan masih terus dilakukan untuk melihat dampak dari transformasi digital terhadap kehidupan sosial di luar pekerjaan. Sehingga muncul dugaan bahwa individu terdampak efek dari peningkatan penggunaan media digital. Sisi positif atau negatif sangat tergantung di lingkungan mana mereka berada. Karena pada dasarnya konsep digitalisasi sebagai bagian dari proses perubahan sosial menggunakan teknologi digital yang telah, serta telah menciptakan ruang sosial yang semakin besar. Ketersebaran teknologi digital yang secara simultan terus berkembang, memungkinkan individu dan kelompok secara global terhubung, bergerak di sekitar tujuan sosial bahkan politik, menciptakan ruang publik global. (Matt et al., 2019).

Beberapa tantangan perubahan diantaranya kekhawatiran tingkat tekanan pekerjaan (Anita et al., 2021), terpengaruhnya kesehatan mental dan fisik (obesitas) (Nazeha et al., 2021), serta kekhawatiran berkurangnya etika, serta cara bekerja yang egois dan terkikisnya kepekaan sosial (Kolesnyk et al., 2021). Teknologi telah mengubah rutinitas sehari-hari, juga telah menjadikan masyarakat sangat tergantung pada teknologi. Para ahli ada yang berpendapat secara ekstrem bahwa masyarakat telah menuju pola hidup digital, sehingga tidak dapat dibayangkan hidup tanpa teknologi digital pada hampir semua lini kehidupan.

SIMPULAN

Digitalisasi akan merubah segalanya mulai dari dunia pekerjaan, pengalaman intelektual, emosional dan sosial. Transformasi digital adalah proses membawa perubahan signifikan dalam infrastruktur teknologi organisasi. Perubahan ini biasanya didorong oleh kemajuan teknologi digital. Transformasi digital menyatukan berbagai teknologi termasuk analitik data, kecerdasan buatan, dan otomatisasi. Transformasi digital diharapkan dapat membantu perusahaan menjembatani penerapan teknologi mutakhir dan tenaga kerja. Organisasi harus menggabungkan teknologi sosial-digital dan kekuatan mereka untuk mengubah proses, menarik bakat, dan memungkinkan model bisnis baru untuk bersaing dan berkembang di dunia yang didukung secara digital. Sehingga secara umum perubahan teknologi digital lebih cenderung terjadi dari dunia kerja, perusahaan atau bisnis.

Transformasi digital memiliki efek positif dalam mengoptimalkan tenaga kerja dan komunikasi. Hasilnya mencakup pencapaian tujuan bisnis secara lebih efektif atau lebih cepat, menghemat anggaran, dan meningkatkan keuntungan. Setiap aspek kehidupan manusia kini terhubung melalui platform digital, aplikasi seluler, jaringan *online*, situs media sosial, komputasi awan, dan sebagainya. Peningkatan konektivitas digital antara orang dan benda, berpotensi membentuk kembali pola interaksi sosial. Teknologi digital yang simultan dan ada di mana-mana memungkinkan individu dan kelompok secara global untuk terhubung, terhubung, dan bergerak di sekitar tujuan sosial atau politik.

Ruang digital menciptakan jaringan sosial yang memungkinkan berkomunikasi secara efektif, produktif, dan meningkatkan keterlibatan komunikan. Semua perlu berevolusi untuk memenuhi permintaan yang terus berubah dan beradaptasi dengan tren baru. Pergeseran perubahan tersebut akan juga mengubah pondasi dan budaya lembaga/perusahaan.

Sisi positif atau negatif sangat tergantung di lingkungan transformasi digital terjadi. Karena pada dasarnya konsep digitalisasi sebagai bagian dari proses perubahan sosial menggunakan teknologi digital yang telah ada untuk menciptakan ruang sosial yang semakin besar. Sehingga terjadi perubahan pola pikir dan perilaku yang cepat. Demikian juga dengan cara berinteraksi dan berkomunikasi, baik secara pribadi maupun profesional. Hiperkonektivitas, atau peningkatan konektivitas digital antara orang dan benda, berpotensi membentuk ulang (redesign) pola interaksi sosial, termasuk komunikasi tatap muka langsung, yang dianggap dapat digantikan dengan interaksi dimediasi teknologi.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Pergeseran ke digital membutuhkan keterlibatan dan pemahaman setiap individu. Transformasi digital akan menggeser banyak hal. Tingkat kegunaan digitalisasi dan pentingnya perubahan bagi sebuah lembaga, tergantung dari tingkat kebutuhan dan kesiapannya. Karena seperti sering kali penggunaan teknologi, seperti email atau panggilan suara, sampai saat ini tidak sepenuhnya bisa diandalkan. Sehingga gangguan teknis dan non teknis pada saluran komunikasi dapat mengakibatkan gangguan komunikasi (mis-komunikasi) dan hilangnya bagian informasi penting dari pesan. Oleh karena itu, sampai saat ini teknologi digital tidak akan pernah sepenuhnya menggantikan komunikasi tatap muka..

DAFTAR PUSTAKA

Alenezi, M. (2021). Deep dive into digital transformation in higher education institutions. *Education Sciences*, 11(12). https://doi.org/10.3390/educsci11120770

Anita, T., Tjitrosumarto, S., & Setyohadi, J. S. (2021). Stres Kerja Guru saat Pandemi Covid-19 Ditinjau dari Kompensasi dan Lingkungan Kerja. *Research and Development Journal of Education*, 7(1), 146. https://doi.org/10.30998/rdje.v7i1.8629

Attaran, M., Attaran, S., & Kirkland, D. (2019). The need for digital workplace: Increasing workforce productivity in the information age. *International Journal of Enterprise Information Systems*, 15(1), 1–23. https://doi.org/10.4018/IJEIS.2019010101

Bilyalova, A. A., Salimova, D. A., & Zelenina, T. I. (2020). Digital Transformation in Education. *In Lecture Notes in Networks and Systems* (Vol. 78, pp. 265–276). Springer. https://doi.org/10.1007/978-3-030-22493-6_24

Cui, Y. (2021). The role of emotional intelligence in workplace transparency and open communication. In *Aggression and Violent Behavior. Elsevier Ltd*. https://doi.org/10.1016/j.avb.2021.101602

Defilippis, E., Impink, S. M., Singell, M., Polzer, J. T., & Sadun, R. (2020). Collaborating During Coronavirus: The Impact of Covid-19 on The Nature of Work. *NBER WORKING PAPER SERIES.* http://www.nber.org/papers/w27612

Dwivedi, Y. K., Hughes, D. L., Coombs, C., Constantiou, I., Duan, Y., Edwards, J. S., Gupta, B., Lal, B., Misra, S., Prashant, P., Raman, R., Rana, N. P., Sharma, S. K., & Upadhyay, N. (2020). Impact of COVID-19 pandemic on information management research and practice: Transforming education, work and life. *International Journal of Information Management*, 55. https://doi.org/10.1016/j.ijinfomgt.2020.102211

ElMassah, S., & Mohieldin, M. (2020). Digital transformation and localizing the Sustainable Development Goals (SDGs). *Ecological Economics*, 169. https://doi.org/10.1016/j.ecolecon.2019.106490

Frank, A. G., Mendes, G. H. S., Ayala, N. F., & Ghezzi, A. (2019). Servitization and Industry 4.0 convergence in the digital transformation of product firms: A business model innovation perspective. *Technological Forecasting and Social Change*, 141, 341–351. https://doi.org/10.1016/j.techfore.2019.01.014

García-Peñalvo, F. J. (2021). Avoiding the dark side of digital transformation in teaching. an institutional reference framework for eLearning in higher education. *Sustainability*

(Switzerland), 13(4), 1–17. https://doi.org/10.3390/su13042023

Guzmán, V. E., Muschard, B., Gerolamo, M., Kohl, H., & Rozenfeld, H. (2020). Characteristics and Skills of Leadership in the Context of Industry 4.0. *Procedia Manufacturing*, 43, 543–550. https://doi.org/10.1016/j.promfg.2020.02.167

Hemerling, J., Kilmann, J., Danoesastro, M., Stutts, L., & Ahern, C. (2019). It's Not a Digital Transformation Without a Digital Culture. *MIS Quarterly Executive*, 18(3).

Ismail, M. H., Khater, M., & Zaki, M. (2017). *Digital Business Transformation and Strategy: What Do We Know So Far?* Cambridge Service Alliance, 10 (1), 1–35. www.cambridgeservicealliance.org

Julião, J., & Gaspar, M. C. (2020). Lean thinking in service digital transformation. *International Journal of Lean Six Sigma*, 12(4), 784–799. https://doi.org/10.1108/IJLSS-11-2020-0192

King, R., Bambling, M., Lloyd, C., Gomurra, R., Smith, S., Reid, W., & Wegner, K. (2006). Online counselling: The motives and experiences of young people who choose the Internet instead of face to face or telephone counselling. *Counselling and Psychotherapy Research*, *6*(3), 169–174. https://doi.org/10.1080/14733140600848179

Kolesnyk, D., de Jong, M. G., & Pieters, R. (2021). Gender Gaps in Deceptive Self-Presentation on Social-Media Platforms Vary with Gender Equality: A Multinational Investigation. *Psychological Science*, 32(12), 1952–1964. https://doi.org/10.1177/09567976211016395

Li, H., Wu, Y., Cao, D., & Wang, Y. (2021). Organizational mindfulness towards digital transformation as a prerequisite of information processing capability to achieve market agility. *Journal of Business Research*, 122, 700–712. https://doi.org/10.1016/j.jbusres.2019.10.036

Liu, D., Baumeister, R. F., Yang, C.-C., & Hu, B. (2019). Digital Communication Media Use and Psychological Well-Being: A Meta-Analysis. *Journal of Computer-Mediated Communication*, 24, 259–274. https://doi.org/10.1093/ccc/zmz013

Marsh, E., Vallejos, E. P., & Spence, A. (2022). The digital workplace and its dark side: An integrative review. In *Computers in Human Behavior* (Vol. 128). *Elsevier* Ltd. https://doi.org/10.1016/j.chb.2021.107118

Matarazzo, M., Penco, L., Profumo, G., & Quaglia, R. (2021). Digital transformation and customer value creation in Made in Italy SMEs: A dynamic capabilities perspective. *Journal of Business Research*, 123, 642–656. https://doi.org/10.1016/j.jbusres.2020.10.033

Mazzarello Martina and Ratti, C. (2021). Leveraging the Use of Digital Technologies to Activate Public Areas and Foster Creativity. In M. I. Aldinhas Ferreira (Ed.), How Smart Is Your City? Technological Innovation, Ethics and Inclusiveness (pp. 45–57). *Springer International Publishing*. https://doi.org/10.1007/978-3-030-56926-6_5

Mundt, M., Ross, K., & Burnett, C. M. (2018). Scaling Social Movements Through social

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

media: The Case of Black Lives Matter. *Social Media and Society*, 4(4). https://doi.org/10.1177/2056305118807911

Nazeha, N., Sathish, T., Soljak, M., Dunleavy, G., Visvalingam, N., Divakar, U., Bajpai, R. C., Soh, C. K., Christopoulos, G., & Car, J. (2021). A Comparative Study of International and Asian Criteria for Overweight or Obesity at Workplaces in Singapore. *Asia-Pacific Journal of Public Health, 33(4), 404–410.* https://doi.org/10.1177/1010539521998855

Nenonen, S., & Sankari, I. (2022). Hybrid Profiles for Knowledge Workers Flexible Workplace and Time. *The 21st EuroFM Research Symposium*. https://doi.org/10.4233/uuid:49cd8030-329d-43f5-9040-b98ae5d5868c

Nguyen, M. H., Gruber, J., Fuchs, J., Marler, W., Hunsaker, A., & Hargittai, E. (2020). Changes in Digital Communication During the COVID-19 Global Pandemic: Implications for Digital Inequality and Future Research. *Social Media and Society*, *6*(3). https://doi.org/10.1177/2056305120948255

Patricia Mefi, N., & Nambei Asoba, S. (2021). A review of the theories of leadership styles in HEI context View project Emerging talent management themes in HRM 4.0: View project. In *Article in Academy of Entrepreneurship Journal*. https://www.researchgate.net/publication/350603401

Putri, N. I., Herdiana, Y., Munawar, Z., & Komalasari, R. (2021). Teknologi Pendidikan dan Transformasi Digital di Masa Pandemi COVID-19. *Jurnal ICT: Information Communication & Technology*, 20(1), 53–57.

Serhan, D. (2020). Transitioning from Face-to-Face to Remote Learning: Students' Attitudes and Perceptions of using Zoom during COVID-19 Pandemic. *The International Journal of Technology in Education and Science (IJTES) International Journal of Technology in Education and Science*, *4*(4), 2020. www.ijtes.net

Siachou, E., Vrontis, D., & Trichina, E. (2021). Can traditional organizations be digitally transformed by themselves? The moderating role of absorptive capacity and strategic interdependence. *Journal of Business Research*, 124, 408–421. https://doi.org/10.1016/j.jbusres.2020.11.011

Sima, V., Gheorghe, I. G., Subić, J., & Nancu, D. (2020). Influences of the industry 4.0 revolution on the human capital development and consumer behavior: A systematic review. *Sustainability* (Switzerland), 12(10). https://doi.org/10.3390/SU12104035

Srivastava, L. (2005). Mobile phones and the evolution of social behaviour. *Behaviour and Information Technology*, 24(2), 111–129. https://doi.org/10.1080/01449290512331321910

Stolterman, E., & Fors, A. C. (2004). Information Technology and the Good Life. *Information Systems Research*, 687–692.

Susser, D., Roessler, B., & Nissenbaum, H. (2019). ONLINE MANIPULATION: HIDDEN INFLUENCES IN A DIGITAL WORLD. *GEORGETOWN LAW TECHNOLOGY*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

REVIEW. https://journals.uic.edu/ojs/index.php/fm/article/view/4901/4097

Tønnessen, Ø., Dhir, A., & Flåten, B. T. (2021). Digital knowledge sharing and creative performance: Work from home during the COVID-19 pandemic. *Technological Forecasting and Social Change*, 170. https://doi.org/10.1016/j.techfore.2021.120866

Trenerry, B., Chng, S., Wang, Y., Suhaila, Z. S., Lim, S. S., Lu, H. Y., & Oh, P. H. (2021). Preparing Workplaces for Digital Transformation: An Integrative Review and Framework of Multi-Level Factors. In *Frontiers in Psychology* (Vol. 12). *Frontiers Media S.A.* https://doi.org/10.3389/fpsyg.2021.620766

van Veldhoven, Z., & Vanthienen, J. (2019). Designing a Comprehensive Understanding of Digital Transformation and its Impact. In *B. R. Kljajić Borštnar M (Ed.),* 32 ND *Bled eConference Humanizing Technology for a Sustainable Society*.

Waridah. (2016). Berkomunikasi dengan Berbahasa yang Efektif dapat Meningkatkan Kinerja. In *Jurnal Simbolika* (Vol. 2).

Watanabe, C., Naveed, N., & Neittaanmäki, P. (2018). Digital solutions transform the forest-based bioeconomy into a digital platform industry - A suggestion for a disruptive business model in the digital economy. *Technology in Society*, 54, 168–188. https://doi.org/10.1016/j.techsoc.2018.05.002

Zaki, M. (2019). Digital transformation: harnessing digital technologies for the next generation of services. *Journal of Services Marketing*, 33(4), 429–435. https://doi.org/10.1108/JSM-01-2019-0034

Eksistensi Pendidikan dan Pembelajaran IPS di Era *Metaverse*

Yulian Widya Saputra[1], Rahmadi[2], Made Ngurah Partha[3]
[1,2,3]Dosen FKIP Pendidikan Geografi Unversitas Mulawarman
e-mail: yulian.widya@fkip.unmul.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

Towards the quarter of the 21st century, the world is beginning to experience a transformation in aspects of human life. This transformation is the impact of the industrial revolution 4.0 were the internet or digital world tends to be increasingly entrenched in society. This Metaverse concept then intersects with educational and learning activities in academia. This article is designed with a qualitative approach with a comprehensive literature study from textbooks, scientific journals, statistical references, research results in the form of theses, theses, dissertations, and the internet, as well as other relevant sources. These various sources relate to the existence of social studies education and the Metaverse. The results of the study show that values in social studies education need to be maintained in the midst of education which is starting to enter this Metaverse era. The social studies education values according to consist of educational values, practical values, theoretical values, philosophical values, and religious values. These five values in the development of social studies education and learning will certainly adapt to technological developments. The development of this technology leads to a Metaverse where social studies learning is more about presenting digital material based on internet networks with the help of applications. However, this social studies education and learning offering in the future needs to be strengthened with 21st century skills including the ability to think critically and solve problems in students. Therefore, the existence of this Metaverse era is expected to facilitate the presentation of social studies education and learning in the future.

***Keywords**: Existence, Education, Learning, Social Studies, Metaverse*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

PENDAHULUAN

Menjelang seperempat abad 21 ini dunia mulai mengalami transformasi di aspek kehidupan manusia. Transformasi tersebut merupakan dampak adanya revolusi industri 4.0 di mana dunia internet atau digital cenderung semakin membudaya di masyarakat. Proses ini masa sekarang dikenal dengan istilah *Metaverse,* di mana *meta* dimaknai sebagai “digital” dan *verse* merupakan kependekan dari *universe* yang berarti “semesta”. Istilah *Metaverse* ini pada prinsipnya telah dikenal oleh khalayak umum dalam kurun satu dasawarsa terakhir ini. Hal ini disebabkan istilah *Metaverse* secara tersirat digambarkan oleh beberapa film diantaranya Ready Player One rilis tahun 2018, Blade Runner 2049 rilis tahun 2019, dan Avatar rilis tahun 2009.

Metaverse ini pada perkembangan saat ini lebih membumi di tengah masyarakat seiring dengan adanya kebutuhan segala aspek kehidupan selama pandemi covid-19. Selama pandemi beberapa tahun belakangan ini masyarakat mulai mengenal adanya kegiatan pekerjaan, pendidikan, kegiatan ekonomi, dan kesehatan yang dibungkus dengan teknologi digital. Beberapa teknologi tersebut dikenal dengan aplikasi daring diantaranya zoom, kamera VAR, Augmented Reality, telecomference dan lain-lain.

Konsep *Metaverse* ini selanjutnya bersinggungan dengan kegiatan pendidikan dan pembelajaran di lingkungan akademisi. Sebagaimana disampaikan di awal, bahwa adanya kebutuhan masyarakat dan didorong adanya pandemi covid-19 menyebabkan dunia pendidikan memulai untuk menggunakan teknologi *Metaverse*. Hal ini terlihat selama pandemi dunia pendidikan menggunakan teknologi berbasis internet untuk pembelajaran. Penggunaan teknologi ini dapat dilihat di mana pembelajaran, praktik, seminar, hingga pertemuan dilakukan dalam jaringan di mana antar individu tidak bertemu langsung melainkan di dunia maya.

Adanya konsep *Metaverse* dalam dunia pendidikan ini tentunya harus beririsan dengan kecakapan abad 21. Kecakapan abad 21 dari Prihatmojo (2019) diantaranya kreativitas dan kewirausahaan, literasi teknologi dan media, komunikasi efektif, pemecahan masalah, berpikir kritis, bekerja sama. Kecakapan abad 21 yang terdiri dari enam aspek tersebut diharapkan menjadi jiwa dalam pelaksanaan pendidikan dan pembelajaran di Indonesia. Harapan ini merupakan poin penting mengingat perkembangan dunia global yang sulit untuk diprediksikan dan bergerak cepat.

Implementasi dari kecapakan abad 21 ini tentu sejalan dengan tujuan dari mata pelajaran IPS di sekolah hingga perguruan tinggi. Erianjoni (2011) mengemukaan pernyataan bahwa proses pembelajaran IPS pada berbagai tingkat pendidikan dasar sampai perguruan tinggi tidak menekankan aspek teoritis keilrnuannya, melainkan lebih menekankan kepada segi ptraktis mempelajari, menelaah serta mengkaji gejala dan masalah sosial, dengan mempertimbangkan bobot dan tingkat kemampuan peserta didik pada tiap jenjang yang berbeda. Proses dari pernyataan Erianjoni ini merupakan dampak adanya perkembangan hngga perubahan di tengah masyarakat yang begitu cepat dan sulit diprediksi akibat dari pesatnya perkebangan ilmu dan teknologi. Perkembangan dan perubahan ini tentu tahapan selanjutnya dapat berdampak positif ataupun negatif.

Pembelajaran IPS pada era di mana dunia diperkenalkan pada teknologi *Metaverse* ini pada prinsipnya dapat membantu atau bahkan mengurangi nilai yang dikandung di dalam IPS itu sendiri. Seperti halnya adanya dampak positif dan negatif dalam penggunaan teknologi pembelajaran berbasis internet atau yang dikenal dengan pendidikan dan pembelajaran di era *Metaverse*.

Nilai-nilai dalam pendidikan IPS perlu dipertahankan eksistensinya di tengah pendidikan yang mulai memasuki era *Metaverse* ini. Nilai-nilai pendidikan IPS tersebut menurut Nursid Sumaatmadja (1997 terdiri dari nilai edukatif, nilai praktis, nilai teoritis, nilai filsafat, dan nilai

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

keagamaan. Kelima nilai ini dalam perkembangan pendidikan dan pembelajaran IPS tentu akan beradaptasi dengan perkembangan teknologi. Teknologi ini yang dimaksud adalah teknologi yang dibingkai dengan konsep *Metaverse*. Selanjutnya dari kelima nilai tersebut akan dikaji dalam penelitian ini terkait eksistensi nilai-nilai pendidika IPS di era *Metaverse*.

Konsep *Metaverse* di beberapa contoh terlihat lebih banyak diterapkan implementasinya pada materi-materi IPA. Beberapa literatur menampilkan bagaimana seorang siswa melakukan percobaan materi IPA pembedahan bagian hewan yang katak yang semula menggunakan katak asli atau bahkan bunga yang asli digantikan objek-objek virtual reality seperti katak, ikan, bunga dan daun. Sejalan dengan pernyataan ini dari Supriadi dan Hignasari (2019) kebutuhan akan pengembangan media berupa Virtual Reality untuk pembelajaran bagi siswa sekolah dasar terhadap materi pada muatan pelajaran IPA dirasakan penting.

Materi IPS yang dapat disentuh dengan *Metaverse* diantaranya materi Geografi dan Sejarah. Geografi dan Sejarah merupakan dua ilmu pengetahuan sosial yang menjadi bagian dari keseluruhan rumpun ilmu sosial. Geografi sendiri secara garis besar mempelajari tentang penggambaran bumi. Ilmu sejarah sendiri dimaknai oleh M Yamin dalam Ismaun (2009) yakni "Sejarah ialah ilmu pengetahuan dengan umumnya yang berhubungan dengan cerita bertarikh sebagai hasil penafsiran kejadian-kejadian dalam masyarakat manusia pada waktu yang lampau, yaitu susunan hasil penyelidikan bahan-bahan tulisan atau tanda tanda yang lain". Kedua ilmu ini dalam perkembanganya berjalan beriringan dengan ilmu-ilmu sosial yang lain menjadi kesatuan yang padu.

Geografi dari zaman ke zaman semakin berkembang cakupan kajiannya. Kajian mencakup aspek fisik, aspek manusia, serta keterikatan antarmanusia dengan lingkungannya. Aspek fisik cenderung lambat berubah jika diukur dengan usia manusia, namun dalam kala geologi pada prinsipnya alam fisik juga berkembang dari waktu ke waktu. Demikian halnya dengan aspek sosial yang cenderung bersifat dinamis. Manusia melakukan mobilitas sosial dan berinteraksi dengan lingkunganna mulai masa prasejarah hingga abad modern ini. Selain mobilitas, aspek sosial dalam geografi juga mencakup berbagai hal berkaitan dengan budaya, politik, pertumbuhan penduduk, migrasi, urbanisasi, hingga perkembangan tekologi. Kedua aspek geografi ini selanjutnya saling berinteraksi di bumi pad alapisan yang dikenal dengan geosfer.

Sejarah selanjutnya merupakan bagian dari ilmu sosial di mana peristiwa masa lalau dikaji untuk diungkapkan makna di dalamnya. Pengungkapan makna ini penting di mana peristiwa-peristiwa pada masa lampau dapat diambil untuk dijadikan pengalaman dalam menatap masa depan. Sejarah menurut Ismaun (2009) diartikan sebagai peristiwa yang terjadi dalam masyarakat pada waktu yang telah lampau sesuai dengan rangkaian kausalitasnya serta proses perkembangannya dalam segala aspeknya yang berguna sebagai pengalaman untuk dijadikan pedoman manusia masa sekarang serta arah cita-cita masa akan datang. Uraian ini dapat ditarik poin penting bahwa materi-materi sejarah di dalam ilmu pengetahuan sosial penting untuk disajikan karena memuat nilai-nilai pelajaran dari masa lalu untuk bekal di masa mendatang.

Geografi dan Sejarah yang menjadi bagian dari kajian Ilmu Pengetahuan Sosial (IPS) dalam perkembangannya dihadapkan pada dinamika dari manusia dan lingkungan. Dinamika manusia dan lingkungan ini seperti peristiwa ledakan penduduk di suatu wilayah. Dampak selanjutnya dari ledakan penduduk ini tentu saja akan mentransformasikan ruang-ruang di bumi menjadi lingkungan permukiman yang dihuni. Oleh karena itu contoh diatas merupakan bagian kecil dari kajian geografi (ruang) dan sejarah (manusia pelaku sejarah).

Penyajian pembelajaran IPS secara daring atau virtual ini tentu terbatas pada kelas-kelas daring. Keterbatasan ini seperti kendala jaringan, interaksi sosial, dan penyajian materi yang nyata. Sardiman (2014) menyampaikan bahwa sementara dalam pelaksanaan pembelajaran di sekolah umumnya sangat sulit terjadi perubahan kearah pembelajaran yang yang mengarah

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

kepada pembelajaran yang kontekstual, kreatif dan mampu memecahkan masalah. Pernyataan dari Sardiman ini beirisan dengan tantangan pembelajaran daring di mana aspek-aspek kontekstual langsung dan nyata materi-materi IPS terbatas. Selanjutnya daya kreatif peserta didik dan proses pemecahan masalah secara langsung akan terkendala.

Permasalahan diatas merupakan bagian kecil dari kendala pembelajaran di era *Metaverse*. Kondisi ini merupakan konsekuensi dunia pendidikan memasuki abad 21. Widja (1991) menyampaikan bahwa tantangan masa depan diantarana menyentuh sendi-sendi kehidupan manusia di mana empat kultur: reifikasi, manipulasi, fragmentasi, dan individualisasi (I Gde Widja, 1991.). Empat kultur yang disampaikan oleh Widja ini bagi dunia pendidikan Indonesia dikhawatirkan akan melahirkan generasi pebelajar yang cenderung materialistis, legalistis, dan formalistis.

Artikel ini berusaha untuk mengkaji eksistensi nilai pendidikan IPS ditengah arus zaman yang menuju pada *Metaverse*. Kajian ini kedepan akan bermanfaat untuk studi ilmu pengetahuan sosial yang terus berkembang diantara zaman. Perkembangan ini tentu berharap nilai dasar pendidikan IPS tidak hilang atau bahkan diperkuat oleh adanya teknologi *Metaverse*. Oleh karena itu melalui kajian berbagai literatur, jurnal, pustaka, dan telaah permasalahan diharapkan suatu kesimpulan yang menegaskan bahwa nilai pendidikan IPS harus tetap ada.

METODOLOGI

Penelitian ini didesain dengan penelitian pendekatan kualitatif Prayogi dan Daniel (2016:66) didukung oleh Creswell (2012) dan Moleong (2014). Desain kualitatif ini dengan studi pustaka komprehensif dari buku teks, jurnal ilmiah, refrensi statistik, hasil-hasil penelitian dalam bentuk skripsi, tesis, desertasi,dan internet, serta sumber-sumber lainnya yang relevan. Berbagai sumber ini berkaitan dengan pendidikan IPS dan *Metaverse*. Penelitian studi pustaka merupakan bagian dari penelitian akademik yang bertujuan pengembangan aspek teoritis dan praktis Sukardi (2013). Dengan telaah komprehensif ini penelitian pustaka dapat dengan mudah menjawab permasalahan yang diteliti.

HASIL DAN PEMBAHASAN

Pendidikan dan Pembelajaran IPS

Pendidikan IPS dari Mulyasa (2007: 125) menyampaikan bahwa IPS salah satu mata pelajaran yag diberikan mulai dari jenjang SD/MI/SDLB sampai SMA/MA/SMK. Materi-materi di mata pelajaran IPS berisikan seperangkat peristiwa, fakta,konsep, dan generalisasi yang berkaitan dengan isu sosial. Selain pengertian Mulyasa, NCSS dalam Sapriya (2009:10) mengutip bahwa social studies is the integrated study of the social sciences and humanities to promote civic competence. Within the school program, social studies provide coordinated, systemic study drawing, upon such disciplines as anthropology, archaelogy, economics, geography, history, law, philosophy, political science, psychology, religion, and sociology, as well as appropriate content from the humanities, mathematics, and natural sciences. Pengertian IPS dari Mulyasa dan NCSS ini beririsan pada kajian sejumlah ilmu pengetahuan sosial dari berbagai disiplin ilmu yang termasuk rumpun sosial. Keseluruhan dari disiplin ilmu tersebut memuat materi dari unsur peristiwa, fakta, konsep, hingga generalisasi pada isu-isu sosial. Isu-isu sosial ini berkenaan pula pada dunia kependidikan yang menjadi bagian kecil dari dunia sosial.

Dunia pendidikan terutama bidang IPS sendiri menjadi bagian dari mata pelajaran utama di jenjang pendidikan. BSNP (2007: 575) menyampaikan beberapa tujuan dari IPS. Tujuan IPS dari BNSP ini berisikan bahwa ilmu pengetahuan sosial membantu peserta didik mendapapatkan pemahaman mendasar tentang sejarah, ekonomi, geografi dan ilmu sosial yang

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

lain. Lebih jauh melalui mata pelajaran IPS peserta didik diarahkan dapat menjadi warga negara Indonesia yang demokratis dan bertanggungjawab serta warga dunia yang cinta damai. Sementara, NCSS (1994) menampaikan tujuan utama IPS yakni membantu manusia (generasi) muda mengembangkan kemampuan untuk membuat keputusan yang informatif dan rasional sebagai warga negara yang baik dari budaya yang berbeda-beda serta dalam konteks masyarakat yang demokratis dalam dunia yang saling membutuhkan. Kedua lembaga ini memiliki kesamaan dalam tujuan pendidikan IPS yakni mengarah pada pembangunan generasi muda.

IPS dalam perkembangannya selalu mengalami persepsi sebagai ilmu yang tidak memiliki value/nilai bagi masyarakat. Sebagaimana anggapan masyarakat sebagian besar menganggap kedudukan IPS tidak bernilai lebih bila dibandingkan dengan IPA. Peryataan ini sejalan dengan Mu’awanah (2015) yakni permasalahan di sekolah sering dijumpai dikotomi masyarakat tentang persepsi jurusan IPA lebih berkualitas dibandingkan dengan jurusan lain. Pendidikan IPS sendiri memiliki peranan penting pada kehidupan bermasyarakat. Lebih lanjut keadaan masyarakat kedepan tentu akan menghadapi tatanan global yang lebih kompleks. Sejalan dengan ini dari Rofiqoh dan Suherman (2017) menyampaikan juga bahwa peran pendidikan IPS merupakan pengupayaan pembentukan karakter pluralis siswa dalam dunia pendidikan sehingga menghasilkan keberhasilan dalam belajar dan mempunyai rasa toleransi atau, saling menghargai, saling percaya, dan gotong royong.

Dunia global yang semakin berkembang terutama aspek teknologi. Aspek teknologi ini megarah pada terbentuknya dunia *Metaverse*. Kehadiran dunia *Metaverse* ini secara tidak langsung menghilangkan adanya batas-batas ruang dan waktu yang semakin tidak jelas. Hal ini berdampak juga pada pembelajaran di mana pelaksanaan pembelajaran tidak diibatasi adanya ruang-ruang kelas dan waktu terjadwal. Secara singkat dapat dikatakan bahwa kehadiran dunia *Metaverse* ini memacu pembelajaran yang cenderung fleksibel dan mudah diakses.

Pembelajaran IPS di lingkungan pendidikan selama ini disajikan dengan berbagai pendekatan. Pendekatan ini merupakan cara agar nilai-nilai atau value dari muatan IPS tersampaikan dengan baik ke peserta didik. Pendekatan tersebut diantaranya pendekatan tematik. Sejalan dengan pendekatan tematik dari Kartini (2016) yakni pembelajaran tematik dalam IPS adalah model pembelajaran yang pengembangannya dimulai dengan menentukan topik tertentu sebagai tema atau topik sentral, setelah tema ditetapkan maka selanjutnya tema itu dijadikan dasar untuk menentukan dasar sub-sub tema dari bidang studi lain yang terkait.

Pendidikan dan pembelajaran IPS pada saat sekarang mengarah pada pengembangan teknologi yang dibalut dunia *Metaverse*. *Metaverse* yang dikenal masa sekaran cenderung muncul pada mata pelajaran di bawah naungan Ilmu Pengetahuan Alam (IPA). Perwujudan dari *Metaverse* ini seperti penggunaan virtual reality untuk memahami ciri mahluk hidup dan klasifikasi mahluk hidup Meslilesi (2017) dan Romadhoni, dkk (2020). Sementara itu di matapelajaran IPS penggunaan *Metaverse* ini masih tergolong baru bila dibandingkan dengan mata pelajaran IPA. Mata pelajaran IPA secara umum telah bersentuhan dengan dunia *Metaverse*

Eksistensi Pendidikan dan Pembelajaran IPS di Era *Metaverse*

Pembahasan mengenai eksistensi ini mengarah pada implementasi pendidikan dan pembelajaran IPS. Pendidikan dan Pembelajaran IPS pada masa sekarang perlu ada sentuhan teknologi. Sentuhan teknologi ini diharapkan seperti penyajian materi-materi IPA yang disajikan secara virtual reality. Materi IPS terutama bidang geografi dan sejarah dapat disajikan dengan efek virtual reality.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Penyajian pada pembelajaran IPS ini selanjutnya mengarah pada konsep *Metaverse* yang ada pada masa sekarang. Dunia *Metaverse* ini dapat disusun dengan menyajikan objek material geografi dan kaitan dengan sejarah (situs, candi, tokoh sejarah) secara virtual. Sajian virtual ini membawa siswa pada situasi sebenarnya seperti kajian geografi peristiwa tsunami, bencana alam, dan peristiwa banjir. Objek sejarah dapat disajikan virtual seperti peristiwa Proklamasi, penjelajahan samudera oleh Columbus, dan lain sebagainya. Peristiwa yang sukar dijangkau oleh siswa dan telah terjadi masa lampau dapat digambarkan dengan baik oleh teknologi *Metaverse* diantaranya augmented reality. Hal ini diperkuat oleh Efendi et al (2018) berbagai media pembelajaran berbasis teknologi informasi dikembangkan untuk menunjang pembelajaran sejarah di sekolah, salah satunya dengan memanfaatkan teknologi augmented reality (AR) untuk visualisasi berbagai peninggalan kerajaan Singhasari.

Kelebihan dari pembelajaran IPS dengan teknologi *Metaverse* ini selanjutnya beririsan dengan kunggulan teknologi era meteverse tersebut. Siswa dapat berinteraksi secara digital seperti melihat, merasakan, dan mendapatkan pengalaman dari peristiwa objek materia geografi dan materi sejarah. . pengaplikasian dalam pendidikan dapat meningkatkan kualitas pendidikan. Teknologi *Metaverse* ini memberikan ruang bagi siswa untuk berselancar secara digital tentang materi IPS.

Keunggulan dari pembelajaran IPS secara *Metaverse* juga memiliki keterbatasan. Keterbatasan ini merupakan kekurangan dari teknologi *Metaverse* untuk pelaksanaan pembelaran. Penggunaan teknologi ini membutuhkan konsumsi teknologi yang tinggi seperti kemampuan penyajian seni grafis tiga dimensi.Peralatan yang menggunakan teknologi *Metaverse* ini membutuhkan modal yang besar. Dampak lain adanya perubahan sosial dan budaya pada siswa yang mengalami kecanduan digital.Kecanduan digital ini perlu dihindarkan karena siswa dapat terbawa pada dunia maya serta lupa akan hakikat mereka yang hidup di dunia nyata. Hal ini diperkuat oleh RF Deonisius (2019) dan Aprilia (2020) bahwa kehadiran dunia maya dan kemajuan teknologi serta peningkatan program literasi digital dapat memberikan banyak manfaat namun juga dapat memberikan dampak negatif.

Pendidikan pada tahap akhirnya diarahkan untuk membentuk sumber daya manusia berkualitas sesuai perubahan zaman. Pendidikan dan pembelajaran IPS pada masa depan perlu beradaptasi dengan perkembangan teknologi. Adaptasi ini dapat merubah metode, model, dan media pembelajaran IPS terutama pada mata pelajaran geografi dan sejarah. Kedua materi IPS ini yakni geografi dan sejarah berkaitan erat dengan ruang dan waktu. Materi IPS terutama sejarah dan geografi dalam implementasi kedepan dengan sentuhan teknologi *Metaverse* diharapkan tetap menjaga pengajaran nilai. Pengajaran nilai ini tidak dapat digantikan oleh teknologi, namun diajarkan melalui guru. Kecanggihan teknologi *Metaverse* pada pendidikan dan pembelajaran IPS ini perlu diiringi dengan kecakapan abad 21 oleh siswa diantaranya kreativitas, inovasi, berpikir kritis, pemecahan masalah sosial, keterampilan komunikasi, dan kolaborasi dengan sesama.

SIMPULAN

Berdasarkan hasil studi pustaka dan berbagai literatur dapat disimpulkan bahwa perkembangan teknologi ini mengarah pada *Metaverse* di mana pembelajaran IPS lebih pada sajian materi digital berbasis jaringan internet dengan bantuan aplikasi. Namun demikian sajian pendidikan dan pembelajaran IPS ini kedepan perlu diperkuat dengan kecakapan abad 21 terutama pada kemampuan berfikir kritis dan pemecahan masalah pada siswa. Hal ini mengingat permasalahan sosial di era modern semakin kompleks untuk dipecahkan. Oleh karena itu dengan adanya era *Metaverse* ini diharapkan mempermudah sajian pendidikan dan pembelajaran IPS di masa-masa mendatang.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

PENGHARGAAN

Penulis menyampaikan terima kasih yang tak terhingga kepada Kerukunan Keluarga Indonesia Gorontalo (KKIG) Lamahu di Makassar atas keramahan, fasilitasi dan informasi yang diberikan selama proses penelitian di kota Makassar. Di samping itu, penulis juga menyampaikan terimakasih kepada LPPM Universitas Terbuka yang telah memberikan bantuan dana penelitian ini.

DAFTAR PUSTAKA

Aprilia et al. 2020. *Tingkat Kecanduan Media Sosial pada Remaja*. Jurnal JNC-Volume 3 Issue 1 February 2020 DOI : https://doi.org/10.24198/jnc.v3i1.26928

BSNP. 2007. *Kurikulum Tingkat Satuan Pendidikan*. Jakarta: BSNP.

Creswell, J. W. (2012). *Qualitative inquiry & research design: Choosing among five approaches (4th ed.).* Thousand Oaks, CA: Sage

Deonisius et al. 2019. The effect of digital literacy to internet addiction. *Jurnal Jurnal EDUCATIO Jurnal Pendidikan Indonesia* Volume 5 Nomor 2, 2019. https://www.researchgate.net/publication/341226661_The_effect_of_digital_literacy_to_internet_addiction/fulltext/5eb4bb9892851cd50da12c67/The-effect-of-digital-literacy-to-internet-addiction.pdf diakses 19 Mei 2022

Efendi, MY et al. 2018. Pengembangan Media Pembelajaran Sejarah Augmented Reality Card (Arc) Candi–Candi Masa Singhasari Berbasis Unity3D pada Pokok Materi Peninggalan Kerajaan Singhasari untuk Peserta Didik Kelas X KPR1 SMK Negeri 11 Malang. *Jurnal JPSI*, Vol. 1, No. 2, 2018 DOI: http://dx.doi.org/10.17977/um033v1i22018p176

Erianjoni. 2011. *PEMBELAJARAN IPS: (KONSEPSI, STRATEGI DAN REFLEKSI). Makalah.* http://repository.unp.ac.id/1439/1/ERIANJONI_228_11.pdf diakses 21 Mei 2022

I Gde Widja. 1991. *Sejarah Lokal Suatu Perspektif Dalam Pengajaran Sejarah*. Jakarta: Departemen Pendidikan dan Kebudayaan.

Ismaun, and Supriyono, Agus (2009) *Ilmu Sejarah dalam PIPS. In: Pengertian dan Konsep Sejarah.* Universitas Terbuka, Jakarta, pp. 1-29. ISBN 9796899205

Kartini, Tien. 2016. *PENDEKATAN TEMATIK DALAM PEMBELAJARAN IPS.* Jurnal Pendidikan UPI. https://www.neliti.com/id/publications/240895/pendekatan-tematik-dalam-pembelajaran-ips diakses 25 Mei 2022

Lani Rofiqoh, Lani dan Suherman, Aris. 2017. PERAN PENDIDIKAN ILMU PENGETAHUN SOSIAL DALAM MEMBENTUK KARAKTER PLURALIS SISWA. *Jurnal Jurnal Edueksos* Vol. VIII No. 2, Desember 2019 14 The journal of social and economics educatioon. https://syekhnurjati.ac.id/jurnal/index.php/edueksos diakses 19 Mei 2022

Digitalisation of Shamanic Practice in Serving Remote Patients

Perdamaian Daulay[1], Momy A. Hunowu[2], Windra Irawan[3]
[1]Universitas Terbuka
[2]IAIN Sultan Amai Gorontalo
[3]Universitas Terbuka
e-mail: momyhunowu@gmail.com

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

Shamanic belief systems do not want to be out of date. Shamanic practices continue to adapt to technological advances. Through the use of information and communication technology, the shaman can treat patients remotely. This study aims to determine how the use of digital technology in the practice of shamanism. How is the effectiveness of treatment through digital technology in shamanic practice. This qualitative research was conducted in Gorontalo and surrounding areas. Data was collected using observation techniques, in-depth interviews and online data. Data analysis was carried out through 3 stages, namely data reduction, data display and conclusion drawing. The results of the study found that the practice of shamanism is still a solution for social and cultural problems, especially in the aspect of medicine. The adherents of this shamanic system come from all social classes in both rural and urban areas. For the effectiveness of patient care from various regions, the shaman has utilized digital technology. Through the digital technology of shamanic practice, the shaman performs healing services for patients remotely. The use of digital media in the practice of shamanism has increased the number of patients seeking help. Treatment through digital media is proven to be effective in curing mild to acute illnesses, including to cure COVID-19 patients. The patient feels comfortable, not have to travel far to meet the shaman. The conclusion of this study is that the use of digital technology in healing patients is increasingly widespread, and its effectiveness is felt by users of shaman services from a distance.

***Keywords**: Digitalization of Shamanism, Distance Medicine, Patients between Regions*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

PENDAHULUAN

Aksi seorang dukun perempuan dalam usaha menghentikan hujan pada gelaran motoGP Mandalika Lombok Nusa Tenggara Barat pada Maret 2022 yang lalu menarik perhatian netizen Indonesia dan dunia (Pranita, 2022). Aksi irrasional itu menuai pro kontra karena ternyata, di era digital yang semakin rasional dan canggih dewasa ini, praktik perdukunan masih diandalkan, bukan hanya masyarakat tradisonal, melainkan pula masyarakat modern. Fakta-fakta sosial menunjukkan bahwa praktik perdukunan tidak hanya ada di Indonesia, tetapi juga di luar negeri, India, Korea, dan sebagainya. Berobat ke dukun sebagai salah satu pilihan untuk menyelesaikan masalah (Endarti, 2021). Sebuah ulasan pada artikel di media JPNN menyebutkan bahwa di negara-negara Eropa Timur, diperkirakan empat ribu orang yang teridentifikasi sebagai dukun penyihir. Sebagian besar mereka membuka praktik secara online (Adil, 2019). Pelaku perdukunan, dalam praktiknya telah memanfaatkan teknologi informasi dan komunikasi (digital) sehingga para dukun bisa dengan mudah ditemui di jagat maya. Di media sosial, mereka menjual jasa secara terang-terangan. Bahkan, ada sejumlah dukun yang punya situs khusus di internet untuk mempromosikan jasanya (Ridwan, 2020). Perkembangan praktik perdukunan yang merambah dunia maya sebagai respon terhadap antusias masyarakat terhadap layanan jasa perdukunan. Masyarakat tidak butuh penjelasan ilmiah, yang mereka butuhkan adalah mendapatkan kesembuhan dengan biaya terjangkau (Sasole, 2009). Adapun mereka yang mendatangi dokter dan rumah sakit, adalah warga yang sudah berputus asa karena sudah dalam kondisi kritis dan sang dukun telah lepas tangan.

Sejauh penelusuran penulis, studi-studi tentang praktik penyembuhan jarak jauh dapat dikelompokkan ke dalam tiga kategori; pertama studi tentang penyembuhan jarak jauh secara medis dengan menggunakan teknologi digital yang sudah lama berkembang. Misalnya penyembuhan jarak jauh yang diinduksi laser (Zhao et al., 2021) dan penyembuhan jarak jauh ultracepat dari nanokomposit termoplastik berbasis magneto-responsif (Griffiths et al., 2022). Cara-cara yang umum seperti memberikan layanan melalui telepon, telemedicine, atau teknologi lainnya. (Wright & Caudill, 2020). Kedua, studi tentang penyembuhan secara mistis (gaib) jarak jauh. Pengobatan jarak jauh ini dapat dilakukan ketika penyembuh (dukun) saling berhubungan dengan pasien, dalam hal ini dapat melalui kontak telepon atau melalui foto pasien yang ditunjukkan keluarga pasien atau melalui surat yang dikirim lewat pos. Foto disertai identitas serta kondisi/keluhan kesehatan pasien. (Novitasari & Artaria, 2015). Studi lainnya memanfaatkan media digital (media sosial) sehingga kehadiran para dukun segera dikenali masyarakat/netizen. (J. Lee, 2016). Penggunaan dunia maya sebagai domain suci baru, menunjukkan adanya pembaruan tentang pemanfaatan dunia maya dalam praktik perdukunan yang menyajikan perspektif baru tentang masa depan “cybershamanisme”. Terobosan lebih lanjut dalam cakrawala di ranah AR (augmented reality) dan VR (virtual realitas) memiliki prospek yang menarik bagi para dukun dunia maya yang memiliki konsekuensi luar biasa untuk dunia maya di abad ke-21 (Airò & Costello, 2016). Ritual perdukunan dapat dilihat secara lokal dan terikat secara teritorial, kekuatan dan kemanjurannya dapat diproyeksikan secara trans nasional (S. Lee, 2021). Ketiga, studi penyembuhan jarak jauh yang menggabungkan cara medis dan mistis. Proses penyembuhan jarak jauh melalui telepon yakni, pertama pasien diminta untuk menyentuh atau memegang bagian tubuh yang sakit sambil mengucapkan do’a dan bersholawat. Kemudian sang dokter mengucapkan do’a sambil melakukan gerakan seperti menyalurkan energi. (Setyoningsih & Artaria, 2016). Dari ketiga kecenderungan ini terlihat bahwa penyembuhan secara mistis jarak jauh dengan menggunakan teknologi digital telah berkembang di kota-kota besar dan dunia.

Penelitian ini ditujukan untuk memberikan informasi mengenai 1) praktik perdukunan dengan menggunakan teknologi digital yang semakin berkembang sejak pandemi covid 19. 2)

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Efektivitas praktik perdukunan semakin diminati masyarakat yang ingin memperoleh kepastian dengan cepat dan murah dalam mendapatkan kesembuhan terhadap penyakit yang diderita. Tulisan ini didasarkan pada argumen bahwa praktik perdukunan semakin meluas dan tanpa batas wilayah, menjangkau masyarakat pedesaan dengan memanfaatkan teknologi digital untuk memperoleh kesembuhan dengan cepat dari jarak jauh.

Perkembangan teknologi digital saat ini telah membawa perubahan dan mempengaruhi berbagai aspek kehidupan manusia (Putrawangsa & Hasanah, 2018). Teknologi digital mencakup teknologi informasi dan komunikasi baru seperti internet, dunia game online, kecerdasan buatan, robotika, dan pencetakan 3D (Hidayat & Khotimah, 2019). Teknologi digital telah banyak diaplikasikan dalam kehidupan sehari-hari, dimana keberadaannya berperan sebagai media atau alat bantu aktivitas di berbagai bidang seperti dalam bidang penelitian, Pendidikan, bisnis, sosial, dan lain sebagainya. Adapun beberapa aplikasi yang seringkali digunakan dalam kehidupan sehari-hari adalah telepon seluler, CD untuk penyimpanan data, computer, dan lain sebagainya (kelaspintar.id, 2020).

Aplikasi teknologi digital telah merambah ke dunia perdukunan, sebuah dunia gaib dan penuh dengan takhyul. Bangsa Indonesia secara historis telah berinteraksi dengan kebudayaan-kebudayaan Hindu-Buddha, Islam-Timur Tengah-Persia, dan tradisi Kristen-Barat Modern. Interaksi berkepanjangan ini berimplikasi pada mengakarnya pengaruh ilmu kebatinan atau spiritual dalam peradaban Indonesia. (Bahaudin, 2015). Kondisi ini menjadikan masyarakat Indonesia memiliki karakter yang khas percaya pada hal hal gaib atau takhayul (Lubis, 2013). Dalam dunia perdukunan, dikenal dua istilah yaitu paranormal dan penyembuh alternatif. Penyembuhan alternatif banyak diwariskan oleh para leluhur bangsa ini. Misalnya Raja Djayabaya, Ranggawarsita, ataupun Sosrokartono, kakak dari R.A. Kartini, serta para wali yang menyebarkan agama Islam di Jawa (Suharyanto, 2015). Kemampuan paranormal dan penyembuh alternatif tersebut diwariskan kepada generasi selanjutnya. Hal itu membuat budaya konsultasi atau meminta petunjuk dari “orang pintar” menjadi satu hal yang biasa dalam kehidupan orang Indonesia. Dukun melakukan fungsinya sebagai perantara antara duniawi dan dunia spiritual atau supernatural dengan tujuan untuk membantu orang-orang dari masyarakatnya (Pokorny, 2009). Dalam perkembangannya, terjadi perpaduan secara sinkretis tradisi spiritual dan perdukunan dengan sains dan teknologi maju. (Moore, 2018).

Sebagai bangsa yang majemuk, setiap daerah memiliki penamaan yang khas berkaitan dengan profesi sebagai dukun. Lazimnya mereka yang berprofesi sebagai dukun dinamakan sebagai paranormal atau orang pintar. Mereka diyakini masyarakat keberadaannya karena memiliki kekuatan magis: bisa berkomunikasi dengan mahluk gaib dan memiliki kelebihan lain yang tidak dimiliki oleh orang lain untuk menyembuhkan berbagai penyakit (Sasole, 2009).

Praktik penyembuhan jarak jauh, baik penyembuhan secara medis maupun secara mistis (gaib) terus berkembang mengikuti perkembangan teknologi digital. Di dunia medis, metode penyembuhan jarak jauh sudah dikembangkan dengan menggunakan jaringan komputer yang dinamakan e-medicine. Pasien dan dokter terpisah oleh jarak; pasien di rumah, dokter di rumah sakit. Dokter memantau keadaan pasien melalui peralatan berbasis elektronik yang terpasang di rumah pasien. Melalui data-data komputer itulah dokter melakukan diagnosis dan memberi saran apa yang harus dilakukan oleh keluarga (Kanedi, 2012).

Konsep yang digagas para dukun di zaman sekarang juga lebih modern, mereka menggunakan media iklan seperti majalah, brosur secara terang-terangan dan bahkan membuka praktik perdukunan dengan fasilitas internet dengan dalih via online (Abdillah, 2010). Selanjutnya yang menjadi korban, bukan hanya orang bodoh yang tidak berpendidikan, melainkan juga mereka yang berdasi, yang setiap hari berbicara tentang logika, yang

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

berhadapan dengan komputer bahkan ada juga yang berpendidikan agama sampai starta dua (S2) atau strata tiga (S3). Ironisnya, mereka semua tunduk dan bersimpuh di hadapan dukun dan paranormal yang kadang tidak segan-segan memakai simbol-simbol ulama agar terlihat Islami. (Musdar, 2017).

Dalam kajian ilmuan Islam ditegaskan bahwa para dukun sebenarnya hanyalah manusia biasa yang tidak memiliki kelebihan tertentu. Adapun kelebihan yang mereka dapatkan dengan cara berbakti, tunduk, dan taat kepada jin. Mandi dengan cara tertentu, melakukan meditasi di gua-gua, melaksanakan puasa dengan cara-cara tertentu, menjadikan hewan dengan kriteria tertentu sebagai tumbal dan lain-lain. Dengan cara-cara itulah jin masuk dan menjadi perantara dalam praktik perdukunan.

Praktik perdukunan digital yang dewasa ini semakin marak sebenarnya memiliki kemiripan dengan praktik perdukunan sebagaimana yang lazim, baik dahulu maupun kini. Tetapi dalam beberapa hal, para pelaku perdukunan berupaya untuk memodernisasi diri dengan melakukan modifikasi dan kreasi-inovatif sesuai dengan kemajuan dan perkembangan teknologi digital. Aspek yang paling banyak dimodifikasi adalah strategi pemasaran (publikasinya), baik yang menyangkut media, istilah, maupun strategi memperdaya konsumen yang relatif semakin berilmu dan memiliki wawasan luas. (Fariadi, 2013). Media yang mulai dimanfaatkan para dukun profesional adalah media sosial, istilah yang mereka gunakan adalah pengobatan alternatif dan strategi yang digunakan adalah menonjolkan janji-janji kesembuhan dalam waktu dan cepat dan biaya yang murah.

METODOLOGI

Hubungan antara pemanfaatan teknologi digital pada praktik perdukunan dengan layanan pasien jarak jauh menarik untuk diteliti. Tema ini dipilih sebagai objek penelitian atas tiga alasan. Pertama; praktik perdukunan dengan memanfaatkan teknologi digital mulai banyak diminati masyarakat. Kedua, belum banyak perhatian diberikan pada analisis pemanfaatan teknologi digital pada praktik perdukunan dengan layanan pasien jarak jauh. Analisis yang ada memperlihatkan adanya praktik perdukunan dengan cara masyarakat yang membutuhkan jasa perdukunan bertemu secara langsung. Ketiga; analisis ini memberi pemahaman tentang adanya penerapan teknologi digital pada praktik perdukunan untuk memberikan layanan penyembuhan kepada pasien dari jarak jauh. Ketiga alasan tersebut memperlihatkan bahwa pemahaman yang seksama atas pemanfaatan teknologi digital dalam praktik perdukunan semakin mempermudah masyarakat mengakses kesehatan melalui bantuan paranormal (dukun).

Pemanfaatan teknologi digital pada praktik perdukunan dalam melayani pasien jarak jauh dapat dijelaskan melalui penelitian kualitatif yang bersandar pada data primer dan sekunder. Data primer terdiri dari praktik-praktik perdukunan yang memanfaatkan teknologi digital yang mulai berkembang di masyarakat, diperoleh melalui wawancara mendalam dan observasi. Data sekunder terdiri dari data-data penelitian terdahulu maupun pemberitaan online. Baik data primer maupun data sekunder digunakan sebagai dasar analisis hubungan antara penerapan teknologi digital pada praktik perdukunan dengan layanan pasien jarak jauh.

Penelitian ini mengambil partisipan para dukun dan masyarakat pengguna jasa perdukunan yang ada di Gorontalo dan Makassar. Pemilihan lokasi tersebut dengan pertimbangan, Gorontalo sebagai daerah yang memiliki kekayaan khasanah budaya termasuk banyaknya praktik perdukunan. Makassar sebagai kota metropolitan di Indonesia Timur yang banyak didiami oleh warga Gorontalo yang juga masih memanfaatkan jasa perdukunan. Pengambilan partisipan dibatasi pada dukun yang memanfaatkan teknologi digital dan masyarakat pengguna jasa perdukunan. Kedua kategori partisipan tersebut untuk mengidentifikasi perspektif pelaku dan pengguna praktik perdukunan.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Penelitian tentang fenomena praktik perdukunan yang memanfaatkan teknologi digital berlangsung melalui tahapan pengumpulan data sekunder, wawancara dan observasi. Pertama; data sekunder diperoleh secara online tentang hasil-hasil riset terdahulu maupun pemberitaan online mengenai praktik perdukunan di media sosial. Kedua, data yang bersumber pada wawancara mendalam mengenai proses pemanfaatan teknologi digital pada praktik perdukunan dan efektivitas penyembuhan yang dirasakan oleh pasien. Ketiga, penelitian ini dilengkapi dengan pengamatan terhadap praktik perdukunan (dukun sebagai pemberi jasa dan masyarakat sebagai penerima jasa). Berbagai kategori data yang diperoleh dari berbagai sumber dan metode tersebut menjadi landasan bagi analisis fenomena pemanfaatan teknologi digital dalam praktik perdukunan untuk melayani pasien jarak jauh.

Proses analisis data akan dilakukan melalui tiga tahap analisis dan dua tehnik analisis data. Tiga tahap analisis data mencakup; (a) reduksi data sebagai proses penataan data dalam bentuk yang lebih sistematis, khususnya secara tematis; (b) display data sebagai usaha menghadirkan hasil penelitian dalam bentuk tabel dan kutipan-kutipan wawancara, dan (c) verifikasi data sebagai suatu tahapan penyimpulan data, khususnya mengikuti trend dari data yang diperoleh. Data yang diproses melalui tiga tahap tersebut dianalisis melalui (a) metode deskriptif dan (b) ditampilkan dalam bentuk tabel. Deskripsi data sebagai dasar untuk proses interpretasi yang dilakukan secara kontekstual. Tahapan analisis dan tehnik analisis yang digunakan memungkinkan dirumuskan kesimpulan-kesimpulan atas hubungan digitalisasi praktik perdukunan dengan pengobatan pasien jarak jauh pada masyarakat.

HASIL DAN PEMBAHASAN

Praktik Perdukunan Menggunakan Teknologi Digital

Pemanfaatan teknologi digital dalam praktik perdukunan dilakukan secara berbeda oleh para dukun yaitu; menggunakan media digital sebagai sarana penyembuhan dari jarak jauh dan menggunakan media digital untuk mempromosikan/sosialisasi praktik perdukunan. Kedua aspek ini akan diuraikan berikut ini:

1. Media Digital sebagai Media Penyembuhan Jarak Jauh

Selain menggunakan teknologi digital sebagai media untuk memasarkan jasa perdukunan, media digital juga dijadikan sebagai sarana untuk melakukan penyembuhan. Dengan pemanfaatan teknologi digital, pasien tidak harus mendatangi dukun secara langsung. Mekanisme pengobatan melalui media digital menggunakan perangkat HP (smartphone). Pasien dapat langsung menghubungi dukun dengan menelpon, lalu menyampaikan penyakit atau keinginan yang diderita, kemudian sang dukun akan memberikan instruksi terhadap perlakuan yang dilakukannya dari jarak jauh. Hal ini sebagaimana dilakukan Pak Usman, seorang dukun yang menggunakan sambungan telepon dan *video call* untuk menyembuhkan pasiennya. Secara logis Pak Usman menjelaskan bahwa penyembuhan dengan menggunakan makhluk halus sangat berkaitan dengan kekuatan magis sehingga makhluk halus dapat diperintah untuk mendatangi pasiennya di mana saja berada. Jadi, tidak harus bertemu yang penting keluhannya sudah diketahui dan identitasnya sudah dikenali sehingga proses penyembuhan dapat tersambungkan. Proses ini dapat dilakukan melalui sambungan telepon. Kekuatan gaib dapat dikirimkan kepada obyek yang sudah diketahui, proses penyembuhan pun terjadi. Untuk memaksimalkan proses penyembuhan, sang dukun meminta keluarga pasien untuk menyediakan bahan-bahan tertentu untuk dijampi-jampi dari jarak jauh.

Selain dapat menyembuhkan penyakit kronis, Pak Usman juga dapat menyembuhkan pasien covid-19. Dia mengaku beberapa pasien yang sudah divonis positif dapat disembuhkan dengan menggunakan kekuatan gaib dari jarak jauh. Keluarga pasien yang khawatir dengan

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

keadaan keluarganya tersebut menghubungi Pak Usman untuk meminta bantuan penyembuhan. Hanya dalam hitungan hari, dua pasien covid-19 yang sedang dirawat di rumah sakit tersebut telah diizinkan pulang. Menurut keyakinan Pak Usman, virus covid-19 adalah penyakit gangguan makhluk halus. Hal ini diakui dukun lain Ka Puu. Menurutnya, pandemi seperti covid-19 ini sudah pernah terjadi pada masa lalu dan bisa diselesaikan dengan menggelar upacara memanggil ruh-ruh halus lalu diberi sesajen sehingga menghentikan gangguannya (Hunowu et al., 2020).

Dukun lain yang melakukan penyembuhan penyakit jarak jauh adalah Ustaz Yunus. Ustaz yang bergelar haji ini terkenal dapat menyembuhkan dari jarak jauh melalui sambungan telepon. Akibatnya, setiap saat dia menerima telepon dari kerabat dan keluarga yang berjauhan untuk meminta bantuan. Ustaz Yunus hanya meminta menyediakan air putih, lalu perangkat handphone didekatkan pada segelas air putih dan diaduk-aduk dengan sendok, setelah itu terdengar perintah untuk meminumkan air itu, sebagian diusapkan ke wajah dan bagian tubuh yang sakit. Kalau sakitnya atas gangguan makhluk halus, rasa sakitnya segera hilang. Terdapat jenis penyakit yang tidak dapat disembuhkan secara mistis sehingga harus segera menghubungi dokter. Pak Usman dan Ustaz Yunus adalah dua dukun yang menggunakan media digital untuk menyembuhkan pasien tetapi tidak memasang tarif tertentu. Ucapan terima kasih pasien kepada Pak Usman seringkali diberikan dalam bentuk beras dan sejumlah uang. Sementara Ustaz Yunus tidak menerima pemberian jasa.

Penggunaan media sosial dalam praktik perdukunan dimanfaatkan oleh komunitas Gorontalo di Makassar. Mereka menggunakan grup *Whatsapp* sebagai media komunikasi dalam praktik penyembuhan. Semua anggota grup dapat menyampaikan keluhannya, sang dukun yang tergabung dalam grup tersebut akan memberikan instruksi, meminta menyediakan bahan-bahan tertentu untuk pengobatan, setelah semuanya tersedia, sang dukun akan menuliskan jampi-jampinya. Pada komunitas ini, dukun tidak diberi bayaran, kecuali dalam hal yang mendesak dan mengharuskan sang dukun mendatangi rumah pasien.

2. Media Digital sebagai Media Promosi/Sosialisasi

Para dukun profesional sudah sejak lama menggunakan media sebagai sarana mempromosikan praktik perdukunan. Pada era media cetak, koran dan majalah menjadi media yang efektif untuk mempromosikan praktik perdukunan. Selanjutnya merambah ke media elektronik seperti radio dan televisi. Di media ini, sebagian besar dukun menggunakan istilah pengobatan alternatif dan menghindari penggunaan dukun. Beberapa praktik perdukunan/penyembuhan dapat ditemukan pada siaran-siaran televisi dalam bentuk advertorial yang ditayangkan televisi milik pemerintah. Namun, program itu dihentikan sejak Januari 2013 karena mendapat penolakan masyarakat karena berbau klenik dan berpotensi menyesatkan. Untuk memenuhi kebutuhan masyarakat akan siaran pengobatan alternatif, stasiun televisi milik pemerintah ini akan mengemasnya dalam format *feature* dengan mengedepankan kearifan lokal. Hal ini seabagiaman diberitakan *antaranews.com* dengan headline "TVRI hentikan tayangan pengobatan alternatif pada Sabtu 1 Desember 2012. (Ariwibowo, 2012).

Dewasa ini, para dukun telah bertransformasi menggunakan media sosial sebagai sarana untuk mempromosikan profesinya. Semua platform media sosial digunakan oleh para dukun kreatif dalam memasarkan jasanya. Dari beberapa data yang penulis dapatkan, cara dukun mempromosikan jasanya dilakukan secara terang-terangan, baik yang positif maupun yang negatif. Gambar berikut ini menunjukkan promosi yang dilakukan oleh dukun terhadap pesugihan uang gaib, ATM ajaib, pelet, santet, menjual janin, menjual musuh dan menjual istri.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Pada gambar yang lain lebih menyeramkan lagi, “tidak butuh waktu lama untuk membuat musuh besar anda tewas secara mengenaskan.

Gambar 1. Promosi Perdukunan melalui Media Sosial

Sumber: https://www.liputan6.com

Digitalisasi perdukunan sudah merambah dunia maya, misalnya yang dilakukan Kyai Pamungkas. Paranormal asal Jawa Timur ini sudah tiga tahun memanfaatkan media sosial seperti *Instagram*, *Facebook*, dan *Twitter* untuk mempromosikan jasanya. Digitalisasi ini dipertegas dengan membuat website sendiri. Paranormal ini mengaku bahwa dengan mempromosikan praktik perdukunan di media sosial dan internet jauh menjanjikan, bisa menjangkau semua lapisan masyarakat. Hal ini diakui Kyai Pamungkas: "Karena media sosial ibarat kolam iklan tanpa batas. Tinggal pintar-pintarnya kita mengail saja. Medsos juga merangkul anak kekinian, aset klien masa depan yang bisa dididik dari dini. Sedangkan *Google Map* atau *Google Bisnis* juga tak kalah vital. Ini media yang meyakinkan ke klien kalau kami benar-benar ada, bukan fiktif, bukan penipuan. Bisa dilihat dari ulasan dan bintang-bintang yang bagus rating-nya," Komunikasi lewat media sosial, seperti *WhatsApp*, *Zoom*, *video call*, dan sebagainya. Ningsih Tinampi adalah dukun asal Pasuruan, Jawa Timur, yang rajin mempertontonkan praktik pengobatannya di Instagram dan Youtube. Bedanya, dulu ada salam tempel. Sekarang minta nomor rekening, bahkan *Go-pay*," (Ridwan, 2020)

Data-data ini menunjukkan terjadinya digitalisasi praktik perdukunan yaitu telah merambah ke media sosial dan menjangkau semua lapisan masyarakat, terutama kalangan netizen, yang akrab dengan media sosial.

Tabel 1. Metode Penyembuhan Jarak Jauh dengan Media Digital

Teknologi yang digunakan	**Tujuan/Fungsi**
Media Sosial	Sebagai media sosialisasi/iklan
Telepon dan Video call	Sebagai media menyalurkan energi/jampi-jampi

Tabel di atas menunjukkan bahwa perangkat teknologi digital dimanfaatkan dukun dengan dua cara; pertama sebagai media sosialisasi dan promosi. Cara ini menggunakan media sosial

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

seperti *Facebook*, *Instagram*, dan kanal *Youtube*. Setelah itu, pasien tetap datang mencari alamat yang dicantumkan. Kedua menggunakan jaringan telepon atau video call untuk proses diagnosis dan pengobatan. Dukun memerintahkan pasiennya melalui telepon untuk menyediakan bahan-bahan tertentu seperti air putih, lalu sang dukun mengirimkan jampi-jampinya dari jarak jauh, kemudian air putih itu diminumkan dan sisanya diusapkan ke bagian tubuh yang sakit.

Efektivitas Praktik Perdukunan melalui Media Digital

Pengobatan jarak jauh melalui media digital dirasakan efektif. Hal ini sebagaimana diakui oleh beberapa warga yang menjadi pasien Pak Usman dan Ustaz Yunus. Dengan menggunakan *smartphone*, warga yang ingin berobat dapat mengetahui sang dukun sedang aktif (*online*) atau tidak sehingga dapat langsung menghubungi dan mengemukakan keluhan. Keefektifan ini sangat dirasakan ketika membutuhkan pertolongan dukun pada tengah malam, ketika anak-anak sakit perut dan menangis sepanjang malam. Dengan bantuan dukun melalui kontak telepon dan media sosial, warga mendapatkan pertolomgan dengan segera.

Faktor kedua yang dirasakan warga yang menggunakan jasa dukun online adalah tidak bertemu langsung sehingga terjaga *privacy* dan tidak menimbulkan fitnah. Hal ini sebagaimana dikemukakan oleh pasien wanita yang merasa lega dan tidak was-was karena tidak harus bertemu langsung dengan sang dukun. Meskipun sang dukun tidak berlaku cabul, tetapi fitnah bisa saja merebak yang dihembuskan oleh orang-orang yang tidak bertanggung jawab.

Faktor ketiga adalah tidak perlu perjalanan jauh dengan ongkos perjalanan dll. Melalui media digital, pasien di kota Makassar dapat berobat dengan dukun yang berada di Gorontalo atau sebaliknya tanpa harus mengeluarkan ongkos perjalanan dan memakan waktu yang lama. Beberapa warga Gorontalo di Makassar mengaku bahwa mereka bisa menghubungi Pak Usman yang berada di pedalaman Gorontalo untuk melakukan pengobatan hanya dengan menghubungi lewat telepon atau video call. Tidak memakan waktu dan biaya, efek penyembuhannya tetap dirasakan.

Tabel 2. Efektivitas Pengobatan melalui Media Digital

Indikator	Efektivitas
Langsung berkomunikasi	Kapan saja membutuhkan pertolongan langsung menghubungi sang dukun melalui telepon/media sosial
Tidak bertemu langsung	Pasien wanita merasa nyaman karena tidak was-was bertemu dukun laki-laki serta tidak menimbulkan fitnah
Jarak dan waktu	Tidak perlu melakukan perjalanan jauh dengan waktu tempuh berjam-jam/berhari-hari

Pemanfaatan teknologi digital dalam melayani pasien jarak jauh telah memudahkan masyarakat untuk mendapatkan pertolongan pada saat mengalami sakit. Pasien tidak harus bersusah payah mendatangi sang dukun di tempat praktik (kediaman). Melalui teknologi digital, pasien langsung diobati dan merasakan efektivitas penyembuhan yang sama dengan bertatap muka. Namun demikian, pemanfaatan teknologi digital dalam praktik perdukunan tidak hanya memberikan jaminan keamanan bagi para pasien, terutama tangan-tangan jahil dukun cabul, tetapi sekaligus rawan terhadap penipuan. Peluang penipuan dapat terjadi jika melakukan transaksi dan transfer uang dalam jumlah tertentu tetapi tidak memperoleh kesembuhan sebagaimana yang dijanjikan.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

SIMPULAN

Teknologi dapat memberikan kemudahan dalam semua bidang kehidupan, mempercepat proses dan memperdekat jarak. Efektivitas layanan perdukunan dengan menggunakan teknologi digital semakin diminati masyarakat pasca pandemi covid-19. Kondisi ini akan terus meluas mengingat praktik perdukunan ini terlarang secara syari'at Islam. Dengan pemanfaatan teknologi digital, praktik terlarang ini dapat diakses secara rahasia oleh para penganutnya.

Penelitian ini menunjukkan bahwa telah terjadi modernisasi kearifan tradisional. Praktik-praktik yang dulu dilakukan secara diam-diam di bilik-bilik tersembunyi, kini merambah ke ruang-ruang virtual yang bisa diakses oleh masyarakat. Penggunaan media digital dalam praktik perdukunan lebih banyak bertujuan untuk memasarkan (promosi), sementara sebagai sarana untuk menyembuhkan pasien antar daerah masih terbatas pada kalangan dukun tertentu.

Tulisan ini masih terbatas pada digitalisasi praktik perdukunan, penulis lain dapat membahas tentang kejahatan-kejahatan yang mengintai praktik perdukunan digital ini.

PENGHARGAAN

Penulis menyampaikan terima kasih yang tak terhingga kepada Kerukunan Keluarga Indonesia Gorontalo (KKIG) Lamahu di Makassar atas keramahan, fasilitasi dan informasi yang diberikan selama proses penelitian di Kota Makassar. Di samping itu, penulis juga menyampaikan terima kasih kepada LPPM Universitas Terbuka yang telah memberikan bantuan dana penelitian ini.

DAFTAR PUSTAKA

Abdillah, A. U. (2010). *Dukun Hitam Dukun Putih.* Pustaka Media Press.

Adil. (2019). *Dukun Online Tawarkan Jasa Pelet Lintas Benua.* JPPN.Com, 1. https://www.jpnn.com/news/dukun-online-tawarkan-jasa-pelet-lintas-benua

Airò, A., & Costello, W. J. (2016). Virtual Shamanism and the Sacred-Cyber-Space. III *International Congress Sanctuaries, Culture, Art, Pilgrimages, Scenery, People*, July, 1–8.

Ariwibowo, A. (2012). *TVRI hentikan tayangan pengobatan alternatif. Antaranews.Com.* https://www.antaranews.com/berita/346360/tvri-hentikan-tayangan-pengobatan-alternatif

Bahaudin. (2015). Mistik dan Politik: Praktik Perdukunan dalam Politik Indonesia. *Jurnal Keamanan Nasional. Keamanan Nasional*, 1(3), 365–386. https://sinta.kemdikbud.go.id/journals/detail?page=4&id=3669

Endarti. (2021, April 30). *Warga Desa India Beralih ke Dukun, Cap Perut dengan Besi Panas untuk 'Usir Setan Penyebab Corona. Akurat.Co.* https://akurat.co/warga-desa-india-beralih-ke-dukun-cap-perut-dengan-besi-panas-untuk-usir-setan-penyebab-corona

Fariadi, R. (2013). Digitalisasi Perdukunan; Mengemas Kemusyrikan dengan Kecanggihan Teknologi. *Jurnal Tarjih*, 11(1), 11–20.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Griffiths, P., Coativy, G., Dalmas, F., Falco, G., Jiang, L., Xiang, Z., Le, M.-Q., Ducharne, B., Le Roy, D., Méchin, F., Bernard, J., Meille, S., & Baeza, G. P. (2022). Ultrafast Remote Healing of Magneto-Responsive Thermoplastic Elastomer-Based Nanocomposites. *Macromolecules*, 55(3), 831–843. https://doi.org/10.1021/acs.macromol.1c02046

Hidayat, N., & Khotimah, H. (2019). Pemanfaatan Teknologi Digital Dalam Kegiatan Pembelajaran. *JPPGuseda | Jurnal Pendidikan & Pengajaran Guru Sekolah Dasar*, 2(1), 10–15. https://doi.org/10.33751/jppguseda.v2i1.988

Hunowu, M. A., Pakuna, H. B., Lahaji, P., & Obie, M. (2020). Mopo'a Huta on Peasant Community: A Ritual for Harmony with Nature in Molamahu Village of Gorontalo Regency-Indonesia. *International Journal of Scientific Research in Science and Technology, 7(1), 220–228. https://doi.org/10.32628/ijsrst207143*

Kanedi, M. (2012). *Pengobatan Gaib Jarak Jauh, Just A Fake? Kompasiana.Com, 1–3. https://www.kompasiana.com/kanedi/5511242d8133116b41bc613d/pengobatan-gaib-jarak-jauh-just-a-fake*

Lee, J. (2016). Commodifying magic: cyber shamans and neoliberalised culture in Korea. *Culture and Religion*, 17(3), 295–311. *https://doi.org/10.1080/14755610.2016.1217897*

Lee, S. (2021). Traditionally transnational : Cultural continuity and change in Hmong shamanism across the diaspora. *Ethnography*, 22(1), 51–69. *https://doi.org/10.1177/1466138119839086*

Lubis, M. (2013). *Manusia Indonesia (Cet. IV). Yayasan Pustaka Obor.*

Moore, L. (2018). The Shaman of Cybernetic Futures: Art, Ritual and Transcendence in Fields of the Networked Mind. *Cybernetics & Human Knowing, 25(2–3), 119–141. https://www.ingentaconnect.com/contentone/imp/chk/2018/00000025/f0020002/art00009*

Musdar, B. T. (2017). *Ensiklopedia Jin, Sihir Dan Perdukunan. Pro-U Media.*

Novitasari, A., & Artaria, M. D. (2015). *Pengobatan transfer energi sebagai salah satu metode pengobatan tradisional dalam penyembuhan penyakit Energy transfer medication as a traditional method in curing disease. Masyarakat, Kebudayaan Dan Politik, 28(1), 50–63.*

Pokorny, L. (2009). Schlottmann, Dirk. Koreanischer Schamanismus im neuen Millennium. *Religio: Revue Pro Religionistiku, 17(2), 278–280. http://hdl.handle.net/11222.digilib/125306*

Pranita, E. (2022). *Pawang Hujan Beraksi di MotoGP Mandalika 2022, Sejak Kapan Pawang Hujan Ada di Indonesia? Kompas.Com. https://www.kompas.com/sains/read/2022/03/22/193000323/pawang-hujan-beraksi-di-motogp-mandalika-2022-sejak-kapan-pawang-hujan-ada?page=all*.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Putrawangsa, S., & Hasanah, U. (2018). Integrasi Teknologi Digital Dalam Pembelajaran Di Era Industri 4.0. *Jurnal Tatsqif*, 16(1), 42–54. *https://doi.org/10.20414/jtq.v16i1.203*

Ridwan, K. P. W. dan A. (2020). *Ada Mbah Dukun Jualan di Medsos. Www.Alinea.Id, 1–5. https://www.alinea.id/nasional/ada-mbah-dukun-sedang-jualan-di-medsos-b1ZRH9whH*

Sasole, D. (2009). *Fenomena Ponari ; Potret Derita Umat ? Pa-Ternate.Co.Id*. http://www.pa-ternate.go.id/2019/07/05/fenomena-ponari

Setyoningsih, A., & Artaria, M. D. (2016). Pemilihan penyembuhan penyakit melalui pengobatan tradisional non medis atau medis. *Masyarakat, Kebudayaan Dan Politik*, 29(1), 46. https://doi.org/10.20473/mkp.v29i12016.46-59

Suharyanto, A. (2015). Eksistensi Paranormal dan Penyembuh Alternatif dalam Kehidupan Masyarakat Medan. *Jurnal Antropologi Sosial Dan Budaya ANTROPOS*, 1(2), 196–201. https://doi.org/10.24114/antro.v1i2.6244

Wright, J. H., & Caudill, R. (2020). Remote Treatment Delivery in Response to the COVID-19 Pandemic. *Psychotherapy and Psychosomatics*, 89(3), 130–132. https://doi.org/10.1159/000507376

Zhao, P., Xia, J., Liu, J., Tan, Y., Ji, S., & Xu, H. (2021). Laser-Induced Remote Healing of Stretchable Diselenide-Containing Conductive Composites. *ACS Applied Materials & Interfaces*, 13(42), 50422–50429. https://doi.org/10.1021/acsami.1c15855

Strategi Programming Acara “Si Otan” di Stasiun Tevevisi Trans 7

Vayol Parama Adrianjara[1], Susi Andrini[2]
[1,2]Ilmu Komunikasi, STIKOM Inter Studi, Jakarta
e-mail: vayoladrianjara@gmail.com

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

This study aims to explain the Programming Strategy at the "Si Otan Di Trans7" event. The methodology used in this research is descriptive qualitative. Data was collected through observation, in-depth interviews, documentation and the internet to obtain in-depth and relevant information or data in research. While the theory used in this research is strategies & practices according to Sydney W, Head which states that in television broadcasting it is necessary to pay attention to five elements to carry out programming strategies, namely Compatibility, Habit formation, Control audience flow, Conservation of program resources and, Breadth of appeal. The results of this study showed significant results, that; Si Otan's programming strategy broadcast by TV-Trans7 station has implemented a programming strategy according to Sydney W. Head which includes these five elements.

***Keywords**: Strategy, Programming, Si Otan, Broadcasting, Television*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

PENDAHULUAN

Televisi adalah adalah satu media massa yang perkembangannya relatif sering dipergunakan oleh warga Indonesia. Televisi sendiri merupakan media telekomunikasi yang menampilkan audio dan juga visual.

Televisi merupakan media atau audio visual, yakni berupa tampilan gambar sekaligus juga sebagai media pendengar. Dalam hal ini, orang tidak hanya dapat mendengar atau mencerna sebuah narasi, tetapi juga dapat memandang/melihat gambar yang ada di televisi. (Adi Badjuri, 2010)

Televisi juga memiliki peranan dalam menyediakan hiburan yang dapat dinikmati oleh penggunanya. Sejarah mencatat, di Indoneisa sendiri saluran televisi pertama kali mengudara pada tahun 1962. Stasiun televisi yang dimiliki Indonesia pertama kali adalah TVRI. Kemudian sejak tahun 1989 munculah stasiun-stasiun televisi lainnya seperti RCTI, Trans TV, Trans7 dan lainnya (Sanityastuti, 2007).

Di Indonesia, perkembangan stasiun televisi sebagai media penyiaran meningkat dengan pesat. dilihat dari adanya persaingan antara stasiun televisi untuk mendapatkan minat menonton dari masyarakat. Mereka bersaing untuk menciptakan acara-acara menarik dan berlomba-lomba untuk menciptakan tayangan yang dapat dinikmati oleh masyarakat agar rating dan juga share dari stasiun televisi tersebut meningkat atau bertahan bilamana sudah bagus.

Rating merupakan suatu evaluasi atau penilaian yang dikerjakan oleh suatu pihak tertentu pada suatu hal. Sistem rating di televisi berguna untuk memberikan gambaran kepada khalayak tentang kesesuaian program televisi untuk penikmatnya. Rating juga digunakan untuk memutuskan apakah suatu acara yang diproduksi masih bisa dilanjutkan penayangannya atau dihentikan saja penayangannya, atau juga dipindah. (Susanto, 2009)

Sementara itu, televisi yang merupakan *Audience Share* (*Share*) ini adalah suatu angka yang menyebutkan proporsi dari jumlah pemirsa pada suatu stasiun di televisi dibandingkan dengan jumlah dari keseluruhan penonton (pemirsa) di televisi. *Share* ini merupakan persentase daripada jumlah pemirsa atau suatu target dari pemirsa pada suatu ukuran satuan di dalam waktu tertentu yang ada pada satu *channel* tertentu dari total terhadap pemirsa yang ada di semua *channel* (Aldi & Budihardjo, 2020).

Salah satu cara untuk menarik banyak penonton diperlukan adanya strategi *programming*, yang merupakan sebuah cara terbaik, bagaimana kiranya program ini dapat menarik penonton (*audiens*) sebanyak mungkin dan juga untuk mempertahankan pemirsa agar tetap menonton program yang ditayangkan sebagai penonton setia. Oleh karenanya, seorang *programmer* harus dapat memahami karakteristik dari audienya. Perbedaan karakter dari para *audiens* ini menujukkan bahwa *audiens* akan cenderung beralih saluran pada saat program acara itu selesai. Beralihnya seorang *audiens* di dalam menentukan satu saluran televisi ini terjadi pada satu titik perpindahan antara satu program ke program selanjutnya. (Auzinii Fitrizhia Putri Triyana, 2020).

Strategi *programming* dibutuhkan media televisi agar dapat merencanakan program-program yang dibuat dan ditayangkan tersebut sehingga dapat menarik minat menonton serta para pemasang iklan. Dengan tidak adanya strategi *programming* yang matang dapat dipastikan bahwa televisi akan kehilangan penontonnya dan juga para pengiklan. (Susanto, 2009)

Mengacu pada penelitian yang dilakukan oleh Auzinii Fitrizhia Putri Triyana (2020), dimana pengkajian ini memiliki tujuan untuk mengetahui strategi program Indonesia Pintar di SCTV. Metode penelitian yang digunakan adalah deskriptif kualitatif. Hasil penelitiannya memaparkan bagaimana program *Indonesia Pintar* menggunakan strategi *programming* dari

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Susan Tyler Eastman dan Douglas A. Ferguson yang terdiri dari *selecting*, *scheduling*, *promotion*, dan *evaluation* dengan menggunakan strategi *counter programming*.

Kajian berikutnya ditulis oleh Adi Pratama Putra (2019), tujuan dari penelitian ini adalah untuk mengoptimalkan jumlah audien yang menjadi sasaran utama bagi pengiklan. Hasil penelitian menyatakan bahwa program *Metro Pagi Primetime* telah menggunakan strategi *programming* menurut *(Eastman & Ferguson, 2011)*, yaitu *Selection, Scheduling, Promotion*, dan *Evaluating*. Selain strategi produksi program *Metro Pagi Primetime* yang sudah cukup bagus, program ini juga mengemas konten dalam bentuk visual (*Visual Animated*) yang berguna dan mempermudah bagi masyarakat dalam menangkap informasi.

Penelitian lainnya yang ditulis oleh (Fahruddin & Asy'ari, 2019), dengan tujuan untuk memahami bagaimana teori strategi pemrograman Sydney W. Head diterapkan pada program dakwah ADiTV. Penelitian ini menggunakan metode kualitatif untuk menganalisis data yang dikumpulkan selama tahap observasi, wawancara, dan dokumentasi. Hasil penelitian menunjukkan bahwa strategi pemrograman ADiTV konsisten dengan lima elemen teori strategi pemrograman Sidney W. Head.

Hasil riset seperti yang dijelaskan diatas, memiliki kesamaan dan juga perbedaan dengan penelitian yang dilakukan ini. Persamaannya, yaitu sama-sama meneliti tentang strategi *programming* pada sebuah program acara televisi. Sedangkan perbedaannya terdapat pada subjek penelitian. Tujuan dari riset ini ialah untuk mengetahui bagaimanakah strategi programming program acara *Si Otan* di televisi Trans7.

Untuk mencapai popularitas dan mutu yang tinggi, acara televisi penting mempunyai strategi tertentu agar dapat menaikkan dan mempertahankan minat menonton masyarakat. Penempatan jam tayang, jenis tayangan yang diberikan, dan juga penamaan sebuah acara pun bisa menjadi strategi yang menarik perhatian masyarakat agar menonton acara tersebut. Jadi, strategi dalam pembuatan acara televisi harus dipersiapkan dan dipikirkan secara matang (Susanto, 2009).

Diperlukan ide, kreativitas dan inovasi yang tinggi dari para kreator untuk membuat program TV sehingga menjadi sebuah strategi yang tujuannya agar tayangan itu dapat diminati oleh pemirsa sehingga dapat menaikkan ataupun mempertahankan rating suatu program TV. Kemampuan seseorang untuk menciptakan sesuatu hal yang dicirikan oleh orisinilitas dalam pengekspresian ide yang imajinatif merupakan kreativitas itu sendiri. (R.M, 1994).

Dalam hal strategi, meskipun tidak semua stasiun televisi memiliki tim kreatif, namun peran tim kreatif sangat dibutuhkan dalam membantu dalam menaikkan atau mempertahankan minat menonton acara tersebut. Tim kreatif diperlukan karena tim kreatif akan berkonsentrasi penuh dalam mengembangkan dan mengeksekusi konten-konten acara yang dibuat dengan kemasan yang rapi dan menarik. (Nova Herinnisa, 2016).

Di Indonesia Trans7 adalah salah satu stasiun televisi swasta nasional. Sebelumnya menggunakan nama TV7 dengan penayangan perdana pada tanggal 25 November 2001. Setelah itu stasiun tersebut mengubah nama meenjadi Trans7 pada tanggal 4 Agustus 2006 setelah 55% saham milik PT Duta Visual Nusantara Tivi Tujuh dibeli oleh Trans (Kemenkominfo, 2019).

Sampai saat ini, Trans7 masih setia menghibur masyarakat Indonesia melalui tayangan-tayangan yang mereka sajikan. Selain menghibur Trans7 juga memiliki tayangan-tayangan yang cukup mengedukatif. (Zamai et al., 2016). Salah satu contoh tayangan yang di sajikan adalah acara "Si Otan", setiap Senin hingga Jumat pukul 13:00-13:30 WIB.

Acara Si Otan adalah acara yang menyajikan tayangan tentang dunia binatang baik dari darat maupun air, yang dikemas secara informative, akan tetapi diselingi dengan hiburan, untuk dapat mengedukasi penontonnya terutama bagi kalangan anak-anak. Program ini memiliki

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

karakter utama yang berbentuk animasi yaitu Si Otan itu sendiri dan temannya yang bernama Dolphino. Si Otan dan Dolphino berinteraksi dengan hewan yang sedang menjadi topik pembahasan sehingga anak-anak tertarik untuk menonton acara tersebut. Seperti yang dikatakan oleh MSG, selaku produser program acara Si Otan, jumlah rating dan Share program acara Si Otan pada bulan Januari yaitu 7.6%, bulan Februari 7.8%, dan bulan maret 7.7%.

Penelitian ini menggunakan teori strategi dari Sydney W.Head (Fahruddin & Asy'ari, 2019) yang menguraikan lima elemen1yang1perlu1dicermati dalam strategi pemrograman, yaitu 1) Kesesuaian Program acara—Disusun berdasarkan keseharian penonton. 2) Membangun Kebiasaan—Kebiasaan penonton dibentuk melalui program yang ditayangkan. 3) Mengontrol Aliran Pemirsa—Ketika sebuah program selesai ditayangkan, maka program berikutnya disajikan. 4) Pemeliharaan Sumber Daya Progam—terkadang program acara yang terkenal dan digemari banyak penonton sekalipun bisa menjadi kuno. 5) Daya Tarik Yang Luas—Program acara yang ditayangkan bisa menjangkau khalayak luas, baik secara teknis dan juga sosial.

Berdasarkan uraian tersebut, terdapat permasalahan di dalam penelitian ini, yakni Bagaimana Strategi Programming diterapkan pada program acara Si Otan di Trans7. Tujuannya, untuk mengetahui Strategi Programming pada program acara "Si Otan" yang ditayangkan oleh stasiun televisi Trans7. Adapun manfaat praktis dari penelitian ini, dapat memberikan wawasan, ilmu pengetahuan baik kepada praktisi dan stasiun Trans 7, strategi programming yang dilaksanakan untuk program acara Si Otan dan kesesuaiannya dengan strategi programming dari Sydney W. Head. Sedangkan manfaat teoritis/akademisi, penelitian ini diharapkan dapat memberikan andil sebagai acuan kepada peneliti selanjutnya yang tertarik dalam membedah lebih dalam apa saja yang belum dikaji dalam pelitian ini.

METODOLOGI

Metode penelitian adalah usaha untuk menemukan, mengembangkan dan menilai keaslian pengetahuan melalui cara-cara ilmiah. Sebuah penyelidikan harus menggunakan metode yang memadai. Penelitian ini adalah penelitian deskriptif dan kualitatif dimana data yang didapat berupa kata-kata dan gambar.

Menurut Creswell metode penelitian kualitatif adalah suatu pendekatan atau penelitian untuk menggali dan memahami sebuah fenomena. Untuk mengetahui gejala tersebut, penganalisa mewawancarai responden dengan melontarkan pertanyaan yang konvensional dan bersifat global. Data tersebut kemudian dirangkum kedalam sebuah naskah atau teks. (Tanzeh & Arikunto, 2014) Penelitian kualitatif memberikan hasil penemuan, yang tidak bisa di dapatkan dengan menggunakan tata cara statistik atau dengan metode kuantitatif lainnya (Dr.farida Nugrahani, 2014).

Teknik yang digunakan dalam pengumpulan data dari penelitian ini dilakukan melalui beberapa tahapan, yaitu: Pertama, observasi partisipasi. Penelitian ini menggunakan pendekatan observasi dan wawancara mendalam. Menurut Riyanto (ghazali, 2019), yang di maksud dengan metode observasi adalah metode yang pengumpulan datanya menggunakan pengamatan secara langsung ataupun sebaliknya.

Observasi yaitu sebuah proses pengamatan serta penyalinan yang terancang, absah, objektif, dan masuk akal dari berbagai kejadian, dalam kondisi yang nyata maupun di dalam kondisi buatan untuk menghasilkan tujuan tertentu. Fungsi observasi ialah untuk mengetahui ketepatan diantara pengaplikasian tindakan dengan rencana yang telah dirancang sebelumnya serta mengetahui pengaplikasian yang sedang berjalan, sehingga diharapkan dapat menghasilkan perubahan yang diinginkan (Tanzeh & Arikunto, 2014).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Tahap kedua, wawancara mendalam (*in-depth interview*) guna memvalidasi informasi yang diperoleh sebelumnya. (Sugiyono, 2016). Menurut Esterberg (Oliver, 2017), wawancara ialah pertemuan dua orang atau lebih untuk bertukar informasi atau suatu gagasan melalui sebuah proses tanya jawab, sehingga menghasilkan sebuah determinasi atau suatu garis besar dalam tema tertentu. Adapun menurut Blaxter, Hughes, & Thight, menyampaikan bahwa metode wawancara melibatkan orang-orang yang bersangkutan dengan penelitian untuk diajukan pertanyaan atau pembahasan untuk mendapatkan informasi yang diperlukan (Nugraha, 2015).

Sebagai Informan dalam penelitian ini, terdapat informan kunci yang diwakilkan oleh MSG (selaku Produser Program Acara Si Otan), dan juga didukung oleh informan pendukung lain yaitu CSR (selaku Tim Kreatif program acara si otan), serta ada juga JS (selaku Penghoby dan Animal Lover sekaligus penonton acara si Otan). Tahapan ketiga adalah dokumentasi berbentuk data atau fakta yang tersimpan di server, atau website (Bungin, 2011).

Penenlitian ini menggunakan Teknik Analisis data model interaktif dari Miles dan Huberman yang dilakukan dalam tiga tahap, yaitu (a).Tahap reduksi data (b).Tahap penyajian data (c).Tahap penarikan kesimpulan atau verifikasi.

Kumpulan data tersebut kemudian ditelaah. Hasil dari penelitian kemudian dijabarkan dengan penelitian yang dilakukan terdahulu oleh ilmuwan lain. Hasil akhir dari penelitian kualitatif kemudian dimanifestasikan kedalam laporan tertulis (Penelitian Kualitatif– Universitas Raharja, N.D.).

Oleh karenanya, penulis, akan membuat analisis berdasarkan realita yang ada, di mana semua bertujuan mendapatkan kesimpulan yang digunakan untuk mengambil dan memutuskan langkah selanjutnya. Pengambilan keputusan selanjutnya sangatlah penting untuk dilakukan, mengingat banyaknya acara dan stasiun-stasiun TV lainnya maka diperlukan strategi supaya dapat mempertahankan rating atau malah bisa menarik lebih banyak penonton untuk menaikan rating acara “Si Otan”.

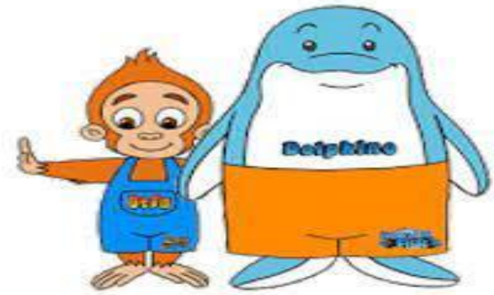
HASIL DAN PEMBAHASAN

Tujuan dari penelitian ini adalah untuk mengetahui Strategi Programming pada program acara *Si Otan* di Trans7. Program *Si Otan* ini berisi tentang kehidupan dari berbagai macam hewan/binatang. Mencakup mulai dari bagaimana binatang memproduksi, nama latin dari binatang, metamorphosis maupun gaya hidup. Program ini semakin bertambah seru dengan adanya narator *Si Otan* yang pandai menerangkan dengan improvisasi dan gaya yang lucu (kapanLagi.Com, n.d. 2012).

Teori strategi pemrograman yang digunakan dalam penelitian ini mengacu pada strategies & practices dari Sydney W, Head (1996) dalam (Fahruddin & Asy’ari, 2019), dengan indikator penilaian, yaitu dalam siaran televisi perlu memperhatikan lima elemen dalam melakukan strategi programming, yaitu a) *Compatibility* (kesesuaian), b) *Habit* formation (membangun kebiasaan), c) *Control audience flow* (mengontrol aliran pemirsa), d) *Conservation of program resource* (pemeliharaan sumberdaya program) dan, e) *Breadth of appeal* (daya tarik yang luas).

Sejak tahu 2008, program acara Si otan adalah, program acara yang menyajikan tayangan berupa dunia hewan yang dikemas secara edukatif, dan ditayangkan pada saluran televisi Trans 7. Pogram acara *Si Otan* ini dimaksudkan untuk mengedukasi bagaimana kehidupan hewan, dan juga tentang pentingnya melestarikan hewan yang ada pada anak-anak (Informan Kunci MSG, 28 Januari 2022).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4



Gambar 1. Foto Ikon Si Otan dan Dolphine
Sumber: (Otan, n.d.)

Compatibility (Kesesuaian)

Didalam dunia penyiaran, program-program acara harus bias menyesuaikan dengan keseharian penonton yang berbeda-beda. Hal seperti kebiasaan sarapan, waktu beristirahat, dan jam bekerja, pasti berbeda waktu ehingga bias menjadi tolak ukur bagi stasiun televisi dan radio dalam melaksanakan kebijakan programming-nya. (Ii et al., 2019) Seperti yang dijelaskan penempatan program acara Si Otan juga menyesuaikan dengan segmentasi audien mereka yaitu anak-anak. Dari wawancara yang peneliti lakukan Bersama informan, bahwa:

Penempatan waktu sangat berpengaruh dalam menarik minat penonton, penempatan waktu yang salah dapat menyebabkan menurunnya minat khalayak untuk menonton acara tersebut. Program acara Si Otan ditayangkan setiap hari Senin sampai Jumat pukul 13:00 WIB hingga 13:30 WIB. Sudah banyak perpindahan jam tayang yang sudah dilakukan oleh program acara si otan, dan jam 13:00 WIB adalah penempatan waktu yang paling tepat sejauh ini. (Informan kunci MSG, 28 Januari 2022).

Pengelola acara harus bisa mengatur waktu dan jam siaran dengan mempertimbangkan beberapa variabel seperti muatan program, sasaran audiens dari program secara keseluruhan (Subandi, 2019). Menurut infomasi yang didapatkan dari hasil wawancara dengan informan bahwa:

Dalam menentukan waktu jam tayang, perlu disesuaikan dengan keseharian dari pemirsa itu. Ada penggolongoan jam-jam tertentu seperti pagi hari segmennya untuk siapa, siang hari untuk siapa dan seterusnya. Jadi kesesuaian juga perlu dilihat dari kebiasaan yang dilakukan oleh pemirsa. (Informan Kunci MSG, 28 Januari 2022).

Oleh sebab itu, media televisi diharuskan untuk menciptakan program yang sesuai dengan keseharian audiensnya yang selalu berbeda-beda. Maka, diperlukan penjadwalan program yang tepat (*Ardiani*, 2020). Hal ini tentu akan sesuai dengan informasi dari informan kunci yang menyampaikan bahwa pergesaran waktu yang dilakukan oleh tim program menunjukan adanya tingkat ketertarikat atau minat penonton yang meningkat.

Gambar 2. Foto Ikon Si Otan di Hutan
Sumber: (Si_Otan_1516277352, n.d.)

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Habit Formation (Membangun Kebiasaan)

Menurut Sydney, setiap stasiun televisi dan radio harus bisa mengetahui kebiasaan target penonton dan pendengarnya. Dalam poroses membangun kebiasaan ini biasanya muncul sikap fanatik dari audiens terhadap suatu program acara, sehingga audiens tidak akan berpindah dari program acara yang sedang disiarkan. Dari sikap ini sehingga tercipta penonton yang fanatic dan terus menonton program acara yang ditayangkan, sehingga meciptakan dampak pada lamanya pemasang iklan untuk melakukan promosi.(Fahruddin & Asy'ari, 2019).

Dengan penempatan program yang sudah sesuai, maka khalayak akan terbiasa untuk menonton program acara Si Otan. Dengan karakteristik utama dari acara tersebut yang membahas tentang segala hal tentang dunia binatang yang dikemas secara edukatif, serta mengangkat tema-tema yang sedang trending di masyarakat, serta mengatur fariasi dan juga ketegangan dari setiap segmentasinya, sehingga menciptakan kebiasaan kepada khalayak yang ingin mengetahui seputar dunia binatang untuk menonton acara Si Otan. (Informan Kunci MSG,28 Januari 2022)

Kebiasaan audiens perlu dibangun melalui sebuah program acara. Bukan mengherankan jika penonton terkadang menjadi sangat tertarik terhadap program tersebut (*Ardiani*, 2020). Hal ini didukung dengan pernyataan dari informan berikut ini:

Kalau fanatisme ada klasifikasinya tersendiri, jadi ketika membuat program tidak hanya sekedar asal membuat program, tetapi setiap progam yang digarap memiliki pemetakannya masing-masing. Misalnya ada pemirsa yang suka dialog yang serius, santai ataupun lucu, harus dibangun program yang sesuai dengan segmentasi audien. (Informan pendukung, CSR, 8 Februari 2022)

Pembentukan kebiasaan disini adalah menciptakan kebiasaan menonton sebagai hasil dari perencanaan program acara melalui peninjauan yang seksama. Oleh karena itu, penyajian program acara berlangsung secara terstruktur dan selalu berada di penempatan waktu yang sama dalam jangka waktu tertentu (Martiatiana, 2019). Sejalan dengan pemaparan dari narasumber, penempatan dan penyajian program yang sesuai dapat menarik minat penonton untuk menyaksikan program tersebut dan menciptakan kebiasaan untuk mengikuti program tersebut dikemudian harinya. Seperti juga yang dikatakan oleh nara sumber pendukung:

Program acara si otan cukup memperhatikan perkembangan yang terkait dengan pembahasan program acara mereka yaitu tentang dunia binatang. Program acara si otan membawakan segmentasi yang cukup uptudate terkait dunia binatang tersebut, tentang hewan hewan yang sedang "happening" dikalangan pecinta binatang dengan dikemas secara menarik dan edukatif, dan hal itu cukup membantu terutama dikalangan pencinta binatang untuk mengetahu perkembangan yang sedang terjadi. (Informan Pendukung ZN, 12 Februari 2022).

Gambar 3. Ikon Si Otan bersama penggemar
Sumber: (*Bilibili.Tv*, n.d.)

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Control of Audience Flow (mengontrol aliran pemirsa)

Stasiun televisi dan juga radio berupaya untuk mengoptimalkan jumlah audiensnya dan juga berusaha untuk mengurangi kemungkinan terjadinya aliran keluar dari para audiens yang berpindah *channel* ke *channel* lainnya. Cara yang dapat diterapkan adalah dengan metode *countering* (menyajikan program acara yang lebih bervariasi dibandingkan dengan televisi atau radio lain) atau dengan cara menggunakan metode *blunting* (menyajikan program acara yang mirip dengan televisi atau radio lain) (Fahruddin & Asy'ari, 2019).

Untuk menarik perhatian khalayak, mengontrol ketegangan dan variasi dari acara serta mengetahui siapa saja yang menonton acara tersebut. Progam acara bisa mengetahui dan juga mempelajari tipe acara dan juga segmentasi seperti apa yang disukai oleh khalayak karena stasiun televisi mendapatkan hasil penghitungan survei Rating dan Share yang dilakukan oleh Elsi Nelson. (informan Kunci MSG, 28 Januari 2022)

Pengelola penyiaran harus terus berupaya agar program-program yang disajikan bisa terlihat berbeda atau unik agar menjadi program yang di unggulkan dan disukai oleh audiensnya. Kreatifitas adalah suatu hal yang penting dalam memenangkan persaingan ini (Masyitoh, 2018). Hal ini sejalan dengan pemaparan dari narasumber berikut ini:

Keunikan dan juga daya jual dari program menciptakan daya tarik tersendiri. Pemilihan tema yang sedang trending di masyarakat, ketegangan acara, fariasi acara serta program acara yang terus berkembang adalah kunci agar khalayak tidak merasa bosan saat menyaksikan program acara tersebut, Mengerti dengan keinginan masyarakat dan terbuka dengan apa yang sedang menjadi trend dimasyarakat. (informan pendukung, CSR, 8 Februari 2022).

Ide dan materi kreatif bisa didapatkan dengan mengolah dan menemukan dari berbagai aspek yang mungkinkan, karena hal ini berfungsi penting untuk menciptakan inovasi serta1ide-ide dalam bentuk program baru, untuk memelihara imajinasi pendengar. (Masyitoh, 2018). Sehingga dapat mengontrol aliran pendengar dan tetap bertahan pada statisiun televisi yang sama dan mengetahui juga pada satu program yang sama pada waktu yang lama.

Gambar 4. Ikon Si Otan bermain di air
Sumber : (Youtube.com, n.d.)

Conservation of program resources (pemeliharaan sumber daya program)

Program acara televisi dan radio disiarkan sepanjang hari, sehingga harus bisa memperhitungkan ketersediaan materi serta sumber daya lainnya yang menopang jalannya program acara. Berbagai cara harus disiapkan agar bahan untuk melakukan siaran dapat disiapkan hanya dengan menggunakan materi dan sumber daya yang tersedia, contohnya seperti melakukan pengemasan kembali atau menggunakan pendekatan dan metode penyajian yang berbeda (Putra. 2019).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Dengan penelitian yang telah peneliti lakukan untuk menjaga kesediaan bahan dan sumber daya lain yang menopang program acara Si Otan tetap terlaksana, menurut CSR selaku Tim Kreatif acara Si Otan yaitu:

Untuk mendapatkan ide-ide baru dalam pemilihan tema yang diangkat, program acara SI Otan mendapatkan informasi seputar hewan atau mengetahui jenis-jenis hewan baru dari para penghoby hewan.(Informan Kunci, CSR, 8 Februari 2022)

Dalam hal pemeliharaan, tim kreatif pada program acara si Otan berupaya untuk terus memunculkan ide baru dan menyajikan informasi seputar dunia hewan secara menarik dengan melakukan riset mendalam terhadap materi yang akan disiarkan. Selain itu juga dengan melihat trend saat ini yang sesuai *dengan program yang ditayangkan, agar dapat mendukung isi dari program tersebut. Rating yang ada saat ini menunjukkan di angka 8.5, hal ini adalah hal baik yang selalu dipertahankan oleh tim kreatif untuk mengembangkan materi yang segar setiap harinya untuk dinikmati. (Informan Kunci MSG, 28 Januari 2022).*

Bukan hanya penonton, isi atau konten program merupakan aspek penting yang harus diperhatikan seorang produser. Pemilihan konten dan isi dari program merupakan salah satu contoh dari pengaplikasian pemeliharaan sumber daya1program. (Ardiani, 2019).

Gambar 5. Ikon Si Otan
Sumber : (Youtube.com, n.d.)

Gambar 6. Si Otan dan Ular
Sunber : (Pinterest.com, n.d.)

Breadth of appeal (daya tarik yang luas)

Media penyiaran harus memperhatikan perbedaan minat dan kesukaan dari para audiensnya. Oleh karena itu, kita perlu mengupayakan sebuah program yang menarik dan dapat memperhitungkan semua minat dan preferensi pemirsa. Sehingga program siaran dapat menjangkau pemirsa yang luas, baik secara teknis maupun sosial.(Triyana, 2021).

Dalam penelitian yang telah peneliti lakukan, program acara Si Otan berupaya untuk mengerti dengan keinginan masyarakat dan terbuka dengan apa yang sedang menjadi topik utama di kalangan masyarakat, mengontrol ketegangan dan fariasi dari acara Si Otan serta mengetahui siapa saja yang menonton acara program acara Si Otan, serta program acara yang terus berkembang adalah kunci agar khalayak tidak merasa bosan dalam menonton program acara Si Otan. (Informan Kunci MSG, 28 Januari 2022)

Program Si Otan juga memiliki tujuan awal yang melandasi pembuatan program ini, seperti yang dijelaskan informan berikut ini:

Program Si Otan hadir karena adanya konservasi hewan. Pada 2008 tahun dimana program Si Otan dibuat *saat terjadi banyak pemburuan hewan dan hal itu masih sering terjadi hingga saat ini. Dari situlah tim berangkat untuk membuat program Si Otan yang dapat mengedukasi audience untuk lebih menghargai dan menyayangi makhluk hidup lebih hewan. (Informan kunci, MSG, 28 Januari 2022)*

Selaku pecinta binatang dan turut terjun kedalam hal-hal yang terkait seputar dunia binatang, program acara si otan cukup menambah wawasan terkait dunia binatang tersebut,

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

dengan mengangkat bahasan yang sedan menjadi tren di kalangan pencinta binatang, pembawaannya yang ringan dan juga unik serta mengajarkan terutama untuk anak-anak pentingnya melindungi hewan membuat program acara memiliki daya tarik tersendiri. (Informan Pendukung ZN, 12 Februari 2022)

Berdasarkan hasil wawancara tersebut, dapat disebutkan bahwa dengan adanya program acara Si Otan ini, memiliki daya pikat tersendiri terutama pada ranah anak-anak dan pencinta hewan, karena selain memperkenalkan serta mengedukasi tentang dunia binatang. Program acara Si otan juga turut mengajak *audience*-nya untuk melindungi hewan dan menjaga kelangsungan hidup hewan baik yang dilindungi maupun yang tidak dilindungi.

Gambar 7. Ikon Si Otan menangis dikuburan harimau di tembak pemburu liar
Sumber: (Youtube.com)

Gambar 8. Ikon Si Otan menangis melihat
Sumber: (Youtube.com, n.d.)

SIMPULAN

Berdasarkan hasil penelitian "Strategi Programing Acara Si Otan Di Trans7 Dalam Mempertahankan Rating" yang didapat melalui proses wawancara, maka kesimpulan yang diperoleh sebagai berikut:

Pertama, dari strategi programming Kesesuaian (Compability), sudah cukup baik dalam segi penyususnan program acara, serta sudah1memiliki korespondensi antara program acara dengan keseharian pendengar yang berbeda-beda. Kedua, dari strategi programming, membangun Kebiasaan(Habit Formation), dalam hal ini program acara Si Otan berhasil membangun pandangan baru di masyarakat mengenai unsur hiburan dan edukasi dalam sajian animasi yang mengajarkan tentang dunia hewan. Ketiga, dari strategi programming Mengatur Alur Penonton(Control Audience Flow), Tim Produksi program acara Si Otan bisa mengontrol ketegangan dan variasi dari acara serta mengetahui siapa saja yang menonton acara tersebut sesuai dengan segmentasinya. Keempat, dari strategi programming Pemeliharaan Sumber Daya Program(Conservation of Program Resource) dalam hal pengemasan materi, inovasi konsep, serta inovasi konten sudah sangat baik karena seluruh aspek sama-sama meningkatkan keterampilan dan pengemasan secara merata dan meningkatkan kualitas program dalam segala hal. Kelima, dari strategi Programming Daya Tarik Luas(Breadth of Appeal) daya tarik program ini cukup kuat mengingat pengemasan program acara Si Otan yang unik serta memiliki ciri khas tersendiri yang tidak banyak dimiliki oleh program acara anak-anak lainnya.

Dari uraian ini dapat disimpukan bahwa strategi programing pada acara Si Otan yang disiarkan oleh stasiun TV-Trans7 menunjukkan hasil yang signifikan dan sudah menerapkan strategi pemrograman menurut Sydney W. Head yang mencakup lima elemen tersebut, yaitu ; a) Compatibility (Kesesuaian) Program acara, b) Habit Formation (Membangun Kebiasaan), c) Control of Audience Flow (mengontrol aliran pemirsa), d) Conservation of program

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

resources (pemeliharaan sumber daya program), dan e) Breadth of appeal (daya tarik yang luas), senua seluruhnya sudah sejalan dan baik dilakukan, sehingga dapat menentukan kesuksesan dan kelangsungan hidup sebuah program acara dengan banyak penontonnya serta berisi muatan edukasi.

DAFTAR PUSTAKA

10 Program TV yang Cocok Untuk Anak, Nomor 7 Animasi Asal Indonesia - KapanLagi.com. (n.d.). Retrieved August 14, 2021, from https://www.kapanlagi.com/showbiz/televisi/10-program-tv-yang-cocok-untuk-anak-nomor-7-animasi-asal-indonesia-number-0fdf54.html

Aldi, M., & Budihardjo, H. S. (2020). *STRATEGI TIM KREATIF MEMPERTAHANKAN RATING AND SHARE DALAM PROGRAM OPERA VAN JAVA (OVJ) DI TRANS* 7. 2(2), 1–14.

bilibili.tv. (n.d.). https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.bilibili.tv%2Fid%2Fvideo%2F2003767033&psig=AOvVaw2wdaYmbtw_5Wj0kFP0W3fk&ust=1649422726280000&source=images&cd=vfe&ved=2ahUKEwiRqN_OgIL3AhW2jNgFHSmbAPYQr4kDegUIARC6AQ

Dr.farida Nugrahani, M. H. (2014). *dalam Penelitian Pendidikan Bahasa*. 信阳师范学院, 1(1), 305. http://e-journal.usd.ac.id/index.php/LLT%0Ahttp://jurnal.untan.ac.id/index.php/jpdpb/article/viewFile/11345/10753%0Ahttp://dx.doi.org/10.1016/j.sbspro.2015.04.758%0Awww.iosrjournals.org

Fahruddin, A., & Asy'ari, N. A. S. (2019). *Kajian Teori Strategi Programming Sydney W. Head pada Program Acara Dakwah ADiTV*. ProTVF, 3(1), 1. https://doi.org/10.24198/ptvf.v3i1.21207

Ghazali, A. (2019*). Wawancara* 4. 20–27. https://doi.org/10.31219/osf.io/2mqxg

Ii, B. A. B., Program, P. S., & Fahruddin, A. (2019). *KAJIAN PUSTAKA A . Strategi Program 2 . Teori Strategi Program a . Perencanaan program*. 1(2), 5–31.

Kemenkominfo. (2019, September 2). https://www.baktikominfo.id/id/informasi/artikel-media/kemkominfo_resmikan_penyiaran_tv_digital_untuk_perbatasan-927

Masyitoh, R. (2018). *Strategi Dakwah Program Radio SAS FM Surabaya*. 1(2), 51–66.

No Title. (2020).

Nugraha, M. S. (2015). *Pembelajaran PAI Berbasis Media Digital*. Universitas Pendidikan Indonesia.

Oliver, J. (2017). Evaluasi Bauran Promosi Dalam Meningkatkan Loyalitas Pelanggan Claine. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Otan. (n.d.). *No Title Si Otan Dan Dolpino*. https://mobile.twitter.com/DuniaAir_Trans7/photo

Para, M. (2010). *Pengertian_televisi_Menurut_Para_Ahli*. 1985.

PENELITIAN KUALITATIF – UNIVERSITAS RAHARJA. (n.d.). Retrieved June 23, 2021, from https://raharja.ac.id/2020/10/29/penelitian-kualitatif/

Pinterest.com. (n.d.). No Title.

Putra, A. P., Shintya, Z., & Arisanty, M. (2019). Strategi Programming Program “Metro Pagi Primetime” Dalam Mempertahankan Rating. *Jurnal Common*, 3(1), 1–25. https://doi.org/10.34010/common.v3i1.1501

R.M, M. (1994). *Kreativitas*. Mudra (JURNAL SENI BUDAYA), 2, 1–1.

Sanityastuti, M. S. (2007). “Membaca” Televisi Indonesia, Sebuah Upaya Menyikapi Tayangan Televisi. *Jurnal Komunikasi*, 2(1), 189–200.

Si_Otan_1516277352. (n.d.).

Subandi, P. E. S. (2019). *UPT Perpustakaan ISI Yogyakarta UPT Perpustakaan ISI* Yogyakarta. Computers in Human Behavior, 63(May), 9–57.

Susanto, E. H. (2009). Rating Televisi dan Masyarakat Desa. *Jurnal Komunikasi Universitas Tarumanagara*, 1(February 2009), 52–61.

Tanzeh, A., & Arikunto, S. (2014). *Metode Penelitian Metode Penelitian*. Metode Penelitian, 22–34.

Tinggi, S., Komunikasi, I., Surabaya, A. W., Salah, M., Persyaratan, S., Program, M., Ilmu, S., & Disusun, K. (2019). *STRATEGI PROGRAMMING RADIO MERDEKA FM SURABAYA DALAM MENGOPTIMALKAN TARGET AUDIENS GRESIA ZUMARDA MARTHATIANA NPM : 15010071 KEKHUSUSAN : BROADCASTING SEKOLAH TINGGI ILMU KOMUNIKASI.*

Triyana, A. F. P. (2021). Strategi Programming Program Indonesia Pintar SCTV. Inter Script: *Journal of Creative Communication*, 2(1), 1–14. https://journal.interstudi.edu/index.php/interscript/article/view/437

Youtube.com. (n.d.). Si Otan. https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3DHc8mEupoouk&psig=AOvVaw2AT8pfH8uKEvV54DtwlGhg&ust=1649423127339000&source=images&cd=vfe&ved=2ahUKEwjTg_6NgoL3AhUdj9gFHV0QAdwQr4kDegUIARCBAg

Zamai, C. A., Bavoso, D., Rodrigues, A. A., & Barbosa, J. A. S. (2016).

Kajian Sintesis Cashless Society di Indonesia

Dwi Rahmawati[1], Raden Aswin Rahadi[2]
[1]Universitas Terbuka, Tangerang Selatan, Indonesia
[2]Institut Teknologi Bandung, Bandung, Indonesia
e-mail: dwirasuryo@gmail.com

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

The emergence of technology 4.0 as a solution provider for economic development in the midst of the COVID-19 pandemic. Financial literacy variable, which has a positive influence on attitudes in non-cash transactions, attitudes, which have a positive influence on intentions in non-cash transactions. This study aims to analyze the synthesis literature of the cashless society condition in Indonesia. The semi-systematic or narrative literature review technique is intended for issues that have been understood differently and explored by diverse groups of researchers in different fields, causing the complete systematic review process to be hampered. The practical and pleasant cashless society culture cannot be isolated from the numerous plastic card services that are issued with advancements in the many features supplied. In Indonesia, there are several e-wallet service providers ranging from huge corporations to bank institutions to digital start-ups, at least there are top five e-Wallet used in Indonesia such as GoPay, OVO, DANA, and LinkAja. According to one study, the supporting environment, performance expectations, and social influence all had an impact on the actual use of e-payment. Based on the comparative factors conducted, the advantages are very likely to outweigh the dangers. As a result, creating a cashless society might be more beneficial in the context of Indonesia.

Keywords*: Cashless Society, E-Wallet, Digital Financial Service*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

The Covid-19 epidemic, which had already spread globally, caused a significant lifestyle transformation in Asia, notably in Indonesia, by the end of 2019. People's normal lives were disrupted by quarantine; they couldn't go to work, dine at a restaurant, play sports in a sports center, or attend entertainment events (Rahmawati et al., 2021). As previously stated, new coronavirus, or SARS-Cov2, can be easily transferred if droplets from an infected individual land on inanimate things nearby and are then handled by other people. When handled by an infected individual, physical money might become a vehicle for the virus. As a result, the WHO advised utilizing digital money wherever feasible. Prior to this epidemic, cashless payments using cellphones had been popular in numerous developing nations, like Thailand, Vietnam, and Indonesia PWC (2019). According to the Global Consumer Insight Survey 2019, Thailand has a 67 percent customer or 19 percent increase in mobile payment transactions, trailing Vietnam and the Middle East by 24 percent and 20 percent, respectively (Aji et al., 2020).

In today's digital age, financial technology development is accelerating, particularly for desktop and mobile apps. The primary drivers of this phenomena are the need for convenience and the demand for simple transaction services (Persada et al., 2021). Technological advancements have also enabled a wide range of different functionalities for mobile apps, enabling a variety of mobile financial applications such as bill paying, wallet transactions, person-to-person transactions, point-of-sale proximity payments, online payments for purchases of products and services, and other services such as location-based services, mobile ads, ticketing, promotions, or co-operative services (Aminata & Sjarif, 2020). The societal trend toward electronic money has a substantial impact on money circulation but has no impact on the inflation rate. A cashless society is an unavoidable tendency, owing to the constant development in digital payment methods. Support from the Indonesian government through the National Non-Cash Movement (GNNT) initiative established on August 14, 2014 and Go Digital Vision 2020, is one of the drivers of cashless transactions expanding fast in the previous two years, with transaction increase of more than 200 percent (Lonardi & Legowo, 2021)l.

Furthermore, utilizing the idea of acceptance and integrated use of technology, behavioral interest in using electronic wallet transactions (e-wallet) via the Quick Response (QR) code among millennials. In Indonesia, many entities were involved in the establishment and management of payment systems. E-payment, like other electronic environments such as electronic banking (e-banking), electronic shopping (e-commerce), or electronic learning, requires an Internet connection to function (e-learning). Credit cards, electronic wallets (e-wallets), electronic currency, digital checking systems, and wireless payment systems are all sorts of e-payment (Foster et al., 2022; Saputri & Pratama, 2021).

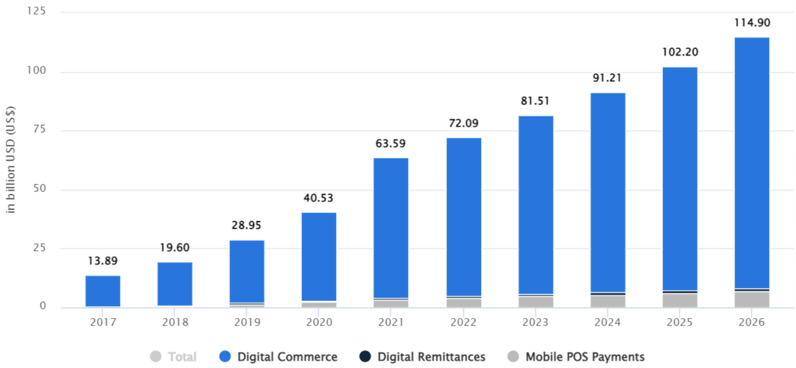


Figure 1. Indonesia Digital Payment Projections
Sumber: Statista, 2022

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

According to (Statista, 2022) total transaction value in the Digital Payments segment is projected to reach US$72.09bn in 2022, total transaction value is expected to show an annual growth rate (CAGR 2022-2026) of 12.36% resulting in a projected total amount of US$114.90bn by 2026. The market's largest segment is Digital Commerce with a projected total transaction value of US$67.31bn in 2022. From a global comparison perspective, it is shown that the highest cumulated transaction value is reached in China (US$3,497.00bn in 2022). Developed economies developed a cashless payment system based mostly on credit cards some decades ago, but the legacy structures have unexpectedly become a burden in recent years. "Western" markets are currently far slower to adopt innovative payment options than emerging economies such as China, India, and Eastern Europe. Until the emergence of mobile payment and wallet technologies that fully rely on accessible mobile technology, a huge portion of the population in the developing economies of Asia, Africa, and Latin America was similarly unbanked.

The development in the e-Commerce and ride-hailing sectors, as well as the significant growth in the digital payment sector, are the key drivers of the digital economy's growth in Indonesia. With a rise of 60 million users over the previous four years, there were as many as 152 million internet users in Indonesia in 2019, indicating that digital-based business would become a lucrative industry in the future. In Indonesia, e-Wallets and digital payments are booming (Prasasti et al., 2021). The current research explores the synthesis literature that analyze drivers of people's perceived readiness for the deployment of digital financial services, which would result in a cashless society. Our emphasis here is on the usage of electronic money for payment and other purposes.

METHODOLOGY

This study employs qualitative research methods. Qualitative procedures use a distinct approach to quantitative research approaches scientific study. Qualitative research employs a variety of philosophical assumptions, inquiry strategies, data gathering methods, analysis, and interpretation. Although the technique is similar, qualitative processes rely on text and picture data, have distinct data analysis phases, and employ a number of investigative strategies (Creswell, 2012). The qualitative technique that will be employed is connected to a study of prior research on the e-Wallet usage in Indonesia.

The semi-systematic or narrative literature review technique is intended for issues that have been understood differently and explored by diverse groups of researchers in different fields, causing the complete systematic review process to be hampered. Semi-systematic reviews, in addition to reviewing a topic, frequently examine how research in the selected field has changed through time or how a topic has evolved across research traditions. While covering a broad topic and various types of studies, this approach states that the research process must be transparent and that a research strategy must be developed that allows the reader to assess whether the arguments for the judgments made are reasonable and appropriate for the chosen one. topic and from a methodological standpoint (Snyder, 2019).

The meticulous selection and reading of books, academic and professional journals, reports, theses, conference proceedings, unpublished papers, and the like determines the quality of the literature review. In general, academic books and journals are the most valuable sources of information. Professional publications, research, and even newspapers can give thorough real-world information about markets, sectors, or companies. As a result, a mix of information resources is nearly always required. The nature and aims of the research endeavor dictate the precise combination of resources (Sekaran & Bougie, 2016).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

RESULTS AND DISCUSSION

Most used e-Wallet

People in numerous regions of the world, including Indonesia, accept mobile-based payments or E-Wallets. E-Wallet has been linked with numerous markets in Indonesia. Tokopedia, for example, has been merged with OVO, while Bukalapak has been integrated with DANA. This demonstrates that E-Wallet users are well-accepted in the community (Wulantika & Zein, 2020). In Indonesia, there are several e-wallet service providers ranging from huge corporations to bank institutions to digital start-ups. According to a report provided by Bank Indonesia on May 27, 2020, there are 48 e-wallet providers in Indonesia that have an official license. E-wallet transactions in Indonesia hit USD 1.5 billion in 2018 and are expected to reach USD 25 billion by 2023. The study conducted by Saputri & Pratama (2021) validates GoPay, OVO, and DANA as the top three e-wallet services in Indonesia by the second quarter of 2020. According to the findings, GoPay has the greatest user base (71.64 percent), while OVO, which is utilized by 65.28 percent of e-wallet users, has the most loyal user base. In this survey, more than 40% of users picked OVO as their most commonly used e-wallet, compared to 31% who preferred GoPay. Meanwhile, DANA, the third-ranked e-wallet in terms of both user base and user loyalty, has the most diverse user attributes of any of them. It appeals to younger and male consumers far more than any other e-wallet service in Indonesia.

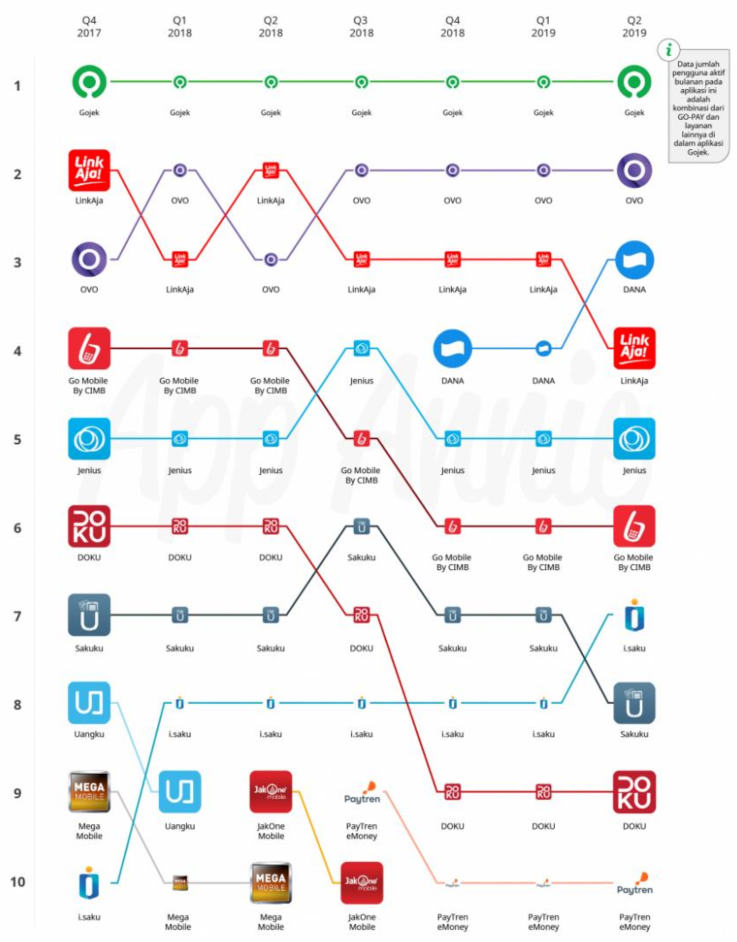


Figure 2. E-Wallet Development in Indonesia
Sumber: Wulantika & Zein, 2020

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

There are several firms in Indonesia that offer electronic wallets or electronic payments. Moreover, the number of people who utilize it is rather large. It is expected that the introduction of an electronic wallet or electronic payment would make it easier for the community to conduct payments or financial transactions, which we already know are quite difficult in the current period. E-Wallets are not only used for buying and selling, but they may also be used as a form of payment for all of the community's requirements, such as power, internet, and other services. Up until 2019 GoPay lead the e-Wallet market in Indonesia followed by OVO, DANA, and LinkAja, this is quite aligned with the study conducted by Saputri & Pratama (2021).

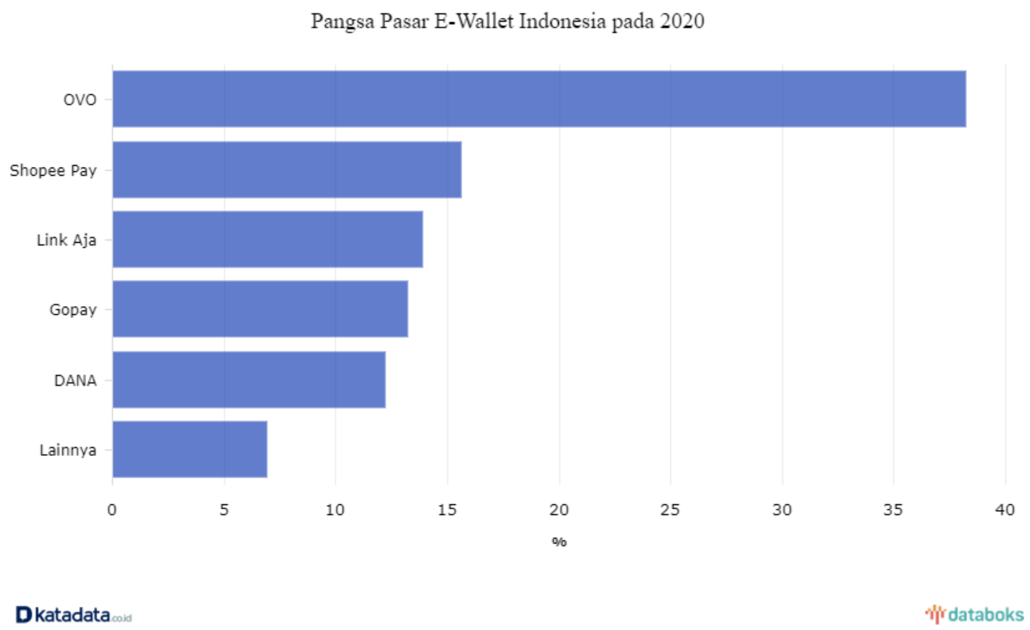


Figure 3. E-Wallet Market Share in Indonesia
Sumber: Katadata, 2021

Furthermore, on Boku Inc. Report The 'Mobile Wallets Report 2021' shows that OVO controlled 38.2% of the digital wallet (e-wallet) market share in Indonesia in 2020. With this market share, OVO transactions reached US$ 10.75 billion last year. This figure is expected to continue to increase over the next five years. The unicorn from Indonesia is predicted to have transactions reaching US$ 40.91 billion. Shopee Pay sits in second place with a market share of 15.6%. Then, LinkAja has a market share of 13.9%. Furthermore, Gopay has a market share of 13.2%. Lastly, DANA has a market share of 12.2% (Katadata, 2021).

Behavior on Cashless Society

According the results from Trinugroho et al. (2017) on examining individuals and regions, there are at least three major elements impacting perceived preparedness for the deployment of digital financial services. The first is infrastructure, namely information and communication technology infrastructure, which is assessed by a perception poll on infrastructure quality. Some demographic criteria associated to financial literacy, such as education and age, play a role in explaining the disparity in perceived readiness to utilize digital financial services. The final category is regional characteristics. These findings are congruent with the previous findings, who discovered that the greater people's financial literacy in the areas, the greater their propensity to engage with formal financial institutions.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Lonardi & Legowo (2021) stated that trust and behavior intention have a direct influence on consumer usage behavior. Behavior Intention has the most direct influence on Use Behavior customers, but Effort Expectancy, Performance Expectancy, Privacy Risk, and Perceived Security have an indirect impact on Use Behavior customers. Perceived security has the greatest direct and indirect influence on trust and behavior intention. It means that in a digital payment system, the perception of security has a significant impact not only on consumer behavior but also on customer faith in the company/institution. Another factor that plays a role is effort expectancy; in the modern era, customers will use systems that are simple to use and allow them to complete transactions more quickly. The privacy risk factor also has an impact on perceived security and trust; this means that customers understand the importance of personal information confidentiality (Lely Savitri Dewi, 2018; Lenniawati & Anastasia, 2021; Rahadi et al., 2022).

Based on the comparative factors conducted by Ewa Abbas (2017), the advantages are very likely to outweigh the dangers. As a result, creating a cashless society might be more beneficial in the context of Indonesia. Access to financial services resulted in a positive movement in these variables, however the advancement could not be classified as quick because no meaningful result was seen. Another study suggests that the second indicator, macroeconomic and cultural, is unlikely to shift quickly. Based on this fact, it is reasonable to say that merchant scale and competitive component are classified as being in a rapidly expanding region. Because of the downward tendency, the following result suggests that there has been little advancement in technology. Otherwise, Persada et al. (2021) and Prasasti et al. (2021) stated that the generation Z who are mostly tech-savvy thinks that infrastructure is not quite a significant effect or obstacles for them affecting the use of e-wallets, yet the promotion and discount program by the providers are more preferable.

The findings found by Anshari et al. (2021) are consistent with other similar technology acceptance studies across various types of IT in which younger people, in this case, millennials and digital natives, were indifferent to perceived beliefs (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions) vis-a-vis behavioral intention, which may be due to the Internet's embeddedness paired with technological advancements where smartphones with Internet connections are already highly integrated into their daily lives. Another study by Rahadi et al. (2021) observed three factors that have been shown to have a substantial influence on the desire to utilize electronic payment devices. First, customers demand electronic payment performance in terms of convenience and speed in performing transactions, which may be addressed to enhance the system. Second, influence from the users' surrounds, such as relatives and family, may be used to develop the promotion plan. Finally, the attributes and characteristics of the users belonging to the culture are critical in selecting a prospective target market to increase market share.

CONCLUSION

In Indonesia, there are several e-wallet service providers ranging from huge corporations to bank institutions to digital start-ups. According to a report provided by Bank Indonesia on May 27, 2020, there are 48 e-wallet providers in Indonesia that have an official license. E-wallet transactions in Indonesia hit USD 1.5 billion in 2018 and are expected to reach USD 25 billion by 2023. According to study by Katadata (2021), Saputri & Pratama (2021), Wulantika & Zein (2020) at least there are top five e-Wallet used in Indonesia such as GoPay, OVO, DANA, and LinkAja. Behavior Intention has the most direct influence on Use Behavior customers, but Effort Expectancy, Performance Expectancy, Privacy Risk, and Perceived Security have an indirect impact on Use Behavior customers. Based on the comparative factors

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

conducted by, the advantages are very likely to outweigh the dangers. As a result, creating a cashless society might be more beneficial in the context of Indonesia. Millennials and digital natives who are more tech-savvy compared with other generations, were indifferent to perceived beliefs (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions) vis-a-vis behavioral intention, which may be due to the Internet's embeddedness paired with technological advancements where smartphones with Internet connections are already highly integrated into their daily lives.

REFERENCES

Aji, H. M., Berakon, I., & Md Husin, M. (2020). COVID-19 and e-wallet usage intention: A multigroup analysis between Indonesia and Malaysia. *Cogent Business and Management*, 7(1), 1–17. https://doi.org/10.1080/23311975.2020.1804181

Aminata, J., & Sjarif, G. E. (2020). Towards a Cashless Society in Indonesia: the Impact on Economic Growth and Interest Rate. *Indonesian Journal of Economics, Entrepreneurship and Innovation*, 1(2), 2721–8287. https://doi.org/10.31960/ijoeei.v1i2.705

Anshari, M., Arine, M. A., Nurhidayah, N., Aziyah, H., & Salleh, M. H. A. (2021). Factors influencing individual in adopting eWallet. *Journal of Financial Services Marketing*, 26(1), 10–23. https://doi.org/10.1057/s41264-020-00079-5

Creswell, J. W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research.*

Ewa Abbas, A. (2017). Literature Review of a Cashless Society in Indonesia: Evaluating the Progress. *International Journal of Innovation, Management and Technology*, 8(3), 193–196. https://doi.org/10.18178/ijimt.2017.8.3.727

Foster, B., Sukono, & Johansyah, M. D. (2022). Analysis of the effect of financial literacy, practicality and consumer lifestyle on the use of chip-based electronic money using sem. *Sustainability* (Switzerland), 14(1). https://doi.org/10.3390/su14010032

Katadata. (2021). *No TitleSurvei: OVO Rajai Pangsa Pasar E-Wallet Indonesia pada 2020*. https://databoks.katadata.co.id/datapublish/2021/07/14/survei-ovo-rajai-pangsa-pasar-e-wallet-indonesia-pada-2020

Lely Savitri Dewi, H. (2018). *Menuju Budaya "Cashless Society" Antara Tantangan Dan Peluang*. Indonesia Menuju Cashless Society, 1–18.

Lenniawati, M., & Anastasia, N. (2021). THE INFLUENCE Of CASHLESS PAYMENT USAGE AND PROTECTION AGAINST FINANCIAL INCLUSION IN MICRO AND SMALL ENTERPRISES IN KEDIRI. *International Journal of Financial and Investment Studies (IJFIS)*, 1(2), 67–76. https://doi.org/10.9744/ijfis.1.2.67-76

Lonardi, H., & Legowo, N. (2021). Analysis of Factors Affecting Use Behavior of QRIS Payment System in DKI Jakarta. *Turkish Journal of Computer and Mathematics Education*, 12(6), 3709–3728.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Persada, S. F., Dalimunte, I., Nadlifatin, R., Miraja, B. A., Redi, A. A. N. P., Prasetyo, Y. T., Chin, J., & Lin, S. C. (2021). Revealing the behavior intention of techsavvy generation z to use electronic wallet usage: A theory of planned behavior based measurement. *International Journal of Business and Society*, 22(1), 213–226. https://doi.org/10.33736/IJBS.3171.2021

Prasasti, A., Lia, D. A. Z., & Nuari, K. P. (2021). e-Wallet usage intensity and the determining factors during pandemics: A closer look on Indonesian students' perspectives. *International Journal of Research in Business and Social Science*, 10(8), 94–99. https://www.proquest.com/scholarly-journals/e-wallet-usage-intensity-determining-factors/docview/2623909592/se-2?accountid=31562

Rahadi, R. A., Nainggolan, Y. A., Afgani, K. F., Yusliza, M. Y., Faezah, J. N., Ramayah, T., Saputra, J., Muhammad, Z., Farooq, K., & Angelina, C. (2022). Towards a cashless society: Use of electronic payment devices among generation z. *International Journal of Data and Network Science*, 6(1), 137–146. https://doi.org/10.5267/J.IJDNS.2021.9.014

Rahadi, R. A., Putri, N. R. R., Soekarno, S., Da-Mayanti, S. M., Murtaqi, I., & Saputra, J. (2021). Analyzing cashless behavior among generation z in indonesia. *International Journal of Data and Network Science*, 5(4), 601–612. https://doi.org/10.5267/j.ijdns.2021.8.007

Rahmawati, D., Rahadi, R. A., & Putri, A. D. (2021). The Current State of Property Development in Indonesia During the Covid-19 Pandemic. *International Journal of Innovation, Creativity and Change*, 15(7), 253–271.

Saputri, A. D., & Pratama, A. R. (2021). Identifying User Characteristics of the Top Three E-Wallet Services in Indonesia. *IOP Conference Series: Materials Science and Engineering*, 1077(1), 012028. https://doi.org/10.1088/1757-899x/1077/1/012028

Sekaran, U., & Bougie, Ro. (2016). *Research Methods for Business*. www.wileypluslearningspace.com

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104(March), 333–339. https://doi.org/10.1016/j.jbusres.2019.07.039

Statista. (2022). *Digital Payments*. https://www.statista.com/outlook/dmo/fintech/digital-payments/indonesia

Trinugroho, I., Sawitri, H. S. R., Toro, M. J. S., Khoiriyah, S., & Santoso, A. B. (2017). How Ready Are People for Cashless Society? *Jurnal Keuangan Dan Perbankan*, 21(1), 105–112. https://doi.org/10.26905/jkdp.v21i1.1231

Wulantika, L., & Zein, S. R. (2020). E-Wallet Effects on Community Behavior. *IOP Conference Series: Materials Science and Engineering*, 879(1), 1–8. https://doi.org/10.1088/1757-899X/879/1/012121

Website Development Using the Codeigniter Framework – A Literature Review

Erman Arif[1], Imelda Paulina Soko[2]
[1,2]Universitas Terbuka
e-mail: erman.arif@ecampus.ut.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

CodeIgniter is a framework created using the PHP language, which can be used for fast web development. The framework itself can be interpreted as a structure of libraries, classes, and run-time infrastructure that can be used by programmers to develop web applications quickly. The purpose of using the framework is to make it easier for web developers to develop robust web applications quickly without losing flexibility. Based on the results of the theoretical study, it is concluded that CodeIgniter applies a very dynamic and easy-to-use MVC (Model, View, Controller) model to create websites. Compared to other frameworks, CodeIgniter is more flexible, giving web developers the freedom to develop web-based applications even without a framework.

***Keywords**: Codeigniter, Framework, Website Development*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

Current technological developments, including those related to the dissemination of information using internet media, have reached every region to remote areas. Advances in existing internet technology can expand information through cyberspace and advances in internet technology as easily as people access information. This progress also marks the progress in the development of the website as a medium of access for various purposes developed by the developer. This condition has led to so many developers building various website applications for the wider community to use to develop websites as needed. Various web applications develop a framework, which is a collection of basic commands or functions that form certain rules and interact with each other. so that in making website applications it makes it easier for developers to make web easily and quickly (Wardana, 2010). The use of the framework aims to accelerate and facilitate the development of a web application, facilitate the maintenance process and the framework provides facilities that are commonly used so that we do not need to build from scratch, and are freer in development when compared to CMS (Arrhioui, et al., 2017).

Until now there are various frameworks that have been developed and can be used to develop the web such as CodeIgniter. CodeIgniter is an application development toolkit framework for people who build websites using the PHP cake, symphony, yii, zend and prado programming languages. CodeIgniter applies a very dynamic MVC (Model, View, Controller) model to create websites (Betari, et al., 2017). This model was created to separate the code generation section from creating templates for presentation purposes (views) so that website developers can jointly develop websites focusing on their respective parts so as to speed up the website development process. This article will try to discuss about the CodeIgniter framework, its advantages.

METHODOLOGY

The method used by the researcher is a literature review method which is carried out by browsing various reference libraries in the form of books, and articles/journals related to CodeIgniter. This study is carried out through the collection of scientific data or articles intended for research subjects or data collection that is librarian or studies conducted to solve basic problems or provide comprehensive information related to an issue or theme so that readers can understand the existing theme. This article is directed towards an important and thorough study of the relevant documents from the available literature. The library source database used is Google Scholar and Research gate for the study of CodeIgniter framework implementation research, while theoretical concepts are explored from various other sources.

RESULTS AND DISCUSSION

CodeIgniter is an application development toolkit framework for user who build websites using the PHP programming language which was first developed in 2006 by Rick Ellis. The goal is to allow developers to develop projects faster than they would if they were coded from scratch, by providing a rich collection of libraries for common tasks required, as well as simple, structured logic for accessing the libraries. CodeIgniter allows developers to focus creatively on the project by minimizing the amount of code required for a given task (Vuksanovic & Sudarevic, 2011). As much as possible, CodeIgniter is made as flexible as possible, allowing developers to work the way they want without having to work in a certain way (www.codeigniter.com).

CodeIgniter applies a very dynamic MVC (Model, View, Controller) model to create websites. This model was created to separate the code generation section from creating

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

templates for presentation purposes (views) so that website developers can jointly develop websites focusing on their respective parts so as to speed up the website development process. The model section describes a php file placed in the application/models directory which is used to retrieve data or information in the database in the form of a text file or xml file. This model contains classes and functions for retrieving, updating, and deleting site data. This model will usually handle SQL queries. The model is specifically used to connect to the database, so the programming logic in the model must also be linked to the database. For example, select condition but to select the query to be executed. The View display section describes the information displayed to website visitors. A view is simply a view commonly known as HTML. Then the controller is the link between the model and the view. Inside the controller there are classes and functions that handle requests from views into the data structure model. Also, the controller must not contain any code to access the database. The controller's job is to provide various variables to display in the view, call the model to access the database, provide error handling, perform application logic processing, and validate or validate, verify entries. So, in a nutshell, the order of requests is as follows: user is associated with a view, where all information is displayed in this view. When the user makes a request or request, for example clicking a button, the request will be handled by the controller. What you have to do, what data you want, whether you want to view the data, import it, or maybe do some pre-validation, are all handled by the controller. The controller will then ask the model to complete the request, be it a query or something else. From the model, the data will be returned for further processing in the controller and the new data from the controller will be displayed in the view. The CodeIgniter framework workflow can be seen in Figure 1. the request will be handled by the controller. What you have to do, what data you want, whether you want to view the data, import it, or maybe do some pre-validation, are all handled by the controller. The controller will then ask the model to complete the request, be it a query or something else. From the model, the data will be returned for further processing in the controller and the new data from the controller will be displayed in the view. The CodeIgniter framework workflow can be seen in Figure 1. the request will be handled by the controller. What you have to do, what data you want, whether you want to view the data, import it, or maybe do some pre-validation, are all handled by the controller. The controller will then ask the model to complete the request, be it a query or something else. From the model, the data will be returned for further processing in the controller and the new data from the controller will be displayed in the view. The CodeIgniter framework workflow can be seen in Figure 1. From the model, the data will be returned for further processing in the controller and the new data from the controller will be displayed in the view. The CodeIgniter framework workflow can be seen in Figure 1. From the model, the data will be returned for further processing in the controller and the new data from the controller will be displayed in the view.

The CodeIgniter framework workflow can be seen in Figure 1.

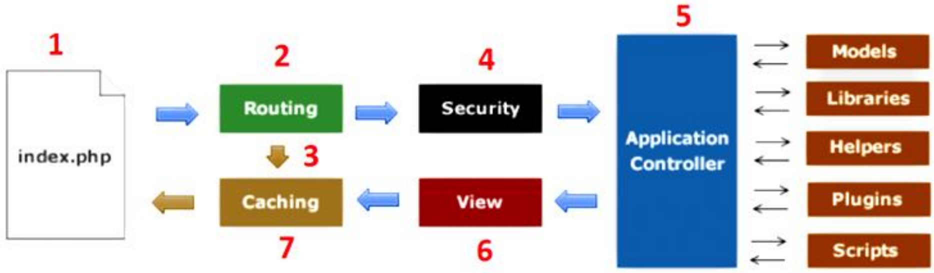


Figure 1. Codeigniter Framework Workflow

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

In Figure 1 it can be seen that Index.php functions as the first file in the program to be read by the program, then the Router will check the HTTP request to determine what the program should do, if the program already has a cache file, the file will sent directly to the browser. This cache file can make a website open faster. The cache file can skip the actual process that must be done by the CodeIgniter program. Before the controller file is loaded as a whole, HTTP requests and data sent by the user will be filtered first through the security facilities owned by CodeIgniter, after that the Controller will open the model file, core libraries , helpers and all the resources needed in the program, the last thing it will do is read all the programs in the view file and send it to the browser for viewing. If an existing view file is cached, the new uncached view file will update the existing view file.

CodeIgniter has several advantages, namely: a) it is open source, b) has a small size compared to other frameworks, c) applications made using CodeIgniter can run fast, d) CodeIgniter uses the MVC (Model-View-Controller) design pattern so that one file doesn't contain much code. This makes the code easier to read, understand and maintain in the future, e) CodeIgniter can be extended as needed; f) CodeIgniter is well documented, information about libraries and functions provided by CodeIgniter can be obtained through the documentation included in the distribution package, g) CodeIgniter has complete libraries and helpers, h) CodeIgniter has reliable security such as xss filtering, session encryption, etc.,

The CodeIgniter installation process is carried out in several stages, starting from downloading CodeIgniter via www.CodeIgniter.com then setting up a we server such as WAMPSERVER, MAMP, or XAMPP as the basis for CodeIgniter to run. In this case, the web server as a medium to put CodeIgniter ready to be installed via localhost. After the installation process ends, proceed with basic configuration such as autoload.php, this file is used to set functions that will be automatically loaded at the beginning when the program is run; config.php, in this file there are several configurations that have been configured by default; database.php, the database.php file is used to perform configurations related to the database configuration of the website to be created, as for the configuration that needs to be considered, namely: hostname,

Website development using the CodeIgniter Framework has been carried out by many researchers for various needs such as institutional/company information systems, libraries, e-learning, online stores, and so on. Afuan (2010) developed an information system for data collection of practical work reports for students of the Unsoed Informatics Engineering Study Program. In designing the data flow in this information system the author uses the Data Flow Diagram (DFD) method.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

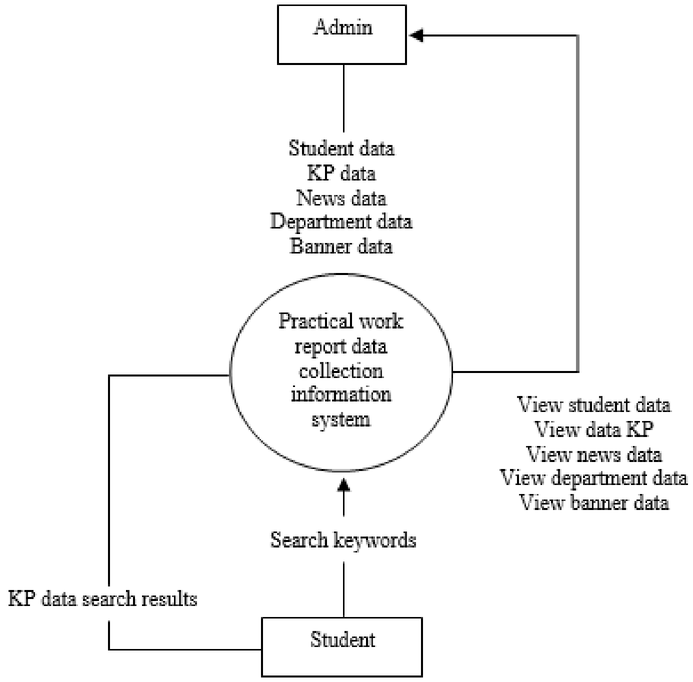


Figure 2. Data Flow Diagrams
Source: Afuan, 2010

This DFD context diagram describes the system in general (Figure 2). This system involves admin and student entities. Each entity provides input in the form of the required data into the system. The system will provide output in the form of data required by admin and students. The data needed in this system is represented in several tables, each of which is connected or related. Wibisono (2012) developed the development of SMS Gateway.

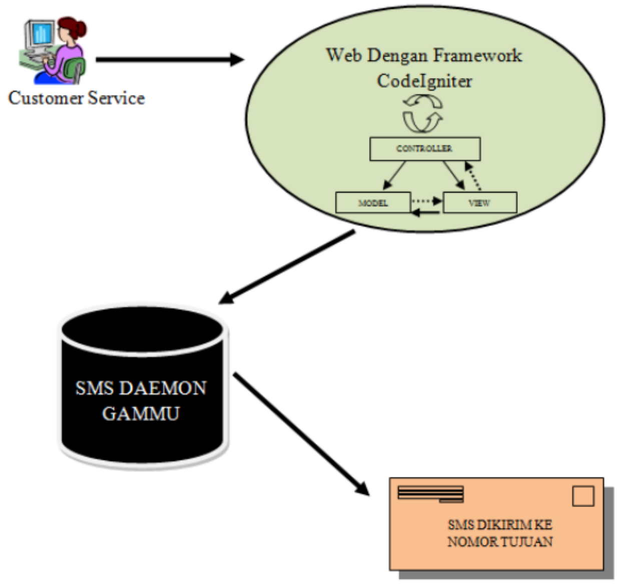


Figure 3. Design Architecture
Source: Wibisono, 2012

The development of this system is based on the old system, namely the service recording information system on the Bali iPhone which was developed so that the system can

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

automatically send short messages to its customers when the repair of the customer's cellphone or Apple product has been completed. This new feature can send short messages to many of its customers as a means of promotion. The architecture developed for this purpose is presented in Figure 3.

The user, in this case the customer service inputs short message data through a website that already uses the CodeIgniter framework, the web is displayed by calling the controller file, the controller file will process what will be displayed to the user (the controller will call the view), after the user enters the sms data, the view will send the data to the controller. The controller will send the sms data to the model which will take care of the database. Muzakir (2014) developed a library management website using the CI framework. U The goal is to facilitate service and access to information and management of library data, among others, facilitate the search for information on book collections, member information, registration, visitors, borrowing and returning books, and reports. clear picture of what needs to be done. System design can be divided into two parts, namely general system design and detailed system design. The general system architecture is presented in Figure 4. U The goal is to facilitate service and access to information and management of library data, among others, facilitate the search for information on book collections, member information, registration, visitors, borrowing and returning books, and reports. clear picture of what needs to be done. System design can be divided into two parts, namely general system design and detailed system design. The general system architecture is presented in Figure 4. U The goal is to facilitate service and access to information and management of library data, among others, facilitate the search for information on book collections, member information, registration, visitors, borrowing and returning books, and reports. clear picture of what needs to be done. System design can be divided into two parts, namely general system design and detailed system design. The general system architecture is presented in Figure 4.

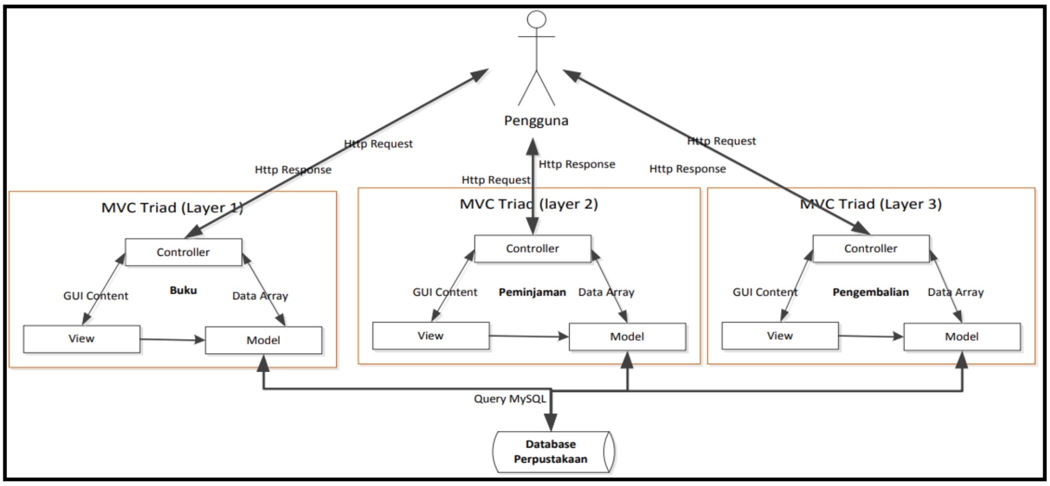


Figure 4. General Design Architecture
Source: Muzakir, 2014

In this library management system, there are three levels of user access rights, namely admin level, officer level, and student level. At the admin level, all the facilities in this system can be used by admin level users. Then at the officer level, officers can only manage borrowing and returning books, member management, and report management. While at the student level, there are several menus, namely ebook download menus, book lists, borrowing information, and book return information. Silviana & Thalib (2018) developed a website as a forum for sharing journals using the CodeIgniter framework. The purpose of this development is to create

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

a forum or place to publish journals for writers and also as a place for audiences to share information by publishing their own journals and to make it easier for the general public who want to search for journals to search only on one website. The navigation structure developed is presented in Figure 5.

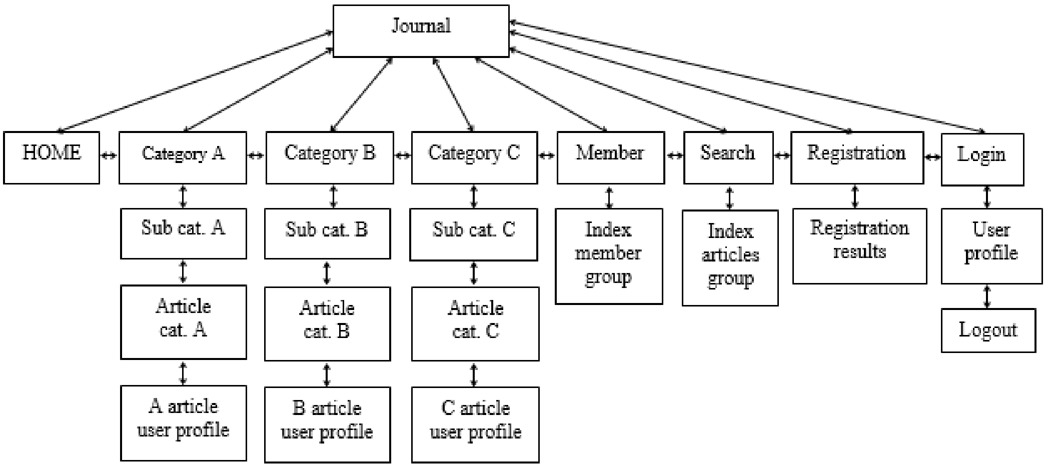


Figure 5. Navigation Structure
Source: Silviana & Talib, 2018

In the database design, there are 11 tables, namely user, admin, article, inbox, friend, type, favorite, category, comment, report, and comment_report tables. The design of the interface page of this application consists of the main page, category page, news page, login page, dashboard page, user profile page, article writing page, activity page, friendship page, inbox page, biodata settings page, article settings page, page collection of favorites, and the index page is the page from the search results through the search box.

CONCLUSION

CodeIgniter applies a very dynamic MVC (Model, View, Controller) model to create websites (Irish, 2009). The model describes a php file placed in the application/models directory which is used to retrieve data or information in the database in the form of a text file or xml file. View describes the information displayed to website visitors. The controller is the link between the model and the view. Inside the controller there are classes and functions that handle requests from views into the data structure model. Also, the controller's job is to provide various variables to display in the view, call the model to access the database, provide error handling, perform application logic processing, and validate or validate, verify entries. In general, CodeIgniter is very easy to use in building the web because it has a small size, MVC design pattern (Model, View, Controller) so that one file does not contain too much code, it is flexible so that it gives web developers the freedom to develop web-based applications even without a framework. The use of the CodeIgniter framework has been widely used, including building websites for various information systems, libraries, online stores, journals, and so on.

REFERENCES

Afuan, L. (2010). Pemanfaatan framework CodeIgniter dalam pengembangan system informasi pendataan laporan kerja praktek mahasiswa program studi teknik informatika Unsoed. *Jurnal Informatika*, 1(2), 39-44.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Arrhioui, K., Mbarki, S., Betari, O., Roubi, S., Erramdani, M. (2017). A model driven approach for modeling and generating PHP codelgniter based applications. Transactions on *Machine Learning and Artificial Intelligence*, 5(4), 259-266.

Betari, O., Erramdani, M., Roubi, S., Arrhioui, K. & Mbarki, S. (2017*). Model transformations in the MOF meta-modeling architecture: from UML to CodeIgniter PHP framework*. In: *Europe and MENA Cooperation Advances in Information and Communication Technologies*, 227–234.

CodeIgniter documentation website. http://CodeIgniter.com/

Irish, H. (2009). *Creating a file hosting site with CodeIgniter*.

Muzakir, A. A. (2014). Implementasi manajemen perpustakaan menggunakan framework CodeIgniter (CI) dengan teknik hierarchical model–view–controller (HMVC). In *Seminar Nasional Sains dan Teknologi Informasi (SeNASTI). Pusat Penelitian dan Pengabdian Masyarakat STMIK Kharisma Makassar*.

Setiadi, M. F. (2018). *Tutorial CodeIgniter untuk pemula*. Diakses dari https://mfikri.com/artikel/tutorial-CodeIgniter

Silviana, A. B., & Thalib, F. (2018). *Pengembangan situs web sebagai wadah berbagi jurnal menggunakan framework CodeIgniter*. Skripsi, Teknik Informatika, Universitas Gunadarma, Depok, Indonesia.

Vuksanovic, I. P. & Sudarevic, B. (2011). Use of web application frameworks in the development of small applications. *Prosiding MIPRO, the 34th International Convention*.

Wardana. (2010). *Menjadi master PHP dengan framework CodeIgniter*. Jakarta: PT Elex Media Komputindo.

Wibisono, S. B. (2012). Pengembangan website menggunakan framework CodeIgniter sebagai penunjang sistem informasi SMS gateway di iphone Bali. *(JELIKU) Jurnal Elektronik Ilmu Komputer Udayana*, 1(1)

Work or Study: Observing Informal Learning Among Employees and Teachers in Schools

Astrid Wangsagirindra Pudjastawa[1], Rina Kusweni[2]
[1]SMAN 2 Malang, Kota Malang, Indonesia
[2]SLBN Seduri Mojokerto, Kabupaten Mojokerto, Indonesia
e-mail: a.w.pudjastawa@gmail.com

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

This study focuses on efforts to understand and integrate informal learning that occurs among teachers and employees in the school environment. Descriptive method with a phenomenological approach was chosen to capture the phenomenon as a whole. With data collection techniques, observations, interviews, and independent discussions of the target, which are teachers and employees at SMKN 3 Malang, attempts to answer the basic questions behind the research, namely: what is learned, how to learn it, and what factors affect the level and direction of the learning effort. The results are often rejected by some groups and research targets, informal learning processes do occur in the workplace and there is an increase in competence between before and before they work.

***Keywords**: Informal Learning, School, Work*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

The term 'informal learning' is increasingly used in adult education for several reasons. This provides a simple contrast to formal learning or training, indicating greater flexibility or freedom for the learner. This learning recognizes the social significance of learning from others but implies a greater scope for individual institutions than socialization (Eraut, 2004). At one point, this learning model became interesting because it took place in spaces around activities and events with a more open formal purpose and took place in a wider variety of settings than formal education or training. Moreover, it can be considered a complementary partner to experiential learning, usually interpreted more in personal understanding than interpersonal learning.

Apart from being under-researched, the school as workplace context brings new perspectives to research on learning because it encompasses a variety of more or less structured environments, which are rarely structured with learning in mind. This also applies to family and workplace contexts which are even more difficult to research.

However, I would argue that formal education can also be seen as a workplace and use a discourse in which the term 'work' is usually quite prominent. Students are given work (Kim, 2018) to do and are described as excellent or complex 'workers.' In addition, it is generally structured work and not learning. Much informal learning has been observed to occur in or near formal educational settings, but research on the outcomes of such informal learning is minimal (Mehrvarz et al., 2021). This research is based on several research projects that focus on learning among teachers and employees in their workplace. Some learn during their first years on the job, and some in mid-career learning. In all cases, most workplace learning is informal and involves a combination of learning from others and learning from personal experience, often both. The study begins with a brief description of the methods used to collect data for these projects, then returns to some further analysis of the nature of informal learning before deconstructing the concepts and processes implied in 'learning from experience,' the all-encompassing phrase and have dominated adult education and learning in the workplace (schools) without much critical attention. The acquisition and use of knowledge in complex situations are then discussed through two contrasting examples, learning about others and using scientific and other forms of academic knowledge in a practical context. It is further said that professional performance, both managerial and technical, is usually complex and involves the simultaneous use of several different types of knowledge and skills, which must be studied more holistically. It also influences how and how much people think when they act and places 'ready-to-use' knowledge at a premium, sometimes regardless of quality. Finally, this research returns to the three questions below that have guided all research into learning among teachers and employees in their schools as workplace and presents a framework for answering questions that have been developed as the research program progresses:

1. What is learned
2. How is it learned
3. What factors influence the level and direction of learning effort.

METHODOLOGY

In this study, the researcher has reviewed several research methods used in this type of research elsewhere (Fraenkel & Wallen, 2012). The most common are interview studies, as this is the easiest method to construct, and questionnaires are considered unsuitable, except perhaps to test whether some of the findings from the interviews can be generalized to a larger group of respondents. However, such discussions are not easy to conduct for reasons that will appear throughout this article. The interview has used the following focus:

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

1. Significant lifetime events (Hudspeth & Pribram, 1990)
2. Learning by projects (Naviri et al., 2021)
3. Recent changes in the respondent's life or practice (Tagawa, 2008)
4. Situations where more knowledge and skills are needed (Pears, 2020)

All of them yielded exciting results. Ethnographic studies have provided valuable insights into the socio-cultural aspects of learning in specific settings, but it is not easy to obtain funding in most countries other than for research that attracts government attention.

The author's research began with an interview study, but there was also an opportunity for brief observations in the two projects, in which two researchers shared their work to elicit additional knowledge.

Interviews avoid focusing on critical incidents or salient episodes like the studies cited above for two main reasons, they highlight learning from atypical situations rather than standard practice, and they are not suitable for obtaining information about implicit learning, slow, gradual learning, or tacit knowledge. Our interviews focus on how people learned to do what they were doing at the time.

The researcher initiated the research through casual discussion of our respondents to describe their work in great detail. The conversation then turns to the question of what knowledge, skills, or competencies are needed to do the job and how it is acquired. A period of observation of the school environment in which they work, to record other people in the place and their interactions with our respondents, and to observe the extent to which the work uses cultural, textual, electronic, or other forms of artifacts. These observations are not treated as a typical sample but are used to start a conversation about specific and concrete practices and practice environments, rather than generic and evaluative; this emphasizes the interviewer's role as a stranger in the work environment, to whom simple actions and circumstances may need to be explained.

There are several problems we encountered when trying to research respondents, namely:

1. Informal learning is uninvolved mainly because it is largely taken for granted or not recognized as learning; thus, respondents are less aware of their knowledge.
2. Knowledge generated either tacitly or openly is considered a general part of one's abilities, not something that has been learned.
3. Discourse on learning is dominated by codified proportional knowledge, so respondents often find it difficult to describe more complex aspects of their work and the nature of their expertise.

Most respondents still equate learning with formal education and training and consider that work and study are two separate activities that never overlap, while our findings always show the opposite, namely that most of the learning among teachers and employees takes place in the workplace—their work in school rather than outside of work.

Another important aspect of our methodology is the increasing awareness of the possible answers to our three research questions as our research program progresses. We see this as increasing our sensitivity as our research program goes to certain types of knowledge, learning, or influencing factors that may, but are not always possible, and thus enable us not to conduct interviews in a way that might hinder available certain types of evidence. May arise, and not to fail to recognize such evidence in our old records or transcripts. Because the range of contexts we are researching is extensive, there is little danger of our expectations being strong enough to cause researcher bias. It is also maintained by cross-examination in a highly multi-disciplinary setting.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

RESULTS AND DISCUSSION

The Nature of Informal Learning in Schools

Since I deplore the dichotomy as an indicator of lazy thinking, I prefer to define informal learning as learning nearing the casual end rather than the formal end of a continuum. The informal final characteristics of the formality continuum include implicit, accidental, opportunistic, and unstructured learning and the absence of a teacher. In the middle comes activities such as mentoring, whereas coaching is somewhat more formal in most settings..

This nature of learning distinguishes between the three levels of intention. Implicit learning is defined by Reber (Kalra et al., 2019) as 'the acquisition of knowledge that independently, they have conscious effort to learn and in the absence of explicit knowledge of what is being learned.' I will also argue below that most experiential learning has some implicit aspect and that an awareness of explicit learning does not mean that implicit learning does not occur either. In addition, outside of formal education and training, explicit learning is often unplanned. I, therefore, distinguish between almost spontaneous reactive or opportunistic learning and more considered deliberative learning. I use the term 'reactive learning' because, even though it is intentional, it occurs amid action when there is little time to think. In contrast, reflective learning includes 'intentional' learning (Batterink et al., 2019), in which definite learning goals and time are set aside for acquiring new knowledge and involvement in deliberative activities such as planning and problem-solving. There are clear work-based goals with learning as a possible by-product because most of the latter activities are a normal part of working life; they are rarely considered a learning activity, although meaningful learning does occur.

This process suggests a possible temporal relationship between the learning episode and the experience that gave rise to it. (Kaufman et al., 2010) distinguishes between reflection during and after the action but tends to confuse the context of thought with its focus (Nakagawa & Leung, 2020). This type of learning is a context; learning always occurs in the present, but the focus of education can be in the past, present, or future. While planning for future learning opportunities is often informal, the options can be formal or informal. My terminology is open to challenge as I have to prioritize finding terms for aspects of reactive learning, which are rarely mentioned in the literature. I, therefore, use `discussion' and `review' to discuss the past when I could use `reflection' in the form suggested by (Berry, 1993).

What Is Being Studied

That is our first research question. The significance of this paper is that a much broader and more flexible approach to representing learning outcomes is needed if we are to address the different types of skill sets and the holistic nature of most workplace performance. However, before describing our progress to date, I will tell my position on the concepts of knowledge, skills, and competencies that usually dominate such discussions. The research subject can study knowledge and learn from individual and social perspectives (Reber, 2008). That can be thought of as analogous to the particle and wave theory of light. Personal views on knowledge and learning allow us to explore differences in what and how people learn and interpret what they know. The social perspective draws attention to the social construction of knowledge and contexts for learning and the various cultural practices and products that provide sources of knowledge for learning. In formal higher education, the most prominent sources are coded academic knowledge embedded in texts and databases and cultural teaching practices, student affairs, scholarship, and research. Non-academic coding knowledge can be found in almost all workplaces, including educational organizations, in the form of textual materials containing organization-specific information, notes, correspondence, manuals, and plans.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Uncoded cultural knowledge plays a crucial role (Kapelari et al., 2020) in most work-based practices and activities. There is much debate about the extent to which such knowledge can be made explicit or represented in any textual form, and the evidence gathered so far suggests that consent to codification has been dramatically exaggerated (Cobb, 1994). It appears to be generally acknowledged that much of the uncoded cultural knowledge is acquired informally through participation in social activities, and much is often 'taken for granted so that people are unaware of the effect it has on their behavior. This phenomenon is much broader in scope than implicit learning, which is usually associated with the concept of socialization. That is a prominent feature of educational institutions despite the predominance of coded academic knowledge, and it occurs in both formal and informal settings.

Unlike cultural knowledge, I define personal knowledge as what individuals bring to situations that enable them to think, interact, and do. The coded version of intimate knowledge is linked to the concept of authorship and provides the basis for assignments and assessments in educational programs that are expected to be more than publicly available knowledge replication. But my definition is meant to include uncoded personal knowledge and a much broader concept of knowledge than academic performance (Chatti, 2012). For example, it has not only private versions of public code knowledge but also everyday knowledge of people and situations, knowledge in the form of skills and practices, memory of episodes and events, self-knowledge, attitudes, and emotions.

Moreover, it focuses on the use-value of knowledge rather than its exchange value in an increasingly crowded world with qualifications. That implies a holistic rather than fragmented approach to learning because, unless one stops negotiating, the knowledge it uses is readily available in an integrated form and ready for action.

Skills can be considered both cultural and personal knowledge, according to the focus of attention. The term also tends to be used on two levels. One level is used to describe actions that are believed to be based on procedural memory only, although the knowledge needed to decide when to use that skill will include situational understanding, which is not a skill. Such skills would most likely be classified in our typology under Task Performance (Pan & Yang, 2010). Another level of use relates to processes constructed from a mixture of procedural knowledge and other forms of knowledge. There are several such entries in our typology section, including those under Teamwork, use of evidence and argument, and decision making under pressure.

Most aspects of performance are continuously developed with further learning throughout one's career. Therefore, we prefer to describe our typology as a developmental typology and view a person's current position on each aspect as a point on a lifelong learning trajectory. We also anticipate that at each stage in a person's career, there will be a learning trajectory group in which they explicitly and deliberately progress and another group in which they implicitly and unintentionally advance. The composition of these groups will change over time. Therefore our typology can be used as a template for planning, prioritizing, recoding, or reviewing professional development.

Finally, two important caveats must be made. The first is to remind the reader that using understandable descriptors does not increase the explicitness of the contained knowledge. The second is not to assume that accepting the sociocultural origins of knowledge implies that individuals in work groups, pursuing practices with similar objects, share a joint knowledge base or align their practices for clients in the same way. Especially when there is little mutual observation, the practice discourse performs its natural function of sharing practical knowledge only on a relatively superficial level. Its latent part often protects individual practitioners from

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

criticism and maximizes their autonomy (Corlaci et al., 2013). How often 'awards' are described as 'communities of practice' beyond wishful thinking (Pyrko et al., 2019).

How is it Learned

My second research question was as challenging as the first because so much of the learning went unrecognized. More recently, our methodology and analysis have been aided by a simple conceptual framework for distinguishing between different types of knowledge when several things are happening simultaneously. In examining the conscious learning process, we find it helpful to make two distinctions. First, we separate normal work processes, in which learning occurs, from operations in or near the workplace, which are introduced to learning as their primary goal. Second, we then distinguish between processes that last a long time, from a few hours to several days or even months, and specialized learning activities, which are often embedded in the process.

We find four main types of work activities that regularly give rise to learning:

1. Participation in group activities includes teamwork towards a typical result, and groups are formed for specific purposes such as auditing, developing or reviewing policies and practices, and responding to external changes.
2. Working with others allows people to observe and listen to others at work, participate in activities, and learn new practices and experiences. perspective, to be aware of different types of knowledge and skills, and to gain some insight from the tacit knowledge of others
3. Coping with challenging tasks requires on-the-job learning and, if properly supported and successful, leads to increased motivation and self-confidence.
4. Working with clients also requires learning (1) about the client, (2) from every new aspect of each client's problem or request, and (3) from any new ideas that emerge from consulting with them.

These four processes account for a high proportion of reported learning from people we interviewed during our various projects (Camerer, 2003). Their success also depends on the quality of relationships at work. For these and other reasons, the amount of learning reported varies significantly with people and context, raising important questions about appropriate intervention strategies to improve the quality and quantity of informal learning, which we return to at the end of this paper.

Arrangements to support learning are responsible for many other learning processes, some of which are aimed only at new workers or beginners, while others are generally available. Formal training and knowledge resources such as manuals, reference books, documentation, protocols, and intranets are usually known to all workers, whereas apprenticeship-type arrangements are offered only to trainees. Mentoring is generally limited to newcomers or trainees, as is supervision and coaching, although coaching is sometimes provided to more experienced workers for newly introduced technical practices, including new information technology. What interests us is the balance between the support provided by on-site people when, or soon after, the first need becomes apparent and support from a mentor or designated manager. We found many contexts where informal support from whoever was available was more important to learning than a formally appointed helper (Rogers, 2014).

Most learning activities are embedded in the processes described above to a greater or lesser degree. That includes formal study, listening, observing, pondering, practicing and relearning skills, trial and error, supervision or coaching, and mentoring. Problem-solving can occur both in an individual or group context and when working directly with clients. Sometimes it's just a pinned activity, but it can also be the main task for quite an extended period. Other activities are not always so clingy. Learning from mistakes is possible in most work contexts.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Getting information and asking questions is a basic mode of learning that goes beyond the usual group of direct peers. Some workers are very proactive in seeking and developing relationships with a broader network of knowledge resources, while others pay little attention to them. Giving and receiving feedback is essential, often vital, too much of the learning process. We found that learners needed short-term, task-specific, and more strategic, long-term feedback for general progress. Interestingly, good short-term feedback on performance is often accompanied by almost no strategic feedback, giving even the most confident workers a sense of unnecessary uncertainty and lowering their commitment to their current employer (Abel & Buchman, 2021).

Again, a note of caution should be added. In reporting the relatively large proportion of informal learning in the workplace, it would be a mistake to believe that workplace learning is often close to its potential. A typical workgroup consists of changing individuals who spend various periods in it. These people go to other groups, sometimes within the same organization, sometimes not. Each has a distinctive learning career that can be traced through the sequence of work groups: in some groups, it develops; in others, it stagnates or retreats. That depends on how much group members learn from one another or the degree to which individuals from across the group respond to the challenges of their work and support one another and what additional learning opportunities for the group are located and developed. Many groups are reluctant to inquire about sources of knowledge and new member networks, perceive external contacts and learning opportunities as a diversion from their work, and do not seek to learn from various experiences or perspectives.

Our analysis suggests that a group climate for learning must be created, maintained, and reinvented periodically and that when mutual understanding is low, and relationships are dominated by suspicion, this should be the responsibility of management. That does not mean that managers have to do it alone; in some contexts, which can be counter-productive. They must work on a climate with group members, and individual and work group learning must be at the top of the manager's agenda. Workgroup half-life is reduced in many contexts, so few groups are stable and coherent enough to develop a positive learning climate quickly and spontaneously. Our evidence shows that management styles and local workplace climates influence learning, retention, and quality improvement similarly. Therefore, managers must be educated and supported for this role. Surprisingly, this aspect of management capabilities is very rarely found in management development programs.

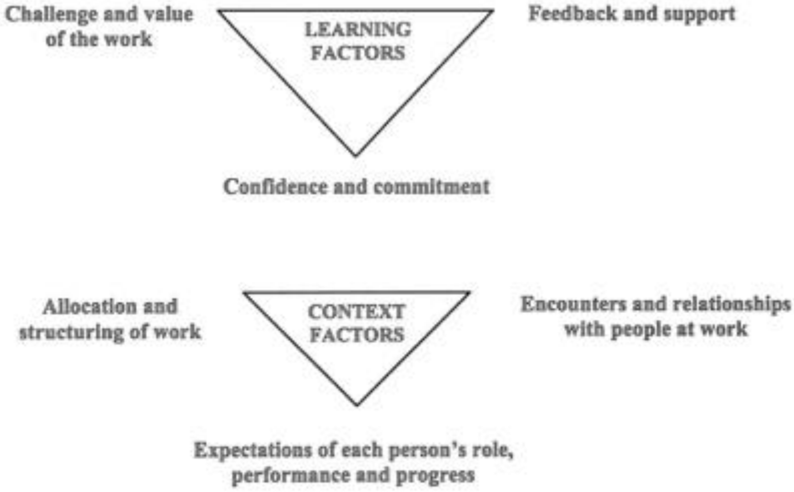
Factors Affecting Informal Learning In Schools

Our approach to this final research question is based on an essential theoretical assumption: we cannot reach conclusions about cause and effect that can be generalized across various work contexts. Therefore, our approach has always been to look for factors that influence learning, either directly or indirectly, in many contexts but to assume that their relative significance and how these factors interact will differ from one context to another.

The message to other users and researchers is for them to be sensitive to possible factors and combinations of elements and the types of effects they may have while warning them that they need to gather good evidence from their context before drawing solid conclusions. As many of the products are local, this could mean developing informal self-evaluation capacities in local workplaces.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Figure 1. Factors that affect learning (Eraut, 2004)



Our conclusions can be summarized by two similar triangles, which describe the working context for learning and the main factors influencing education in that context (see Figure 1). The first thing that struck us in our interviews with both novices and experienced workers mid-career was the importance of self-confidence. Much learning in the workplace occurs through doing things and being proactive in seeking learning opportunities, which requires confidence. In addition, we note that self-confidence arises from successfully meeting challenges in one's work, whereas confidence to meet those challenges depends on the degree to which learners feel supported in those endeavors. So there is a triangular relationship between challenge, support, and belief (Pecen et al., 2018). If there is not enough challenge or support to encourage a person to seek or respond to a challenge, self-confidence decreases and motivates them to learn. The contextual significance of the word 'belief,' used by our respondents without further explanation, depends on which aspects of this triangular relationship are most significant to certain people at specific points in their careers. The dominant meaning for most mid-career respondents usually approximates (Suhardis et al., 2021) concept of self-efficiency, a context-specific concept related to the ability to perform a particular task or successfully perform a role. That is not a common attribute like `self-worth.' However, for some mid-career respondents, self-confidence has more to do with relationships than the job itself. Do they feel confident in supporting coworkers in more senior, junior, or parallel positions? That depends on whether they perceive their more significant working relationship as mutually supportive, critical, factional, or overtly hostile. For early-career professionals, the latter aspect of this belief stands out more.

We then added a different element to each vertex of this triangle to reflect another factor emerging from our data: feedback, as we discovered that this was more than a form of support, and had been, or needed to be, provided by people who did not appear to have any. Specific supporting roles; the value of the work (both for the client and career advancement) as an additional motivating factor; and commitment. Given our focus, commitment to learning was immediately recognized as a complementary factor to trust, influencing the extent to which workers are proactive in taking advantage of the learning opportunities available. However, we also find that commitment to clients, colleagues, work groups, and organizations is sometimes an essential factor that cannot be underestimated. Commitment is generated through social inclusion in the team and by appreciating work's value to clients and the workers themselves.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

In addition, concerns about career advancement that arise from inadequate normative feedback can weaken motivation and reduce commitment to the organization.

The second triangle mirrors the first triangle but focuses on broader contextual factors. In each triangle, the top left corresponds to the job itself, the top right to the relationship at work, and the bottom top to the individual worker. The allocation and organization of work are critical to the progress of our participants, as they affect (1) the difficulty or challenge of the job and the degree to which the work is individual or collaborative, and (2) the opportunity to meet, observe and work with skilled people. More or differently, and to form relationships that provide feedback, support, or suggestions. For novice professionals, in particular, most of their work should be new enough to challenge them without being too intimidating and undermining their confidence; their workload should be at a level that allows them to respond reflectively to new challenges rather than developing coping mechanisms that later prove ineffective. There is also the possibility of competing agendas when tasks are allocated. People are more efficient in jobs for which they already have sufficient experience but may also need to be involved in a wider variety of functions to broaden their knowledge. So managers and senior colleagues must balance the pressing demands of the job with the need for workers to expand their capabilities.

A detailed description of how these factors combine to influence the workplace learning of trainee accountants, trainee graduate engineers, and newly qualified nurses can be found in Eraut et al. (2004b). We found communication about job allocation and performance, and progress expectations to be fragile in some workplace settings, and most of the constructive feedback on performance was sub-optimal. Whether we look at early-career or mid-career workers, our research evidence suggests that workplace learning is either facilitated or constrained by (1) organization and work allocation and (2) workplace relationships and social climate. The informal roles of managers may be more critical for this purpose than their formal roles, and people's learning in the workplace is strongly influenced by their managers' personalities, interpersonal skills, and learning orientation.

Therefore, of all the mechanisms used at the organizational level to promote learning, perhaps the most significant is the appointment and development of its managers (Baum et al., 2000). However, while approaches to management development typically emphasize motivation, productivity, and judgment, relatively little attention is paid to supporting subordinate learning, allocating and organizing work, and creating a climate that encourages informal learning. This imbalance may result from not knowing how much knowledge is taking place (and how much more education is possible) in the workplace. There are also implications for the selection of people for management roles. In most organizations, the practical impact of strengthening informal learning to develop employees' individual and collective abilities is not widely understood. To appoint managers and develop them for new roles facilitating learning would be a significant step.

Deeper issues may become the dominant policy discourse in government and work organizations. Problems are well-treated and easy to solve and therefore vulnerable to formal training and standards for clearly defined targets. Yet the concepts of a knowledge-based economy and learning organization stem from an acknowledgment of the complexities and uncertainties of the modern world. Public discourse on training not only ignores informal learning but also denies complexity by oversimplifying learning processes and outcomes and the factors that create them.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

CONCLUSION

The learning process, in the end, will always find a way because it is a characteristic of humans to have the will to learn. Informal learning, considered less structured, can occur in a school environment that is a center for formal learning. Research has also found that it becomes a learning environment if done and nurtured correctly. Informal learning can also be something worthwhile. But in some communities that rely on learning about economic values, this kind of learning is sometimes not recognized and considered to exist.

REFERENCES

Abel, M., & Buchman, D. (2021). *The Effect of Manager Gender and Performance Feedback: Experimental Evidence from* India. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3730469

Batterink, L. J., Paller, K. A., & Reber, P. J. (2019). *Understanding the Neural Bases of Implicit and Statistical Learning.* In Topics in Cognitive Science (Vol. 11, Issue 3). https://doi.org/10.1111/tops.12420

Baum, J. A. C., Calabrese, T., & Silverman, B. S. (2000). *Dont go it alone: Alliance network composition and startups' performance in Canadian biotechnology.* Strategic Management Journal, 21(3). https://doi.org/10.1002/(SICI)1097-0266(200003)21:3<267::AID-SMJ89>3.0.CO;2-8

Berry, D. (1993). *Implicit learning: Reflections and prospects.* In Attention: Selection, awareness, and control: A tribute to Donald Broadbent.

Camerer, C. F. (2003). *Behavioral game theory: Experiments in strategic interaction. In Behavioral Game Theory: Experiments in Strategic Interaction*. https://doi.org/10.1016/j.socec.2003.10.009

Chatti, M. A. (2012). *Knowledge management: A personal knowledge network perspective*. Journal of Knowledge Management, 16(5). https://doi.org/10.1108/13673271211262835

Cobb, P. (1994). Where Is the Mind? Constructivist and Sociocultural Perspectives on Mathematical Development. Educational Researcher, 23(7). https://doi.org/10.3102/0013189X023007013

Corlaci, I., Hidi, I. L., Vasilescu, D., & Stoica, M. (2013). *The Motivational Profile of Individual Practitioners of Sports Performance*. Procedia - Social and Behavioral Sciences, 84. https://doi.org/10.1016/j.sbspro.2013.07.008

Eraut, M. (2004). *Informal learning in the workplace*. Studies in Continuing Education, 26(2). https://doi.org/10.1080/158037042000225245

Fraenkel, J. R., & Wallen, N. E. (2012). *The Basic of Educational Research*. In How to design and evaluate resaerch in education with PowerWeb (p. 125).

Hudspeth, W. J., & Pribram, K. H. (1990). *Stages of Brain and Cognitive Maturation*. Journal of Educational Psychology, 82(4). https://doi.org/10.1037/0022-0663.82.4.881

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Kalra, P. B., Gabrieli, J. D. E., & Finn, A. S. (2019). E*vidence of stable individual differences in implicit learning*. Cognition, 190. https://doi.org/10.1016/j.cognition.2019.05.007

Kapelari, S., Alexopoulos, G., Moussouri, T., Sagmeister, K. J., & Stampfer, F. (2020). *Food heritage makes a difference: The importance of cultural knowledge for improving education for sustainable food choices*. Sustainability (Switzerland), 12(4). https://doi.org/10.3390/su12041509

Kaufman, S. B., DeYoung, C. G., Gray, J. R., Jiménez, L., Brown, J., & Mackintosh, N. (2010). *Implicit learning as an ability*. Cognition, 116(3). https://doi.org/10.1016/j.cognition.2010.05.011

Kim, D. (2018). *A study on the influence of Korean Middle School Students' relationship through science class applying stad cooperative learning*. Journal of Technology and Science Education, 8(4). https://doi.org/10.3926/jotse.407

Mehrvarz, M., Heidari, E., Farrokhnia, M., & Noroozi, O. (2021). *The mediating role of digital informal learning in the relationship between students' digital competency and their academic performance.* Computers and Education, 167. https://doi.org/10.1016/j.compedu.2021.104184

Nakagawa, H., & Leung, A. (2020). *The effects of implicit learning on Japanese EFL junior college students' writing*. International Journal of Instruction, 13(1). https://doi.org/10.29333/iji.2020.13141a

Naviri, S., Sumaryanti, S., & Paryadi, P. (2021). *Explanatory Learning Research: Problem-Based Learning or Project-Based Learning?* Acta Facultatis Educationis Physicae Universitatis Comenianae, 61(1). https://doi.org/10.2478/afepuc-2021-0010

Pan, S. J., & Yang, Q. (2010). *A survey on transfer learning*. In IEEE Transactions on Knowledge and Data Engineering (Vol. 22, Issue 10). https://doi.org/10.1109/TKDE.2009.191

Pears, A. (2020). *Energy efficiency education and training: Australian lessons on what employers want—or need*. Energies, 13(9). https://doi.org/10.3390/en13092386

Pecen, E., Collins, D. J., & MacNamara, áine. (2018). "*It's your problem. Deal with It.*" Performers' experiences of psychological challenges in music. Frontiers in Psychology, 8(JAN). https://doi.org/10.3389/fpsyg.2017.02374

Pyrko, I., Dörfler, V., & Eden, C. (2019). *Communities of practice in landscapes of practice*. Management Learning, 50(4). https://doi.org/10.1177/1350507619860854

Reber, A. S. (2008). *Implicit Learning and Tacit Knowledge: An Essay on the Cognitive Unconscious*. In Implicit Learning and Tacit Knowledge: An Essay on the Cognitive Unconscious. https://doi.org/10.1093/acprof:oso/9780195106589.001.0001

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Rogers, A. (2014). *The Classroom and the Everyday : The Importance of Informal Learning for Formal Learning*. In J. A. Palhares, & A. J. Afonso, O Não-Formal e o Informal Em Educação: Centralidades e Periferias. Atas Do I Colóquio Internacional de Ciências Sociais Da Educação / III Encontro de Sociologia Da Educação (3 Vol.). (p. No Prelo). Braga: Centro.

Suhardis, A., Rumengan, J., & Gunawan, D. (2021). *Influence Of Emotional Intelligence, Self-efficiency, Working Spirit, Work Satisfaction On Employee Work Achievement* In Batam University. Conference Series, 3(2). https://doi.org/10.34306/conferenceseries.v3i2.458

Tagawa, M. (2008). *Physician self-directed learning and education*. In Kaohsiung Journal of Medical Sciences (Vol. 24, Issue 7). https://doi.org/10.1016/S1607-551X(08)70136-0

Challenges and Opportunities for Remote Working after COVID-19 Pandemic

Winin Maulidya Saffanah[1], Rizky Wahyu Permana[2]
[1]Pendidikan Sejarah dan Sosiologi IKIP Budi Utomo Malang
[2] Merdeka.com
e-mail: wininwinin@gmail.com

Article Info

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Article of OSC 2022

Abstract

Even though it is still not clear when COVID-19 will end, Indonesians are quite confident that they have passed trough worse condition dealing with COVID-19. In this couple year, many workers from various sectors have undergone remote working so called Work from Home (WFH). The decreasing number of COVID-19 cases in Indonesia has made several offices start to work from office even though this policy is not applied in all sectors and offices. Some offices like media companies, design companies, and some other creative fields still continue to WFH. This remote working condition is be excepted still continue in foreseeable future and hugely depends on technology as a means to accomplish the job smoothly. Remote working contributes workers some challenges and opportunities especially after COVID-19 pandemic ends. In Media workers and journalist, there are some different conditions that they face because the change of work model and communication pattern. This opportunity for media worker to doing WFH or hybrid work is possibly happened because of the rapid development of technology dan digital landscape that we have right now. This condition, of course, can be an ideal job for people who work in digital industries that do not require them to work in a group and contact their colleagues.

***Keywords**: Challenges, Opportunities, Media Worker, Remote Working*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

In mid-2022, 2 years after COVID-19 pandemic began, there seems an end for this pandemic and Indonesia has passed through the worse condition. Many people and worker sections have come back to work place and doing activity normally nowadays. The decreasing number of COVID-19 cases in Indonesia has made several offices start to work from office even though this policy is not applied in all sectors and offices.

Referring to March 2020, worldwide governments had decided to take measures to restrict the movement of their population in order to reduce the spread of COVID-19. In Indonesia there are several regulations to limit people mobility with different terms and dilike PSBB (Pembatasan Sosial Berskala Besar) and PPKM (Perberlakukan Pembatasan Kegiatan Masyarakat). This condition makes some offices start to limiting their activities and start remote working or WFH.

There are several terms that interchangeable with work from home (WFH). Terms like telecommuting, remote working, and WFH have a same meaning and concept moreover during COVID-19 outbreak. Remote working terms in not a new thing and only emerge in COVID-19 era. This concept emerged in 1950 from Norbert Wiener book's, The Human Use of Human Beings Cybernetics and Society (Mungkasa, 2020). Wiener uses two terms; telecommuting and working from home with different meaning in different context. Telecommute terms first uses at 1974 in University of Southern California reports focused at decreasing in rush hour traffic project (Nile et al, 1974).

COVID-19 outbreak has made WFH implemented globally in some services and sectors (Arruda, 2020). This work scheme is chosen because it could reduce employee exposure to public and reduce the need to commute to workplace that could escalate the spread of COVID-19. Gather in the office or commuting to work especially with public transportation could increase the risk of being infected.

In 1980, Alvin Toffler introduced telework idea from 3 steps based from the appearance of "the third wave" (Siddhartha dan Malika, 2016). The concept of remote working kept changing through times. In 1970's, this concept occurred to decrease commuting and energy consumption. In 1980's, remote working concept rose again as flexible working settings that tried to make work-life balance and aligned economy condition from sub-urban and urban area (Kinsman 1987; Huws et al. 1990). In 1990's, these issue shifted to working space design, facility management and needed of effective working space and time to boost productivity (Mungkasa, 2020). In start of 21st century, the rapid development of information technology and using of personal computer and laptop has made remote working concept is more relevant than ever. Research from previous decade has shown the effectiveness of remote working that give worker more flexible work settings.

Telecommuting and working from home have face upward rise since arrival of networked computer (Cai et al, 2021). In the last 15 years, there was more than 150% increase in telecommuting (Courtney, 2020). From 2010 to 2020, corporations reported an increase in over 400% in the number of employees working remotely at least once a week (Capers, 2020).

Gadecki (2018) define when someone doing WFH, they experiencing two worlds (private and public, family and work) in the same and limited space. Moreover, when someone doing remote work, they work constantly on building and negotiating boundaries between the outside world and their world of home. Before the COVID-19 outbreak, WFH is associated as a program to support work life balance in organizations (Afrianty, 2022). This WFH policy, is designed to provide more flexibility for employees to balance their roles in work and outside of work (Olson & Primps, 1984).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Media workers are one of the types of workers most affected by this WFH. The lockdown and restrictions on mobility caused their movement space to be limited. The use of the term media worker instead of journalist was chosen because it also covers various other parts of the media such as the social media team, IT, marketing, and so on. This paper tries to look at the challenges and opportunities that media workers have in continuing WFH, especially after COVID-19 ends.

METHODOLOGY

This research uses library research. There are differences between field research and library research. Khatibah (2011) states that this differences places in goal, function, or position of library study in each of those researchs. Zed (2003) defines library research as a series of activities relating to methods of collecting library data, reading, and taking notes, and processing research materials.

Library research method is a method of scientific systematic bibliographic research, which includes the collection of bibliographic materials that related to the research objectives: collection techniques using the library method; and organizing and presenting data (Danandjaja: 1997). Library research also means data collection techniques by conducting a review of books, literature, notes, and various reports related to the problem to be solved (Nazir: 2013).

Zed (2008) said there are four main characteristics of library research. First, that the writer or researcher is dealing directly with text or numerical data, not with direct knowledge from the field. Second, the library data are "ready to use" which means that the researcher does not have a direct interest in the field because the researcher is dealing directly with the data sources in the library. Third, that library data is generally a secondary source, in the sense that the researcher obtains material or data from second hand and not original data from the first data in the field. Fourth, that the library data condition is not limited by time and space.

Kulthau (2002) said that there are several steps in library research, that are:

1. Selection of topics
2. Exploration of information
3. Determine the focus of research
4. Collection of data sources
5. Preparation of data presentation
6. Compilation of reports.

Sugiyono (2012: 291) said that literature study relates to theoretical studies and other references related to values, culture and norms that develop in the social situation under study, besides that library research is very important in conducting research, this is because research cannot be separated from Scientific literatures. In this research, researcher uses various sources of data like articles, books, documents, and news.

RESULTS AND DISCUSSION

Challenges and Opportunities when Work from Home

After the lockdowns implemented, there are fall in productivity of white-collar workers (Berstein et al., 2020). This fall was already predicted to happens. After couple of months, this fall in productivity was reversed and the employees found themselves with 10 to 20% longer working hours on average (Patanjali & Bhatta, 2022). In other research, employee in US workload increased by about three hours per week after the lockdowns and there was 38% fall in productivity. The Economist (2020) reported that employees were experiencing longer

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

working hours and the reality of working from home is slight different with what employees had expected.

When work from home, worker should overcome limited technology infrastructure and adapt as soon as possible (Cai et al, 2021). This problem not just happened in rural area where infrastructure was not sufficient, but also in urban area in Indonesia. Several factor that could lower performance when WFH was: Not conducive household environment; unstable internet network; unsupported work infrastructure; limited communication, and; different work facility compared to office (Tuwinanto & Rahadi, 2021).

Another problem is the change of communication in terms of the frequency, length, and the style. In office situation when WFH, communication usually happens asynchronously. It is known that asynchronous communication requires more writing than verbal. This communication pattern increases the communication volume and decrease the productivity (Cai et al, 2021). Written communication that has been done in WFH setting could demotivate worker initiative to interact in some extent because this information can be saved and archived. This condition make worker decreasing the frequency of communication and working more independently.

Telecommuters pre-COVID report concerns about the deterioration of relationship quality with co-workers, supervisors, and family (Gajendran & Harrison, 2007). Working in the office is better for collecting data and integrating with colleagues, while working at home are better for reading literature, working on manuscript, and analyze their data (Aczel, Kovacs, Van Der Lippe, & Szaszi, 2021)

Previous study by Susilo (2020) stated that WFH could increase work motivation. This work setting also has benefits such as work-life balance, improved work efficiency, and greater work control (Ipsen et al., 2021). WFH also gives employee more flexible working hours and saving time on commute to work (Dizaho, Salleh, & Abdullah, 2017; Klopotek, 2017; Purwanto et al., 2020). WFH main advantage is a lack of travelling time and it reduces transportation costs (Al Habaibeh et al, 2021). Less time travelling and commuting can make employees have a better work-life balance, happier, and more motivated (Bick et al. 2020).

Remote working could easily be done in white-collar worker than in blue-collar workers (Rai, 2020). When white collar workers forced to work from home and could shift relative ease to this condition, blue collar worker have to face severe impact and frequently leading to unemployment condition. COVID-19 outbreak condition also rise the number of digital nomadism which usually refer to knowledge workers who are able to travel anywhere in the world and work by mobile devices (Wang et al, 2020). Even so, this digital nomad is depended heavily to technology and internet connection to support their remote work condition (Jacks, 2021).

Sampepajung (2021) state that WFH policy during COVID-19 was received positively by lecturers. Although they have to attend more meetings and were given bigger workload, they did not face burn out syndrome nor stress. Moreover, this positive responds also happened despite they have to work on weekends. They also did not think that WFH affect their work performance negatively. In general, despite having many family members, most lecturer were able to organizing their WFH swiftly. Communication changes between employee when WFH make university academic have to use several different software and tools. From this condition, university academic had pointed out that online meetings are an excellent tool to share and work on project with higher productivity.

Faster technology acqusition is one of the advantages of working remotely. This condition force people to learnt new software and presentation skills (Al Habaibeh et al, 2021). Another positive impact in personal skill that worker gained is increase of team collaboration (Cai et al,

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

2021). This is not only an advantage for employee but also for company because this could give permanent culture change in organizations.

Mungkasa (2020) state that many workers still cannot differentiate between WFH and work at home. In WFH or remote working, home is just a place to work but they still have a same task and target like when work in office. On the contrary, when someone work at home, they are free from task and target. When doing WFH, it is necessary to have a work schedule and separate work space. For civil servant, WFH could significantly improve their productivity (Narpati et al, 2021). WFH make them feel closer psychologically with their family and feel safer. When work from office, these workers feel there are a limited time compared to WFH.

The problem from WFH were lack of social activites because meetings and discussion happen in online and being lonely at home (Al Habaibeh et al, 2021). Same like lonely in home, have too much family members also become a problem for WFH, especially for family with five members or more in a home (Sampepajung, 2020). The family situation was found to be an influencing factor on the suitability of working from home, particularly with the closure of nurseries and schools in COVID-19 pandemic situation (Al Habaibeh et al, 2021). These household distractions could become disaster for workers with lack of facilities in their homes like internet and personal space for work (Cai et al, 2021). When doing WFH, it is advised for employees to build boundaries between workhour and their leisure time with simple activities. In workhour, they could walk during normal commute time and wearing formal clothes to make differences (Giurge and Bohns, 2020).

The change of communication pattern also made work culture to change. When in meeting, many people do not speak with body language, chit-chat between worker in meeting is also decreasing; Moreover, this decreasing in conversation happen in informal setting before or after the meeting. This condition happens more often as WFH continue to happen. In the end, this makes video conference is tiring and make worker feel the Zoom fatigue (Bailenson, 2021)

Individual factors that play big role in employee productivity when WFH is digital orientation and digital capability (Afrianty, 2022). Employee with strong digital orientation is very important to cope distruption in the workplace when WFH. With this digital orientation, employee could optimize digital technology and learn new software for working. For organizational factors, it is identified that access and provision of IT training, management support, and digital infrastructure is important in influencing employee productivity (Aboelmaged & Subbaugh, 2012).

Company or organization should give employe extra facilities not just such a tool, but also extra internet data when WFH. This is not only help worker stay productive when doing WFH but also help them stay connected with work collague. Other thing company should do is giving extra care and monitoring worker and their family health condition physically and mentally (Tuwinanto & Rahadi, 2021). In IT professional, working environment or culture play a major role in ensuring higher performance and productivity in employees. Factors like employee autonomy, interaction with customers or stakeholders, and organization outlook in providing growth opportunities are correlated to employee’s performance and productivity while doing WFH (Patanjali & Bhatta, 2022). In employees who shared the values of the organization and felt enough pride in the organization they have higher performance. It is very important for organization to have a positive working environment to help them through WFH condition. With the right structure, culture, processes, and technology, working remotely can boost productivity and morale (Bick et al., 2020).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Media Worker in Time of Pandemic

According to Dewan Pers (RMOL Bengkulu, accessed 5 June 2022), right now there are 47 thousand cyber media that could accessed by public but only 2.700 have been verified. From this huge numbers of cyber media, there are many people with different background and roles work right there. To make cyber media work smoothly, it does not just depend on journalist but also in IT team. In cyber media, there are same work protocols like in IT sector especially when comes to WFH.

With the business that run heavily in internet, we could equalize cyber media with IT sectors. In COVID-19 pandemic condition, there are four point that adopted in IT Sector (Chinnaiah & Smt.Chyntra, 2021). This four points include setting-up a war room with centralized commands and local teams; use of Apps for regular communication, COVID-19 awareness, and provide support for health and work related challenges; upgraded IT infrastructure and ensured network security, data privacy, and continual monitoring by deploying VPNs, requisite tools, and hardware; securing stakeholder approvals, with service continuity assurance to clients, and extended support and flexibility in addressing sudden requirements in this time of crisis (NASSCOM, 2020).

Media workers have irregular work schedule compare to another office worker. This make newsroom usually shifted the worker to several different schedules. This shift not only apply to journalist but also in different division like social media and IT supports. In journalist and social media specialist, they usually have to work outside the office to cover the news or events that happen. This condition makes COVID-19 lockdown become troublesome for them to work effectively (García-Avilés, 2021).

For journalist in global south including Indonesia, three biggest problems when reporting in pandemics are lack of broadband, expensive data cost, and out of date equipment (Radcliffe, 2021). During pandemic, journalist have to face financial, physical, and psychological problems (Posetti et al., 2020).

For news organizations, remote working models requires them to redesign offices, upgrade technology, reduce office space, and renegotiate contracts to accommodate more flexible working (Cherubini et al, 2021). They also have to balance operational requirements with new expectations from employees around flexibility and personal autonomy. Another thing is handling shift to hybrid work to overcome challenges like attracting talent and addressing lack of diversity that possible to happen.

The progress of digital environment and communication resources has changed the way information professionals or journalist work (Tong, 2017). One example of this transformation is the change in the relationship with the sources and events that could be doing remotely and more depersonalized (Berkowitz, 2019). The replacement of more face-to-face ways of interaction with sources and events by remote ways of contact is not a new or ephemeral phenomenon and have been happens before the pandemic (Miranda et al., 2020).

From previous studies, it is known that journalist could overcome problem when WFH smoothly. There are also some benefits that gain by journalist and their news organizations. Shifting to virtual newsrooms had promoted a more flexible interaction between management and their employees and increased collaboration. At the same time, this shift to virtual newsrooms had brought change to newsrooms and accelerating digital transformation (García-Avilés, 2021).

WFH condition is known to help employees to be more motivated and take fewer sick days (Niebuhr et al., 2022). This condition happens because employees enjoy greater autonomy, flexibility and in some cases better work-life balance and well-being from hybrid models

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

(Choudhury, 2021). Many employees wish to continue working from home (at least partially) even after the pandemic has ended (Niebuhr et al., 2022).

Hybrid work is a middle ground that could become solution for media workers. This model does not need employees to work from office everyday so they do not have to commuting. This new model could help reduce real estate and commuting cost on one side and increase productivity and engagement in other side (OECD, 2020; OECD, 2021). It depends on media company to recreate this work models and implemented it with their work culture.

After the pandemic ended, estimated quarters of employee in developed countries are likely to doing WFH three times or more in a week (McKinsey, 2021). This condition made hybrid model as a perfect choice to attract more talented employees despite their geography location, boost more productivity, and reduce facilities cost (Lund et al., 2021). Hybrid work refers to a spectrum of flexible work arrangements in which an employee’s work location and/or hours are not strictly standardized. Hybrid work as anything between full in-person work with limited time flexibility and full remote work with complete time flexibility (Economy Impact, 2021).

There are also many doubts that hybrid newsroom will not work with concern about losses in creativity, communication, and culture (Cherubini et al, 2021). Physical distance problem could occur in remote or hybrid work condition. Organization could make their culture stay visible for employees in hybrid environment by featuring company vision, mission statement, goals and values prominently in the digital office space (Grzegorczyk et al., 2021).

Communication will be key as uncertainty over the future of work is the biggest cause of anxiety for employees (Lund et al., 2021). To overcome problem in communication, organization could encourage employee to keep doing informal communication through digital channels (Grzegorczyk et al., 2021).

CONCLUSION

There are several terms that interchangeable with work from home (WFH). Terms like telecommuting, remote working, and WFH have a same meaning and concept moreover in COVID-19 pandemic outbreak. Media workers are one of the types of workers most affected by this WFH. The lockdown and restrictions on mobility caused their movement space to be limited. WFH condition made the fall of productivity, longer working hour, and change of communication in employees. But, after several time, there are increase work motivation and productivity in worker because they feel have greater control on themselves.

Media workers have irregular work schedule compare to another office worker. For journalist in global south including Indonesia, three biggest problems when reporting in pandemics; they were lack of broadband, expensive data cost, and out of date equipment. During pandemic, journalist had to face financial, physical, and psychological problems. It was known that journalist could overcome problem when WFH smoothly. There have been also some benefits that gained by journalist and their news organizations. Shifting to virtual newsrooms has promoted a more flexible interaction between management and their employees and increased collaboration. At the same time, this shift to virtual newsrooms has brought change to newsrooms and accelerating digital transformation.

REFERENCES

Aboelmaged, G. M., & Subbaugh, S. M. E. (2012). *Factors influencing perceived productivity of Egyptian teleworkers: An empirical study.* Measuring Business Excellence, 16(2), 3e22. https://doi.org/10.1108/13683041211230285

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Aczel, B., Kovacs, M., Van Der Lippe, T., & Szaszi, B. (2021). *Researchers working from home: Benefits and challenges.* PLoS ONE, 16(3 March), 1–9.

Afrianty, T.W. & Artanaya, I.G.L.S. (2022). *Working from home effectiveness during Covid-19: Evidence from university staff in Indonesia.* John Burgess Asia Pacific Management Review 27 (2022) 50e57

Al-Habaibeh. A, Watkins. M., Waried. K., & Javareshk M.B. (2021). *Challenges and opportunities of remotely working from home during Covid-19 pandemic*, Global Transitions, Volume 3, 2021, Pages 99-108,

Arruda, W. (2020). 6 Ways COVID-19 *Will Change the Workplace Forever*. https:// www.forbes.com/sites/williamarruda/2020/05/07/6-ways-covid-19-willchange-the-workplace-forever/#24ad43cc323e

Bailenson, J. (2021). *Nonverbal Overload: A Theoretical Argument for the Causes of Zoom Fatigue.* Technology, Mind, and Behavior (Vol 2, Iss 1).

Berkowitz, D. (2019). *A sociological perspective on the reporter-source relationship*. In K. Wahl-Jorgensen, & T. Hanitzsch (Eds.), The handbook of journalism studies (pp. 165–179). Routledge.

Berstein, E., et al. (2020). *The implications of working without the office*. Harvard Business Review, 15. https://hbr.org/2020/07/the-implications-of-working-without-an-office

Bick, R., Chang, M., Wang. K.W, & Yu, T. (2020). *A blueprint for remote working: Lessons from China.* McKinsey & Company March 2020

Birkett, H., Forbes, S., & Jackson, G. (2021). *Hybrid Working Beyond COVID-19: Research findings and recommendations for implementing hybrid working.* Retrieved from: www.birmingham.ac.uk/hybridworking-beyond-covid19 22344 © University of Birmingham 2021.

Cai. J., Ryu., S.J., Kum-Biocca, H.H., & Wohn, Y.W. (2021). *Understanding Working from Home Practical Changes and Adaptations During the COVID-19 Pandemic.* New Jersey Institute of Technology

Capers. Z. (2020). *Findings From a Decade in Tech* [New Research].

Cherubini, F., Newman, N., Nielsen, R. K. (2020). *Changing Newsrooms 2020 Hybrid Working and Improving Diversity Remain Twin Challenges for Publishers.* Oxford: Reuters Institute for the Study of Journalism.

Chinnaiah.P.M, & Smt.Chythra P. (2021). *Challenges of Working from Home in Persistent Covid-19 Environment* / 85 – 97 2021

Choudhury, P. (2021). *Our Work-from-Anywhere Future. Harvard Business Review (2021,* July 7)

Courtney. E. (2020). *Remote Work Statistics: Navigating the New Normal.*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Danandjaja, J. (1997). *Metode Penelitian Kepustakaan No 52 (1997*): Jurnal Antropologi Indonesia

Dizaho, E. kadarko, Salleh, R., & Abdullah, A. (2017). *Achieveing work life balance through flexible work schedules and arrangements.* Global Business & Management Research, 9(1), 455–465.

Economist impact. (2021). *Making Hybrid Work Human. Economist Impact*.

Gądecki, J., Jewdokimow, M., & Żadkowska, M. (2018). *New technologies and family life in the context of work at home. The strategies of work-life balance*. Studia Humanistyczne AGH, 17(4), 77. https://doi.org/10.7494/human.2018.17.4.77

García-Avilés, J.A. (2021) *Journalism as Usual? Managing Disruption in Virtual Newsrooms during the COVID-19 Crisis*, Digital Journalism, 9:9, 1239-1260, DOI: 10.1080/21670811.2021.1942112

Giurge, L. M., & Bohns, V. K. (2020). *3 tips to avoid WFH burnout.* Harvard Business Review (2020, April 3). https://hbr.org/2020/04/3-tips-to-avoid-wfh-burnout

Grzegorczyk, M., M. Mariniello, L. Nurski and T. Schraepen (2021). *Blending the physical and virtual: a hybrid model for the future of work', Policy Contribution* 14/2021, Bruegel.

Ipsen, C., van Veldhoven, M., Kirchner, K., & Hansen, J. P. (2021). *Six key advantages and disadvantages of working from home in europe during covid-19.* International Journal of Environmental Research and Public Health, 18(4), 1–19.

Jacks, T. (2021) *Research on Remote Work in the Era of COVID-19*, Journal of Global Information Technology Management, 24:2, 93-97

Klopotek, M. (2017). *The advantages and disadvantages of remote work from the perspective of young employees*. Organization & Management Quarterly, Maria Curie-Sklodowska University, 40(4), 39.

Kuhltau, C.C. (2002). *Teaching the Library Research. USA*: Scarecrow Press Inc.

Lund, S., Madgavkar, A., Manyika, J., Smit, S., Ellingrud, K., Meaney, M., & Robinson, O. (2021). *The future of work after COVID-19.* Retrieved from: www.mckinsey.com/featured-insights/future-of-work/the-future-of-work-after-covid-19

Mardalis. (1999). *Metode Penelitian Suatu Pendekatan Proposal*. Jakarta: Bumi. Aksara

Miranda, J., Fidalgo, J., & Martins., P. (2021). *Journalism in Time of Pandemic: New Professional Routines, New Ethical Challenges.* Comunicação e sociedade [Online], 39 | 2021 URL: http://journals.openedition.org/cs/5688

Mungkasa, O. (2020). *Bekerja dari Rumah (Working from Home/WFH): Menuju Tatanan Baru Era Pandemi COVID 19.* The Indonesian Journal of Development Planning Volume IV No. 2 – Juni 2020

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Narpati, B., Lubis. I., Meutia, K.I., & Ningrum, E.P. (2021). *Produktivitas Kerja Pegawai yang Dipengaruhi oleh Work from Home (WFH) dan Lingkungan Kerja Selama Masa Pandemi.* JURNAL ILMIAH MANAJEMEN FORKAMMA Vol.4, No.2, Maret 2021 Halaman: 121 – 133

NASSCOM (2020), *Navigating Covid, Retrieved from the NASSCOM* website https://nasscom.in/knowledge-center/publications/navigating-covid-indian-tech-sector-benchmarks-and-way-forward

Nazir, M. (2013). Metode Penelitian. Bogor: Ghalia Indonesia

Niebuhr, F.; Borle, P.; Börner-Zobel, F.; Voelter-Mahlknecht, S. (2022). *Healthy and Happy Working from Home? Effects of Working from Home on Employee Health and Job Satisfaction. Int. J. Environ. Res. Public* Health 2022, 19, 1122. https:// doi.org/10.3390/ijerph19031122

OECD. (2020). *Productivity Gains from Teleworking in the Post COVID-19 Era: How Can Public Policies Make it Happen?* OECD Publishing, Paris.

OECD. (2021). *Teleworking in the COVID-19 Pandemic: Trends and Prospects.* OECD Publishing, Paris.

Olson, M. H., & Primps, S. B. (1984). Working at home with computers: Work and non-work issues. Journal of Social Issues, 40(3)

Patanjali, S. & Bhatta, N.M.K. (2022). *Work from Home During the Pandemic: The Impact of Organizational Factors on the Productivity of Employees in the IT Industry.* Vision: The Journal of Business Perspective

Posetti, J., Bell, E., & Brown, P. (2020). *Journalism and the Pandemic Project. IJFC & Tow Center for Digital Journalism*

Purwanto, A., Asbari, M., Fahlevi, M., Mufid, A., Agistiawati, E., Cahyono, Y., & Suryani, P. (2020). *Impact of Work from Home (WFH) on Indonesian Teachers Performance During the Covid-19 Pandemic: An Exploratory Study.* International Journal of Advanced Science and Technology, 29(5), 6235–6244.

R. S. Gajendran & D. A. Harrison. (2007). *The Good, the Bad, and the Unknown About Telecommuting: Meta-Analysis of Psychological Mediators and Individual Consequences.* Journal of Applied Psychology, vol. 92, no. 6, pp. 1524–1541, 2007.

Radcliffe, Damian. (2021). *The impact of COVID-19 on journalism in Emerging Economies and the Global South*. Thomson Reuters Foundation.

Rai, A. (2020). *The COVID-19 pandemic: Building resilience with IS research*. Management Information Systems Quarterly, 44(2), iii–vii.

RMOL Bengkulu, 6 Februari 2022, *Jumlah Media Siber Mencapai Ribuan, Dewan Pers: Kami Belum Menemukan Model Pengawasan yang Efektif.*

Sampepajung, D.C., Nurqamar, I.F., & Nurhadi. M. (2021). *Work from Home Proclivity: A*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Year into Covid-19 Pandemic. Jurnal Manajemen & Kewirausahaan Vol 9, No. 2, 2021: 191-206

Sugiyono. (2012). Metode Penelitian Kuantitatif Kualitatif dan R&D. Bandung: Alfabeta.

The Economist. (2020). *People are working longer hours during the pandemic.* https://www.economist.com/graphic-detail/2020/11/24/people-are-workinglonger-hours-during-the-pandemic

Tong, J. (2017). *Introduction: Digital technology and journalism – An international comparative perspective. In* J. Tong, & S. H. Lo (Eds.), Digital technology and journalism (pp. 1–21). Palgrave Macmillan.

Tuwinanto & Rahadi, D.R. (2021). *Work From Home Dimasa Pandemi, Efektifkah?* Jurnal Manajemen Bisnis Volume 18, No. 1, Januari 2021

Wang, B., Schlagwein, D., Cecez-Kecmanovic, D., & Cahalane, M. (2020). *Beyond the factory paradigm: Digital nomadism and the digital future(s) of knowledge work post-COVID-19*. Journal of the Association for Information Systems, 21, 1379–1401.

Wu, H., & Chen, Y. (2020). *The impact of work from home (WFH) on workload and productivity in terms of different tasks and occupations*. In C Stephanidis, et al (Eds.), HCI International 2020—Late Breaking Papers: Interaction, Knowledge, and social media. Springer.

Zed, M. (2008). *Metode Penelitian kepustakaan*. Jakarta: Yayasan Obor Indonesia.

Patterns Of Social Interaction of Child-Assisted Citizens in Special Child Development Institutions

Randi[1], Eva Lidya[2], M. Fajar Ganta Saputra[3], Wahyu Vergiawan Lestanto[4], Khevin Wiriski[5]
[1,2,3,4,5]Department of Sociology, Faculty of Social and Political Sciences, Sriwijaya University
e-mail: Randi@fisip.unsri.ac.id

Article Info

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Article of OSC 2022

Abstract

Humans as social beings need social interaction with other fellow human beings. Social interaction is a reciprocal relationship between two or more people, both of which affect each other so that mutual communication occurs. The ability of social interaction between inmates, fostered children, inmates with officers, fostered children is not the same. The importance of social interaction in the Special Children's Development Institute so that Andikpas can carry out survival as prisoners because their small scope is not like society, in addition to that so that Andikpas can still adapt when they come out of prison. If the goal to be achieved goes well, Andikpas must establish social interaction with each other. Assisted by the Theory of Social Interaction according to Gillin and Gillin, this relationship was created because basically human beings could not live without others. There are 2 kinds of social processes that arise as a result of social interaction, namely the Associative Process and the Dissociative Process. The existence of forms of interaction that arise either positively or negatively has an inhibiting factor in achieving the form of social interaction. The factors that influence the obstacles are individualism, anti-social, apathy, streotype, selfishness, custom, fear, and ideological obstacles. With this condition, the picture of social interaction in the fostered residents.

***Keywords**: Social Interaction, Andikpas, Coaching Institute*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

Interaction is a social relationship between individuals verbally or non-verbally so that the individuals concerned influence each other. Social interactions are social relationships that concern between individual people, group groups and people with groups (Gillin in soekanto (2017). LPKA's social interaction leads to negative actions and positive actions, positive actions of fellow fostered citizens to know each other and build a family atmosphere, while negative actions are exclusion by other assisted residents (Sinatrio, 2018). The existence of resocialization in LPKA, namely the guidance and guidance of the assisted residents in addition to prisonization, namely habits, behavior, customs and culture in general in prisons, this occurs because of deprivation, namely the existence of a new subculture in correctional/prisoners (Suharti, 1997).

Social interaction is very important in human life in everyday life, that is, it can build relationships or relationships between people. Relationships can be done anywhere as well as in the Penitentiary. The ability of social interaction between inmates, fostered children, inmates with officers, fostered children is not the same. The importance of social interaction in the Special Children's Development Institute so that Andikpas can carry out survival as prisoners because their small scope is not like society, in addition to that so that Andikpas can still adapt when they come out of prison. If the goal to be achieved goes well, Andikpas must establish social interaction with each other. The focal point and most importantly was the interaction of Andikpas and the prison guards which required intense communication. Because, these officers are the ones who are fully responsible for the fostered residents. Even though Andikpas is a child who violates the societal norms that have been regulated by law, Andikpas also still needs social interaction even though its scope is only limited to the Special Child Development Institute.

The existence of a phenomenon such as the case on January 5, 2022 is attached to the tribunnews.com page Andikpas at LPKA Klas 1 Palembang escaped in the process of spiritual coaching activities and was successfully arrested within 30 minutes when the coaching officer became the priest of the dzuhur prayer time. Andikpas took advantage of the moment, the incident could be caused because Andikpas did not feel at home or comfortable in LPKA so that what was conveyed by prison officers became a negative response which caused social interaction between child-assisted residents and prison officers to not run effectively. This real phenomenon regarding social interaction in LPKA shows as a real phenomenon that the importance of effective social interaction between Andikpas in order to return to carrying out normal life in society. To prepare for that, LPKA requires training in correctional groups, so that Andikpas can interact with each other and there are no restrictions on each other. In making the social interactions in Andikpas to be quality , the need for programs that can guide them on better behavior. According to preliminary observations at LPKA itself, there are coaching programs such as: LPKA Filial School, Scout Movement, hair trimming exercises, smaw welding training and skill training, other morals. The Andikpas, whose average age rate is 12-18 years, are still very eager to live a normal life and have a soul that wants to interact normally with many people.

A special child development institution that accommodates and fosters the Andikpas, in which there is communication or interaction between Andikpas and prison officers. As an example of the context of the interaction, Andikpas who have just entered LPKA will automatically begin the process of adapting to other Andikpas. In this phase, it is what makes It difficult for Andikpas to face an environment and situation that is very different from the outside world. That way the importance of the role of officers in making Andikpas easy and quick to adjust to be able to communicate reasonably makes the interaction capital will make

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

their survival while at LPKA. What's more, with the various backgrounds of the cases they have experienced, here are the various cases behind the Andipkas crime, as follows:

Figure 1. Type of Crime in LPKA

No	Type of Crime	Volume
1.	Against the Order	3 People
2.	Decency	1 Person
3.	Murder	11 People
4.	Theft	42 People
5.	Robbery	23 People
6.	Narcotics	61 People
7.	Criminal Code /Criminal (general)	2 Persons
8.	Sharp Weapon	1 Person
9.	Child Protection	41 People
10.	Other	15 People
Total		206 People

Sources: http://lpkapalembang.kemenkumham.go.id/

Apart from the background of the case above, in fact, conflicts that are often the main trigger for infighting factors, one of which is excessive jokes during the coaching process. Usually when the coaching program is carried out, Andikpas interacts with andikpas with a rate of 12-18 years of age during the coaching process. Andikpas who often quarrel with the same age rate occurs during the filial school coaching process of fellow classes at the high school level, namely grades 10 to 12 with an age rate of 16-18 years, while in Andikpas who are educated in elementary and junior high schools there are rarely disputes, while age difference quarrels occur when carrying out physical health coaching activities such as gymnastics and football sports matches, and it also often happens between classes at the high school level where the coaching process is carried out in combination, andikpas with an age rate of 16-18 years.

Another factor is that Andikpas in the 12th grade of 18 years old feels senior towards other Andikpas so that potential disputes between andikpas at the high school level often occur.

The difference between Andikpas and adolescents of their normal age is that normal teenagers can have social interactions without restrictions, while Andikpas interact according to the structure in LPKA and existing regulations. The programs at LPKA carried out by Andikpas are in accordance with the LPKA structure that Must be followed by Andikpas in Coaching through programs at LPKA, not only in the scope of science, but include various coaching such as; a). guidance for religious awareness by learning religious knowledge in class, learning to recite iqro and the Quran, congregational prayers every day and giving qultums or cerama every Friday or major islamic religious events while for non-Islamic religions, places are provided to worship according to their respective religions; b). guidance in national and state consciousness by carrying out extracurriculars/excursions of scouts and paskibra, citizenship lessons, ceremonies conducted every Monday morning and morning apples; c).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Coaching in intellectual abilities by providing formal school education with a system adapted to the Ministry of Education and Culture; and d). Awareness in physical and spiritual health with morning exercises every Saturday and other sports that are included in extracurriculars including futsal, basketball, badminton, and martial arts..

METHODOLOGY

This research author will use a type of descriptive qualitative research method as a method in the research. According to (Sugiyono, 2018) qualitative research methods are research methods used to examine a condition of natural objects, (behavior, motivation, action, etc.) by describing using language and words in a special natural context. This article focuses on the Patterns of Social Interaction of Child-Assisted Citizens in Special Child Development Institutions. The data used in this study is literature data sourced from journals, articles, mass media, and books. This paper describes the results of investigations related to the Pattern of Social Interaction of Child-Assisted Citizens in Special Child Development Institutions.

RESULTS AND DISCUSSION

Forms of Associative Social Interaction

1. Form of Group Task Cooperation
   All coaching at LPKA is an important coaching to do for Andikpas. One of the coaching is a filial school where filial schools teach cooperation in maintaining class cohesion. During this pandemic, due to the lack of facilities at LPKA in terms of technology, andikpas worked on assignments together in class. In addition, in the classroom, it is also taught to work together by maintaining cohesiveness such as, pickets in maintaining cleanliness every day.
2. Mutual Cooperation Every Week
   Strengthening the cooperation of fellow andikpas as a whole, LPKA holds mutual cooperation every day for all andikpas. Given parts there are those who plant plants, clean the mosque, give around LPKA and so on. This serves to maintain the social interaction of the entire andikpas, not only the roommates or the classmates. In addition, it makes the LPKA environment clean and healthy together with both andikpas and officers. The pattern of coaching carried out by LPKA is one of the forms of empowerment which provides guidance that is corrective, educational, rehabilitative, and reintegrative in carrying out the function of LPKA, not only for clarity but to make the assisted residents aware (Silvia, 2017).
3. Forms of Cooperation in Extracurriculars and Skills
   To strengthen cooperation on each extracurricular and skills for example on , Scouts and LAS. In scouting, cooperation is the main material. A form of joint work, basically Scouting activities aim to train the younger generation to maximize every potential that exists in him, be it intellectual, spiritual, social, and physical so that we hope that these values can arise in Andikpas so that they can return to being positive individuals when mingling with society later. If in the old andikpas skills are required to supervise and teach new andikpas in each skill program because the skill program is not easy learning while creating a good relationship.
4. There was Accommodation when Andikpas was fighting
   When doing every activity and coaching Andikpas is not always able to work together well, there are times when or reproached–the reproach of Andikpas' activities occurs misunderstanding, activities that often occur misunderstandings during physical activities and often there are also misunderstandings with his roommates. If this is the case, the

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

officer will take Andikpas for mediation or who is the mediating party and does not have the authority to give a decision.

5. Assimilation Attitude
   In LPKA Klas 1 Palembang did not feel the existence of the most striking or most dominant culture, all of them felt the same, it was just that Andikpas felt the need to respect each other with different beliefs to become a unity in LPKA. LPKA officers also felt that it was not ad group that became dominant or controlled.
6. Acculturation Attitude
   Acculturation is a social process that occurs between two different cultures so that there is a mixture of two cultures. In LPKA, there are their own rules made by the government and assisted and run by institutions, so andikpas in LPKA do not follow their cultural rules let alone form a new culture. It's just that the regulations made to change andikpas for the better.

Dissociative Forms of Social Interaction.

1. There was a Dispute over Andikpas' Misunderstandings
   Andikpas feels the dissociative form of social interaction that often occurs with fellow roommates. Different people are also different thoughts or perspectives of a person is very difficult to unite an opinion, but one of the andikpas must be aware or relent so that there is no major conflict. One of the key informants felt he had to be patient and relent for the sake of mutual comfort. When extracurricular sports often occur misunderstandings in a football match that ends with a fight so that cooperation cannot run.
2. Competition
   Competition often occurs when a social interaction is running, but not with Andikpas at LPKA, they feel that competition exists only when carrying out certain activities because they feel that they have to change for the better together, so the absence of a sense of competition appears in their daily lives.
3. Contravention
   Rejection is a form of contravention in which there is a denial that is not expressed openly. This is due to the presence of stance differences between certain circles. As a child who commits a criminal act and is sentenced to carry out a coaching period according to a certain period of time feels that it is impossible for rejection to occur in conditions at LPKA.
4. Conflicts
   Conflict is a social process in which an individual person or human group seeks to fulfill a goal by challenging the opposing party accompanied by threats or violence. In LPKA andikpas do not show any opposition from officers but if opposition from fellow andikpas has occurred if carrying out activities such as often joking excessively, andikpas often conflict.

Inhibiting factors:

1. Selfish
   Selfishness is the attitude of a person who needs time to change, in every individual has a selfish attitude but there are those who can control it, some do not. Selfishness is the most recognized obstacle by andikpas in LPKA. Selfish with his opinion that must be followed while in the match. If the peacock has realized that there will be a conflict andikpas feel that they have to give in to avoid unwanted things happening.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

2. Less Adaptable
   Adapati is a factor in social interaction. If you want to have social interactions with the community and establish good relationships with other individuals, it is very necessary to be able to adapt in order to survive in an environment. Andikpas who were interviewed felt that he was not able to adapt well which made him rarely to chat or form conversations with other fellow andikpas.

CONCLUSION

Based on the results of the research conducted by the author in interviews, and observations, it can be concluded that the research with the title "Social Interaction of Child-Assisted Citizens in special child development institutions" went well. The form of social interaction is divided into two, namely, Associative interaction and Dissociative interaction and answering the problem formulation question that :

1. The form of social interaction carried out by child-assisted residents is associative in the form of group task cooperation, mutual cooperation every week, forms of cooperation in extracurriculars and skills, the existence of accommodation but in LPKA there is no form of assimilation and acculturation attitudes and forms of dissociative social interaction, namely disputes over misunderstandings among andikpas, conflicts, and contraventions of some andikpas, and the absence of a form of cooperation between andikpas.
2. The inhibiting factors that are widely experienced in the social interaction of child-assisted citizens are selfish attitudes and lack of being able to adapt

Judging from the observations of social interactions that are intertwined, andikpas experienced a fairly increased progress in interaction from the initial observations. At different times, the officers unite themselves to Andikpas by playing officer vs. andikpas ball. Their closeness seemed to have awakened like brothers and sisters, Andikpas also looked polite to the officers. Every section chief through Andikpas always reprimanded the greeting. For non-participatory observation methods on outside media disseminated by LPKA. These observations are viewed through the web directly from LPKA, social media and news stories published by news portals. On social media, andikpas were given competitions and on the LPKA web, all schedules for coaching meetings or socialization were arranged transparently.

REFERENCES

Sinatrio, Dimas. 2018. *Interaksi Sosial Warga Binaan Lembaga Pemasyarakatan (Studi Kualitatif Deskriptif Dalam Perspektif Mantan Warga Binaan Pemasyarakatan).* Malang: Universitas Brawijaya

Soekanto, Soerjono. 2017. *Sosiologi*. Jakarta: Rajawali Pers

Sugiyono. 2018. *Metode Penelitian Kuantitatif*, Kualitatig, dan R&D, penerbit Alfabeta, Bandung

Silvia, Oktari. 2017. *Pola Interaksi Dalam Pembinaan Narapidana Narkotika di Lembaga Pemasyarakatan Klas IIA Binjai. Universitas Muhamadyah Malang*

Suharti, Titik.1997. *Fungsi Ganda Lembaga Pemasyarakatan* dalam jurnal Perspektif-Volume 2 no.2 tahun 1997

tribunnews.com

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Sumber: http://lpkapalembang.kemenkumham.go.id/

Reframing Individual's Bureaucratic Personality in Public Service Interaction in Digital Era

Yeni Widyastuti[1], Susanti[2]
[1]Postgraduate Student Doctoral Program in Public Administration
Universitas Terbuka, Tangerang Selatan, Indonesia
[2]Department of Administration Sciences, Faculty of Law, Social and Political Sciences, Universitas Terbuka, Tangerang Selatan, Indonesia
e-mail: yeni.widyastuti@untirta.ac.id

Article Info

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Article of OSC 2022

Abstract

This research aims to analyze the influenced of digital era such as the use of web technologies, to improve the structure and functions of government for public services. Changing the design of the institutional system of public organizations and services and creating a bureaucratic apparatus which more understand to the need of community, realizing individual's bureaucratic personality that satisfactory in the interaction of public services as a manifestation of bureaucratic reform in changing mindset and culture-set. This study is descriptive in nature and data collected from various research results related to bureaucratic reform, e-government, industrial revolution 4.0, human resource management. This study also completely based on secondary data that are journals, scientific articles, reports, research papers and other academic publications. A systematic review was carried out in detail from some of the collected literature. The results of this study conclude public service which based on public, or citizens preferences will foster public trust and enhanced the citizen/resident-state interactions.

***Keywords**: Bureaucratic Personality, Digital Era, Public Service*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

In the interaction of public service, we often found the condition, The citizen of the user services is required to follow all procedures which includes forms of requirements, filling out data, time readiness to follow service process and procedures, paid for required fee or cost of services and sometimes had to wait in queues because many people also access the same services. Poor communication in the interaction of citizen and public service provider, uncertainty completion of services, caused red tape and administrative burden for the citizen. They feel emotional, exhausted, and confused. On the other hand, public service providers had the perception that citizen who want to access the public service, are ready with all of service requirements so that the services can run quickly, precisely, and more efficient. This perception gap caused disharmony between the tow (citizen and public service provider).

Convoluted and slow administrative procedures put a burden for citizen. Some complaints that still occurred in public services are uncertainty time, unclear cost, and service procedures (see Dwiyanto, et.al.2011). Public Satisfaction Survey Report for Community Service Reports/Complaint related to Public Services (*Survei Kepuasan Masyarakat Layanan Penanganan Laporan/Pengaduan Masyarakat terkait Pelayanan Publik*) in the year of 2020 conducted by Ombudsman of the Republic of Indonesia stated that the implementation of public services carried out with the government officials in various service sector, especially civil matters and basisc need of community, experiencing convoluted procedures, lack of transparency, lack of information, limited facilities and infrastructures, minimum of safety guarantee, also minimum legal certainty, uncertainty time and cost and also discrimination.

The survey conducted by Ombudsman of the Republic of Indonesia, refers to Regulation of the Minister of Empowerment of State Apparatus and Bureaucratic Reform (MENPAN RB) Number 14 of 2017 concerning for Guidelines for Compiling Community Satisfaction Survey for Public Service Provider on 467 respondents spread across the Head Office and 34 of Representatives Office of Ombudsman RI. Respondents are service recipients at the Ombudsman RI for the period of July until September of 2020. Results shown as following table:

Tabel 1. Result of Community Satisfaction Survey Data Processing at the Ombudsman RI (2020)

No	Service Element	Grade	Service Quality	Service Unit Performance
U1	Suitable of type of requirements with the service	3,33	A	Excellent
U2	Ease of Procedure	3,32	A	Excellent
U3	Service Velocity	3,15	B	Good
U4	Service with Special Treatment	2,29	C	Poor
U5	Suitable of Service Product Received	3,21	B	Good
U6	Officer Competency	3,38	A	Excellent
U7	Officer’s Courtesy and Hospitality	3,48	A	Excellent
U8	Qualities of Facilities and Infrastructure	3,15	B	Good
U9	Availability of Complaint Service	3,83	A	Excellent
	Average	3,24	B	Good

(Source: Laporan Survei Kepuasan Masyarakat: Layanan Penanganan Laporan Pengaduan MasyarakatTerkait Pelayanan Publik tahun 2020)

Annual Report of Ombudsman RI 2021 in Madadministration Prevention Management also stated 5 (five) Ranking of Compliant Survei as the following table:

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Table 2. Top Five Rank of Compliance Survey 2021

Rank	Ministry Category	Institutional Category	Province Category	Districts Category	City Category
First	Kementerian Luar Negeri	Badan Pengawas Obat dan Makanan	Riau	Kampar	Balikpapan
Second	Kementerian Keuangan	Konsil Kedokteran Indonesia	Kalimantan Barat	Deli Serdang	Pontianak
Third	Kementerian Perhubungan	Lembaga Kebijakan Pengadaan Barang/Jasa Pemerintah	DI.Yogyakarta	Rokan Hilir	Bima
Fourth	Kementerian Pendidikan dan Kebudayaan	Badan Tenaga Nuklir Nasional	Bengkulu	Landak	Bekasi
Fifth	Kementerian Ketenagakerjaan	Badan Standarisasi Nasional	Kepulauan Bangka Belitung	Kutai Kartanegara	Blitar

(Source: Laporan Tahunan Ombudsman RI tahun 2021)

Table 3. Public Service Supervision with Low Maladministration Perception Value Interval

Province	Value of Maladministration Perception	Compliance Value	Compliance Zone	Compliance	Categorization of Opinion
DI.Yogyakarta	2,81	97.05	Hijau	High	A
Riau	2,98	98.12	Hijau	High	A
Bali	3,12	77.78	Kuning	Average	B
Kalimantan Barat	3,22	53.04	Kuning	Average	B
Kalimantan Selatan	3,38	78.31	Kuning	Average	B
Nusa Tenggara Barat	3,45	83.89	Hijau	High	A
Kalimantan Utara	3,49	81.47	Hijau	High	A

(Sumber: Laporan Tahunan Ombudsman RI tahun 2021)

Zein (2012:5) stated that bureaucratic reform as seeking to restructure and reposition the system and behavior of the government bureaucracy towards good governance. But even so, making changes to the established organization style is not easy. Ria et.al (2016:2) stated that public service is one indicator that shows the success of bureaucratic reform. According to Kurniawan (2017: 2) bureaucratic reform must start from the institutional arrangement and human resources of civil service (ASN). As Dwiyanto (2015: 92-95) that returning back the bureaucratic reform to the right track is to change the character of civil service (ASN) to be more in line as public service provider, equipped with the multicultural perspective and had the ability to manage diversity. They must have the whole-of-government perspective, their

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

way of understanding and finding problem's solution based on a coherent view of the overall interest in providing world-class civil service.

METHODOLOGY

This study is descriptive in nature related to bureaucratic reforms, public service provider and the influence of digital technology of 4.0 industrial era to the public service process. Analysis conducted by collecting data from various research results of bureaucratic reform and relation of citizen-state interaction due public service. This study is also completely based on secondary data which are from journals, scientific articles, research paper and other academic publication.

RESULTS AND DISCUSSION

The Industrial 4.0 Era represents a fundamental change in the way we live, work and related one another. This is the new chapter of human life, made possible by extraordinary technological advanced (Savitri,2019:vi). The speed, breadth and depth of this revolution era been forced us to rethink how countries develop, how the organization create their values and also human development itself. The Industrial 4.0 Era is more than just technology-driven change, but also an opportunity to help everyone including the leaders, policy makers, people of diverse income from diverse countries, to harness unifying technology to create an inclusive and people-centered world future.

Klaus Schwab in World Economic Forum 2016 presented that not only individuals, organization and government will have a deep influence on the world, but there is also great potential to restore and regenerate environmental resource to the use of technology and intelligent system design. There is an opportunity to shift business processes and consumer away from linear take-make-dispose model of resource use and resource access, to shift towards with a new industrial model with the effective flow of materials, energy, labor and information. All of it can now be interact to each other and promote restorative, regenerative and more productive system design (Schwab.2016:64-65).

President Jokowi said that Indonesia had to be ready to enter the Industrial 4.0 Era which involved with the use of digital technology. It's a transformation effort toward improvement by integrating the online world and production line in industry with the internet as the main support. So that the government and stakeholders tried to develop various innovation as part of digital transformation strategy, making comprehensive changes to every process, competency, business model with the implementation of digital technology, in line with the recommendations of various global research institutions with the mainstreaming of digital transformation.

The government launched Making of Indonesian 4.0 Roadmap on Aril 4,2018. It becomes the government strategy to enter the 4th Industrial Revolution Era which impact the government on (a) responsively adapting to all changes; (b) managing the budget in a transparent and effective manner; (c) resolving public problem quickly and accurately. The government itself underwent several transformations along with the changes that occurs in this industrial revolution, namely:

1. Industrial Revolution 1.0: Government as Administrator, Citizen as Resident
2. Industrial Revolution 2.0: Government as Service Provider, Citizen as Customer
3. Industrial Revolution 3.0: Government as Facilitator, Citizen as Participants
4. Industrial Revolution 4.0: Government as Collaborator, Citizen as Co-creation

On August 3,2020 President Jokowi gave 5 (five) directions for Digital Transformation Planning as follows:

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

1. Acceleration of Access and Digital Infrastructure Expansion in the form of internet services, especially in 12.500 villages or sub-districts as well as public service points.
2. Prepare the digital transformation roadmap in all sector from government, education, health, trade, industry and broadcasting.
3. Accelerate the integration of national data center
4. Preparing digital talent needs
5. Regulations related to digital transformation funding and financing schemes are prepared as soon as possible (Source: e-Bulletin Wantiknas July Edition p.5).

Table 4. 4G Coverage Connection in Village/Subdistrics of Indonesia

Total of Villages/Sub-Districts in Indonesia **83.218**	Villages /Sub-Districts 3T: **20.341**	Villages /Sub-Districts Non 3T **62.877**
Total of Villages/Sub-Districts in Indonesia Unreachable by 4G in Indonesia: **12.548**	Villages /Sub-Districts Not Covered by 4G: **9.113**	Villages /Sub-Districts Non 3T Not Covered by 4G: **3.435**
Total of Villages/Sub-Districts in Indonesia Covered by 4G in Indonesia: **70.670**	Villages /Sub-Districts 3T Covered by 4G: **11.228** Dengan Rincian: Infrastruktur 4G dibangun oleh BAKTI: **1.606** Infrastruktur 4G dibangun oleh Operator Seluler/Opsel: **9.622**	Villages /Sub-Districts Non 3T Covered by 4G: **59.442**

(Sourcesr: Kemenkominfo dalam Buletin Wantiknas, Edisi Agustus 2020)

Attachment to Presidential Decree No.96 of 2014 concerning Indonesia's Broadband Plan 2014-2019 in General Policy point 8 mentions the government as a facilitator encourages the use of broadband with the following strategies:

1. Coordinate the demand /need for use of ICT in the government sector
2. Ensuring the implementation of e-government-based for public service in all government agencies
3. Ensuring the use of e-procurement in all government agencies
4. Ensuring the harmonization of government ICT policies, and program that are cross-sectoral as well as cross-central and regional
5. Facilitating the availability of ICT support for the development of priority sectors such as education and health
6. Facilitating provision of ICT access for public

Also mention in the attachment the selection of 5 (five) priority sectors carried out by taking into account their impact on the nation transformation and increasing national competitiveness. The five sectors represents of the four components of government interactions (a) between government agencies; (b) government with government employee/officials; (c) government and society and (d) the government and business world/sector.

As stated by Klaus Schwab (2016: p.66) the implication of Industrial Revolution 4.0 to the government as follows:

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

More intense and innovative use of web technologies can help public administrations modernize their structures and functions to improve overall performance, from strengthening processes of e-governance to fostering greater transparency, accountability and engagement between the government and its citizens. Governments must also adapt to the fact that power is also shifting from state to non-state actors, and from established institutions to loose-networks.

McKinsey (2017:2) stated in his study that there was an accelerating industry disruption due to the influence of digitalization, machine learning and life science which continues to develop as a result of what is currently being faced not only by changing or developing technology, but also by the combinational of technology explosion, requires us to be more adaptive. In this case, customers get added value to be able to enjoy free goods and services that are more personal and diverse.

We can see its application in giving rewards or points in online transactions, discounts, customer assessments as well as partners important and considered evaluation, as consequences of the ecosystem revolution in business sector. There is a fact that globalization keep continuous to develop so fast, as evidenced by the exchange of electronic mail which reaches 250 million every day and this cross-border data has grown 50 times more in the last decade. More than 250 million people live in area outside of their place or birth origin, which shows demographic shift, as well as more 350 million people are involved in e-commerce as sellers or buyers where MSME’s can turn into micro-multinationals (McKinsey,2017:4)

Eliska Drapalova and Kai Wegrich (2020) in their article entitled Who governs 4.0? Varieties of smart cities states that the concept of smart city is a fuzzy concept because it involved a lot of indicators or various definitions without unified definitions. The concept combines various concept that related to technology, social aspect, sustainable environment, governance, local politics and economic development. Meijer and Bolivar (2016) divides into 3 (three) ideal categories focusing on technology; human resources and governance.

The definition commonly used is investment in human life, social capital and communication infrastructure both traditional and modern that support economic growth and high quality of life, accompanied by wise use of resources in participatory governance Caragliu, Del Bo, and Nijkamp 2011:70). The existence of Smart City lead to Smart Mobility, the transition to new modes of transportation, vehicle transportation and related changes to social norms and business model. Several factors that influence the smart cities include culture and administrative culture, capacity and ideology. In this article also stated, several cities with smart city agenda will faced weak engagement with the citizen, or in the other hand, influential political leadership will focus on forming support groups rather than apathetic voters. It can be concluded, that the influenced of political leadership, regime, ideology and administrative capacity will effect the smart city concepts.

Inline with the findings in this article about administrative culture, several things that are obstacles or challenges in implementing e-government in Indonesia to welcome Industrial Revolution 4.0 Era. These factors include (1) the culture sharing information does not exist yet; (2) the culture of documenting is not common; (3) the scarcity of reliable human resources in IT field; (4) inadequate and expensive infrastructure and (5) limited access to information (Vani Wirawan, 2020:12).

One example of administrative culture in the application of e-Government as a response to Industrial Revolution 4.0 Era is the Green Information and Communication Technology implemented by the government of Pontianak City as well as e-government administration regulations, in order to increase awareness and change the behavior of government resources

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

to behave environmental friendly in the use of information, communication and technology and sustainability (Irfan Setiawan.2019).

The article written by Gregory A. Porumbescu (2016) entitled Placing the Effect? Gleaning Insights into the Relationship between Citizens' Use of E-Government and Trust in Government, showed that there is an optimism regarding the implementation of e-government which contribute to more efficient public services, opening up opportunities to public participation, and strengthening the responsiveness of government and public sector. However, various study that want to find out the relationship between the implementation of e-government and the level of trust of community or citizen, in turns out there are differences. Some of them stated that it had positive effect, especially from the opinion from the citizen that already been trust to government from the start, while other said that there is no significant influenced and even have the negative one (Porumbescu.2016:2). The results of this research showed that the more we know, the less impact we will have on individual change. However, e-government can improve interactions and relations between government and citizen.

In addition, other challenge of implementing e-government, as stated by Johanes Basuki (2018) in the article Public Administration Ecology in Indonesia in Facing the Industrial Revolution 4.0 : Public Policy Perspectives, as identified follows (1) lack of regulations on e-government at the central and regional level; (2) no culture sharing tradition; (3) no documenting culture; (4) availability of IT's human resources and low of literacy on digital IT; (5) inadequate infrastructure and (6) limited access to certain places.

The influence of industrial revolution differs from one country to another, because its influenced by public policies duration, main objective, available funding, areas for action, focused manufacturing sectors and prioritized technologies, as stated by Yongxin Liao.,et.al (2018:1).

CONCLUSION

Public service reform has brought ethical awareness into focus, that having ethical behavior is important, but on the other hand, a democratic and participatory government model is needed, giving greater focus to accountability than efficiency with the acknowledgement that society or citizen also want the government to be efficient, as quotes from Minogue (1998:32) by Joao Bilhim and Barbara Neves (2005).

The focus on ethics not only understood as a new concern, but also a sign that society has develop and in the other hand, becoming less dependent to government. A fair and pro-community public service orientation is needed to overcome various shortcoming in the bureaucracy such as in the new public service paradigm. The government bureaucracy is encouraged to return to its main mission that is ensuring citizen acces to basic services, collectivity needs and other strategic services, as stated by Dwiyanto (2011:27).

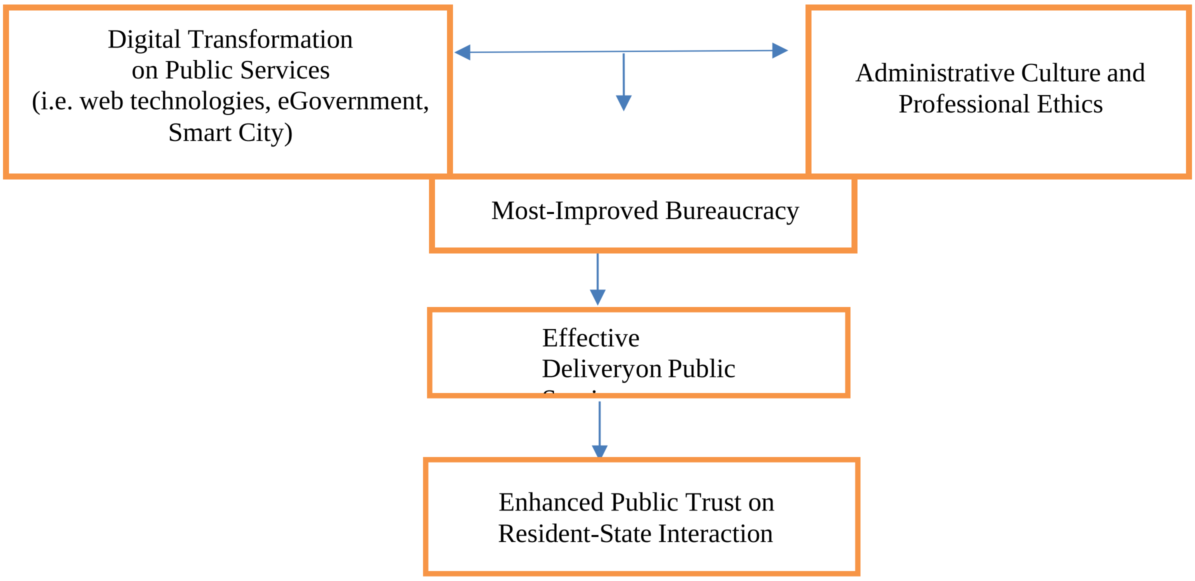
Plato in his book "The Laws" states "the servants of the nations are to render their services without any taking of presents...To form your judgement and then abide by it is no easy task, and "tis a man" surest course to give? Loyal obedience to the law which commands "Do no service for a present", as quotes by (Wijayanto & Ridwan Zachrie.ed.2009:4). From Plato's statement we can conclude that the existence of public service provider should comply with existing laws and regulations, represent and provide selfless service because that is already indeed the main tasks and function and should be carried out.

The public interest basically the highest goals for the government. The role of the government is to provide the best public services to the community or citizens, humane services, giving the community or citizen as the center of interest and doing the professional service standards. The influenced of digital technology and implementation of culture sharing,

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

documenting sharing as consequences in facing digital era, also provide with professional ethics standard could create the most improved bureaucracy and enhance the public trust on resident-state interaction. As describe in following figure:

Figure 1. Reframing Individual Bureaucratic Personality Model



REFERENCES

Cox, Raymond W (ed). 2009. *Ethics and Integrity in Public Service: Concepts and Cases*. ME Sharpe: Artmonk, New York; London, England

Denhart, Janet V dan Robert B. Denhart. 2007. *The New Public Service: Serving, Not Steering.* United States of America: M.E Sharpe.

Dwiyanto, Agus. 2015. *Administrasi Publik: Desentralisasi, Kelembagaan dan Aparatur Sipil Negara.* Yogyakarta: Gadjah Mada University Press

Eliska Drapalova & Kai Wegrich (2020): *Who governs 4.0? Varieties of smart cities. Public Management Review*, DOI: 10.1080/14719037.2020.1718191 To link to this article: https://doi.org/10.1080/14719037.2020.1718191

Irfan Setiawan.2019. *Pengembangan Teknologi Informasi dan Komunikasi Dalam Menghadapi Era Revolusi Industri 4.0 di Kota Pontianak*. Jurnal Teknologi dan Komunikasi Pemerintahan. Volume 1 Nomor 1. Oktober 2019. pp 1-14

Gregory A. Porumbescu (2016): *Placing the Effect? Gleaning Insights into the Relationship between Citizens' Use of E-Government and Trust in Government, Public Management Review.* DOI: 10.1080/14719037.2015.1122827 To link to this article: http://dx.doi.org/10.1080/14719037.2015.1122827

Ismail. 2019. *Government Governance in The Industrial Revolution Era 4.0*. JISPO VOL. 9 No. 2 Edisi: Juli-Desember Tahun 2019

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Joao Bilhim & Barbara Neves.2005. *New Ethical Challenges in A Changing Public Administration. Social and Political Sciences Institute of Lisbon Technical University*.Centre for Public Administration & Policies.

Johannes Basuki (2018) *Ekologi Administrasi Publik Di Indonesia Dalam Menghadapi Revolusi Industri 4.0: Perspektif Kebijakan Publik. Public Inspiration:* Jurnal Administrasi Publik Volume 3 No 2, 2018

Mayumi Fukuyama. 2018. *Society 5.0: Aiming for a New Human - Centered Society*. Japan SPOTLIGHT July/August 2018.htps://www.jef.or.jp/journal/

Mc Kinsey & Company. 2017. *McKinsey Special Collections: Trends and Global Forces*. Sydney Design Studio www.mckinsey.com

Ria, Mai Damai, et.al. 2016. *"Analisis Pengaruh Reformasi Birokrasi Terhadap Kinerja Pemerintah Daerah: Studi Kasus di Pemerintah Jawa Barat*. Jurnal Civil Service. Vol 10, No.1, Hal 51-67, Juni 2016

Salgues, Bruno. 2018. *Society 5.0: Industry of the Future, Technologies, Methods and Tools* (Volume 1). London: John Wiley & Sons, Inc.

Savitri, Astrid. 2019. *Revolusi Industri 4.0. mengubah Tanangan Menjadi Peluang d Era Disrupsi 4.0.* Yogyakarta: Penerbit Genesis

Schwab, Klaus. 2016. *The Fourth Industrial Revolution. World Economic Forum.* Switzerland. ISBN-13: 978-1-944835-01-9. ISBN-10: 1944835016

Wijayanto & Ridwan Zachrie (Editor).2009. *Korupsi Mengorupsi Indonesia: Sebab, Akibat dan Prospek Pemberantasan.* Jakarta: Pt Gramedia Pustaka Utama

Vani Wirawan.2020. *Penerapan E-Government dalam Menyongsong Era Revolusi Industri 4.0 Kontemporer di Indonesia.* Jurnal Penegakan Hukum dan Keadilan (JPHK) Volume 1 Nomor 1. DOI: 10.18196/jphk.1101

Yongxin Liao et.al (2018). *The impact of the fourth industrial revolution: a cross-country/region comparison.* Production. ISSN 1980-5411 (On-line version). Production, 28, e20180061, 2018. DOI: 10.1590/0103-6513.20180061

Zein, Harry Mulya. 2012. *Gerakan Reformasi Birokrasi Dari Dalam*. Tangerang Selatan: Green Komunika

Dokumen dan Peraturan Perundangan

Laporan Survei Kepuasan Masyarakat: Layanan Penanganan Laporan Pengaduan Masyarakat Terkait Pelayanan Publik tahun 2020

Laporan Tahunan Ombudsman RI tahun 2021

Perpres No. 96 Tahun 2014 tentang Rencana Pitalebar Indonesia 2014-2019

Keppres Nomor 1 Tahun 2014 tentang Dewan Teknologi Informasi dan Komunikasi Nasional

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

(WANTIKNAS)

Media Literate As A Determinant Of Student Performance In Communication Science Undergraduate Program Of Universitas Terbuka

Arifah Bintarti[1], Djoko Rahardjo[2]
[1]*Universitas Terbuka*
e-mail: arifahb@ecampus.ut.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

This study aims to investigate the relationship between media literacy and student achievement. This survey research was conducted online and by direct observation. The population in this study were students who registered for Online Tutorials in 3 courses with a total of around 4000 who were all sent questionnaires via their email addresses. The data received is about 425 after filtering complete data of 370. The results show that there is a relationship between user behaviour and media literacy. Meanwhile, there is a significant but weak relationship between media literacy and student performance.

Keywords: *Media Literacy, Internet Literacy, Distance Education, Online Learning*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

PENDAHULUAN

Literasi adalah kemampuan seseorang dalam mengolah dan memahami informasi saat melakukan proses membaca dan menulis. Dalam perkembangannya, definisi literasi selalu berevolusi sesuai dengan tantangan zaman. Jika dulu definisi literasi adalah kemampuan membaca dan menulis. Saat ini, istilah Literasi sudah mulai digunakan dalam arti yang lebih luas. Dan sudah merambah pada praktik kultural yang berkaitan dengan persoalan sosial dan politik.

Definisi baru dari literasi menunjukkan paradigma baru dalam upaya memaknai literasi dan pembelajaran nya. Kini ungkapan literasi memiliki banyak variasi, seperti Literasi media, literasi komputer, literasi sains, literasi sekolah, dan lain sebagainya. Hakikat ber-literasi secara kritis dalam masyarakat demokratis diringkas dalam lima verba: memahami, melibati, menggunakan, menganalisis, dan mentransformasi teks. Kesemuanya merujuk pada kompetensi atau kemampuan yang lebih dari sekedar kemampuan membaca dan menulis.

Pengertian Literasi

Menurut kamus online Merriam-Webster, Literasi berasal dari istilah latin “literature” dan bahasa Inggris “letter”. Literasi merupakan kualitas atau kemampuan melek huruf/aksara yang di dalamnya meliputi kemampuan membaca dan menulis. Namun lebih dari itu, makna literasi juga mencakup melek visual yang artinya “kemampuan untuk mengenali dan memahami ide-ide yang disampaikan secara visual (adegan, video, gambar).”

National Institute for Literacy, mendefinisikan Literasi sebagai “kemampuan individu untuk membaca, menulis, berbicara, menghitung dan memecahkan masalah pada tingkat keahlian yang diperlukan dalam pekerjaan, keluarga dan masyarakat.” Definisi ini memaknai Literasi dari perspektif yang lebih kontekstual. Dari definisi ini terkandung makna bahwa definisi Literasi tergantung pada keterampilan yang dibutuhkan dalam lingkungan tertentu.

Education Development Center (EDC) menyatakan bahwa Literasi lebih dari sekedar kemampuan baca tulis. Namun lebih dari itu, Literasi adalah kemampuan individu untuk menggunakan segenap potensi dan skill yang dimiliki dalam hidupnya. Dengan pemahaman bahwa literasi mencakup kemampuan membaca kata dan membaca dunia. Menurut UNESCO, pemahaman orang tentang makna literasi sangat dipengaruhi oleh penelitian akademik, institusi, konteks nasional, nilai-nilai budaya, dan juga pengalaman. Pemahaman yang paling umum dari literasi adalah seperangkat keterampilan nyata – khususnya keterampilan kognitif membaca dan menulis – yang terlepas dari konteks di mana keterampilan itu diperoleh dan dari siapa memperolehnya. UNESCO menjelaskan bahwa kemampuan literasi merupakan hak setiap orang dan merupakan dasar untuk belajar sepanjang hayat. Kemampuan literasi dapat memberdayakan dan meningkatkan kualitas individu, keluarga, masyarakat. Karena sifatnya yang “multiple Effect” atau dapat memberikan efek untuk ranah yang sangat luas, kemampuan literasi membantu memberantas kemiskinan, mengurangi angka kematian anak, pertumbuhan penduduk, dan menjamin pembangunan berkelanjutan, dan terwujudnya perdamaian. Buta huruf, bagaimanapun, adalah hambatan untuk kualitas hidup yang lebih baik.

Tujuh Dimensi Pengertian Literasi

Literasi memiliki tujuh dimensi yang berurusan dengan penggunaan bahasa.

1) Dimensi geografis meliputi daerah lokal, nasional, regional, dan internasional. Literasi ini bergantung pada tingkat pendidikan dan jejaring sosial.
2) Dimensi bidang meliputi pendidikan, komunikasi, administrasi, hiburan, militer, dan lain sebagainya. Literasi ini mencirikan tingkat kualitas bangsa dibidang pendidikan, komunikasi, militer, dan lain sebagainya.
3) Dimensi ketrampilan meliputi membaca, menulis, menghitung, dan berbicara. Literasi ini bersifat individu dilihat dari tampaknya kegiatan membaca, menulis, menghitung, dan berbicara. Dalam teradisi orang barat, ada tiga ketrampilan 3R yang lazim

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

diutamakan seperti reading, writing, dan arithmetic.
4) Dimensi fungsi, literasi untuk memecahkan persoalan, mendapatkan pekerjaan, mencapai tujuan, mengembangkan pengetahuan, dan mengembangkan potensi diri.
5) Dimensi media, (teks, cetak, visual, digital) sesuai dengan perkembangan teknologi yang sangat pesat, begitu juga teknologi dalam media literasi.
6) Dimensi jumlah, kemampuan ini tumbuh karena proses Pendidikan yang berkualitas tinggi. literasi seperti halnya kemampuan berkomunikasi bersifat relative.
7) Dimensi bahasa, (etnis, lokal, internasional) literasi singular dan plural, hal ini yang menjadikan monolingual, bilingual, dan multilingual. Ketika seseorang menulis dan berlitersi dengan bahasa dearah, bahasa Indonesia dan bahasa Inggris, maka ia disebut seseorang yang multilingual.

Universitas Terbuka (UT) merupakan perguruan tinggi negeri yang menerapkan sistem pendidikan jarak jauh. Tujuan didirikannya UT adalah untuk 1) memberikan kesempatan yang luas bagi warga negara Indonesia untuk memperoleh Pendidikan tinggi, 2) memberikan layanan pendidikan tinggi bagi mereka yang karena bekerja atau karena alasan lain tidak dapat melanjutkan pendidikannya di perguruan tinggi tatap muka (Katalog, UT 2010). Dengan sistem Terbuka dan jarak jauh tersebut, dipastikan mahasiswa mempunyai beberapa karakteristik sebagai berikut:

1. Di UT Mahasiswa drop-out (DO) tidak ada, karena mahasiswa dapat registrasi dan tidak registrasi setiap semesternya, jika tidak registrasi berturut turut selama 4 semester maka mahasiswa tersebut dinyatakan pasif. mahasiswa tersebut dapat aktif kembali jika mereka registrasi kembali.
2. UT seharusnya memahami kondisi data sebenarnya keadaan mahasiswa yang non aktif beserta sebab-sebabnya, sehingga mudah untuk membuat keputusan-keputusan berbagai hal yang berkaitan dengan kemahasiswaan.
3. Mayoritas mahasiswa UT adalah sudah bekerja.

Dalam kaitannya dengan kondisi mahasiswa yang mudah pasif mengingat kondisi mahasiswa UT mayoritas sudah bekerja, maka akan ada banyak faktor yang menyebabkan mereka tidak memperbarui informasi terhadap jadwal dan aturan akademik yang ada di UT. Untuk itu diperlukan keterampilan mahasiswa dalam mencari informasi jika mahasiswa mengalami suatu kendala atau maslaah dalam proses belajarnya. Salah satu faktor penting adalah perlunya mahasiswa menguasi literasi media untuk mendapatkan informasi yang berkaitan dengan proses belajarnya di UT.
Dalam kaitannya ini maka sangatlah erat kaitan antara kemampuan literasi media untuk mencari informasi tentang proses belajarnya di UT. Agar ketahanan belajar mahasiswa UT dapat tetap terjaga. Namun informasi mengenai kemampuan literasi mahasiswa tidak mudah didapatkan. Untuk memperoleh informasi mengeai literasi media mahasiswa UT perlu dilakukan suatu penelitian. Penelitian ini berusaha manjawab permasalahan,
a) Sejauh mana literasi media mahasiswa dalam proses belajarnya di UT?
b) Bagaimanakah hubungan antara literasi media dengan prestasi belajar?

METODE PENELITIAN

Penelitian ini menggunakan pendekatan kuantitatif. Dengan metode survei untuk melihat sejauh mana tingkat literasi media mahasiswa dalam proses belajar di UT. Selanjutnya menggunakan wawancara mendalam kepada mahasiswa untuk mendukung data kuantitatif. Instrumen Penelitian yang digunakan dalam penelitian ini terdiri dari 3 kelompok pertanyaan yaitu, (1) Karakteristik responden; (2) Literasi media mahasiswa dalam proses belajar di UT; (3) Peforma mahasiswa dalam belajar online learning. Variabel Literasi Media diadopsi dari penelitian Erdem, C. & Eristi, B. (2018). Instrumen sebelumnya diujicobakan kepada 36 mahasiswa di UPBJJ-UT Bogor. Hasil ujicoba instrumen menunjukkan bahwa indikator penelitian memiliki reliabilitas yang cukup baik yaitu 0.888. Populasi dalam penelitian ini adalah mahasiswa yang telah meregistrasi pada prodi S-1 Ilmu Komunikasi tahun 2019 sejumlah 6454 responden. Sampel yang digunakan sebesar 956 responden, kemudian seluruh

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

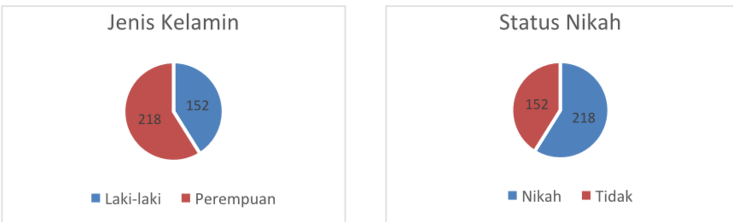
responden sampel dikirim kuesioner melalui email mereka. Responden yang mengembalikan kuesioner dan dengan melalui pemeriksaan kelayakan kuesioner diperoleh data bersih sebesar 370 responden.

HASIL DAN PEMBAHASAN

Karakteristik Demografi Responden Salah satu informasi yang diperoleh dari hasil penelitian ini adalah identifikasi terhadap karakteristik demografi mahasiswa UT. Hal ini dirasakan penting mengingat UT merupakan institusi pendidikan tinggi yang salah satu cirinya adalah tidak membatasi tahun lulusan dari SLTA. Siapapun yang berminat untuk masuk menjadi mahasiswa UT asalkan telah menyelesaikan jenjang pendidikan SLTA atau sederajad dapat mendaftar menjadi mahasiswa UT. Berdasarkan sistem penerimaan mahasiswa UT yang tanpa seleksi tersebut , maka dapat dipastikan bahwa keragaman mahasiswa ditinjau dari aspek demografi akan variatif. Hasil identifikasi aspek demografi secara lengkap disajikan pada diagram berikut,

Gambar 1. Sebaran Lokasi Responden

Responden cukup tersebar di seluruh Indonesia dari wilayah Indonesia barat, tengah dan timur, (Gambar 1). Hal ini menunjukkan bahwa adanya kesadaran responden dalam pemahaman tentang perlunya studi lanjut sampai jenjang iniversitas sudah cukup merata. Khusus untuk wilayah Papua memang belum terwakili. Tetapi untuk wilayah Indonesia timur sudah terwakili di pulau Sulawesi dan Nusa Tenggara Timur. Diagram 1(a) menunjukkan bahwa karakteristik responden dilihat dari aspek gender lebih banyak perempuannya dibandingkan dengan yang laki laki, hal ini menginformasikan bahwa perempuan sudah mempunayi kesadaran untuk harus kuliah atau melanjutkan studi ke jenajng universitas.
Sedangkan Diagram 1(b) dapat diperoleh informasi bahwa lebih dari separo responden adalah belum menikah, hal ini menginformasikan adanya kesadaran untuk menunda berkeluarga terutama pada kondisi responden masih studi di jenjang perguruan tinggi.

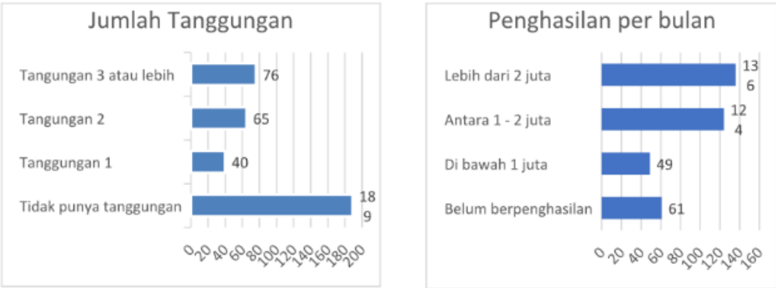


(a) *(b)*

Diagram 1. Sebaran Responden berdasarkan Jender (a) dan Status Nikah (b)

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

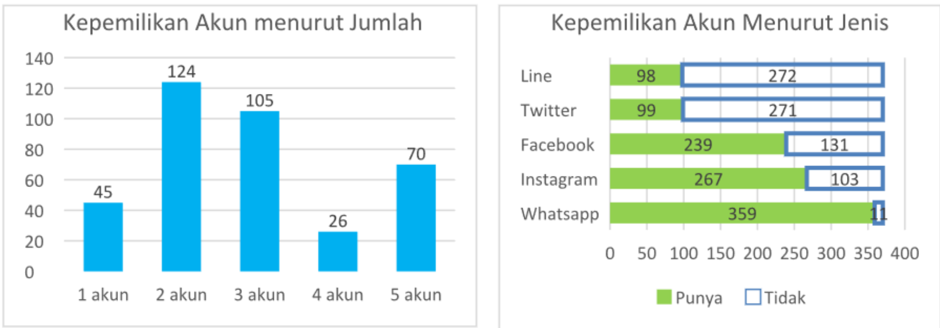
Dari Digram 2(a) dapat diperoleh informasi bahwa lebih dari sepertiga responden adalah berpenghasilan diatas dua juta rupiah setiap bulannya, hal ini menginformasikan bahwa responden sudah mandiri karena sudah berpenghasilan tetap untuk setiap bulannya. Sedangkan penghasilan responden per bulan digambarkan pada Diagram 2(b) berikut.



(a) (b)

Diagram 2 Sebaran Jumlah Tanggungan (a) dan Penghasilan Responden (b)

Dari Digram 3(a) dapat diperoleh informasi bahwa lebih tiga perempat responden, mempunyai akun pada media social lebih dari satu bahkan lebih dari separo responden mempunyai akun media, dua, tiga, empat bahkan lima akun di media social, hal ini menginformasikan bahwa responden sangat up date informasi karena mereka mempunyai banyak kelompok kelompok grup di media social, seperti grup whatsapp, Instagram, twitter, facebook dan yang lainnya. Dari Digram 3(b) dapat diperoleh informasi bahwa paling tinngi responden menggunakan media sosail whatsapp, menyusul Instagram, facebook twitter dan line, Hal ini menginformasikan bahwa responden sangat up date informasi karena mereka mempunaui banyak kelompok kelompok grup di media social, seperti grup whatsapp, Instagram, twitter, facebook dan yang lainnya.



(a) *(b)*

Diagram 3. Kepemilikan Akun Menurut Jumlah (a) dan Menurut Jenis (b)

Hubungan Indikator Demografi dan Literasi Media

Gender dan Indikator Literasi Media

Hasil uji antara Gender dan indikator pada Literasi Media sebagai berikut; Setelah dirujuk pada "Tabel Chi Square", diperoleh angka bahwa pada df =4 dengan tingkat signifikan p =0,05 diperoleh angka = 9.48773, dengan demikian tabel hitung lebih tinggi dari tabel chi square yang bermakna bahwa antara variable tersebut terdapat hubungan. Sedangkan pada kolom keterangan, tertulis "0 cells (0,0%) have expected count less than 5. The minimum expected

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

count is 18.49" yang berarti bahwa asumsi penggunaan uji chi square dalam penelitian ini sudah memenuhi syarat. Sebab tidak ada sel yang memiliki frekuensi harapan di bawah 5 dan frekuensi harapan terendah adalah sebesar masing 18.49, 9.86, dan 13,15.
Dari penjelasan tersebut dapat disimpulkan bahwa terdapat hubungan antara Gender dan pendapat responden mengenai, (1) Respon terhadap hal negatif di sosial media, (2) Respon terhadap konten yang mengandung SARA, kekerasan dan seksual, dan (3) Respon terhadap penyebarluasan kampanye dalam media sosial.

Tanggungan Keluarga dan Indikator Literasi Media

Hasil uji antara Tanggungan dan indikator pada Literasi Media, setelah dirujuk pada "Tabel Chi Square", diperoleh angka bahwa pada df =12 dengan tingkat signifikan p=0,05 diperoleh angka = 21.02606, dengan demikian tabel hitung lebih tinggi dari tabel chi square yang bermakna bahwa antara variable tersebut terdapat hubungan.

Status Nikah dan Indikator Literasi Media

Hasil uji antara Status Nikah dan indikator pada Literasi Media, setelah dirujuk pada "Tabel Chi Square", diperoleh angka bahwa pada df =4 dengan tingkat signifikan p=0,05 diperoleh angka = 9.48773, dengan demikian tabel hitung lebih tinggi dari tabel chi square yang bermakna bahwa antara variable tersebut terdapat hubungan.

Penghasilan dan Indikator Literasi Media

Hasil uji antara Penghasilan dan indikator pada Literasi Media, Setelah dirujuk pada "Tabel Chi Square", diperoleh angka bahwa pada df =12 dengan tingkat signifikan p=0,05 diperoleh angka = 21.02606, dengan demikian tabel hitung lebih tinggi dari tabel chi square yang bermakna bahwa antara variable tersebut terdapat hubungan.

Jumlah Kepemilikan Akun Media dan Indikator Literasi Media

Hasil uji antara Jumlah Kepemilikan Akun Sosial Media dan indikator pada Literasi Media sebagai berikut: Setelah dirujuk pada "Tabel Chi Square", diperoleh angka bahwa pada df =16 dengan tingkat signifikan p =0,05 diperoleh angka = 26.29622, dengan demikian tabel hitung lebih tinggi dari tabel chi square yang bermakna bahwa antara variable tersebut terdapat hubungan.

Hubungan antara Perilaku dan Literasi Media

Hasil analisis Persamaan Struktural yang menginformasikan bahwa walaupun nilai p=0.000 yang tidak fit, tetapi dengan GFI dan RMSEA fit maka bisa dikatakan bahwamodel cukup baik dengan R 2 =0.71.

Unsur	Hasil Pengukuran	Kriteria	Hasil
p	0.000	>0.05	Tidak fit
GFI	0.924	> 0.90	Fit
RMSEA	0.53-	< 0.80	Fit

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Hubungan antara Literasi Media dan Performa Online

Pada analisis ini, indikator performa online adalah frekuensi melakukan diskusi, frekuensi mengerjakan tugas, dan hit (frekuensi melakukan akses internet pada tutorial online). Hasil analisis Struktural menunjukkan bahwa hubungan hubungan antara performa dan literasi media sgnifikan tetapi memiliki kekuatan yang kecil dengan R 2 =0.08

Unsur	Hasil Pengukuran	Kriteria	Hasil
p	0.238	>0.05	Fit
GFI	0.964	> 0.90	Fit
RMSEA	0.17	< 0.80	Fit

SIMPULAN DAN SARAN

SIMPULAN

Dari pembahasan yang sudah dipaparkan pada bagian sebelumnya dapat disimpulkan sebagai berikut:
Jumlah kepemilikan akun media membuat seseorang lebih banyak pengalaman sehingga tentu saja mereka akan menyukai akses ke internet. Hubungan antara perilaku pengguna yang terdiri dari pengetahuan, niat menggunakan, ketrampilan dan literasi menunjukkan bahwa hubungan signifikan yang cukup kuat. Hubungan antara literasi media dan performa pengguna dan literasi media menunjukkan hubungan signifikan namun sangat lemah.

SARAN

Untuk meningkatkan literasi media perlu ditingkatkan pula pengetahuan dan memotivasi mahasiswa untuk menggunakan tutorial online dengan memberikan layanan yang baik, dan perlu memberikan pelatihan penggunaan tutorial online. Lemahnya hubungan antara literasi media dan performa mahasiswa menunjukkan bahwa kurangnya jumlah data, oleh karena itu ke depan diharapkan penelitian ini dilakukan dengan cakupan lebih luas agar perolehan data yang cukup dan lengkap.

DAFTAR PUSTAKA

Abbas, J., Jaffar Aman, J., Nurunnabi, M., and Bano, S. (2019). The impact of social media on learning behavior for sustainable education: evidence of students from selected universities in Pakistan. Sustainability, 11: 1683. https://doi.org/10.3390/su11061683

Erdem, C & Eristi, B. (2018). Paving the way for media literacy instruction in preservice teacher education: prospective teacher’s level of media skills. International Journal of Instruction 11(4): pp795-810. https://doi.org/10.12973/iji.2018.11450a

Kahne, J. & Bowyer, B(2019). Can media literacy education increase digital engagement in politics? Learning, Media and Technology, 44:2, 211-224, https://doi.org/10.1080/17439884.2019.1601108

Leaning, M. (2019). An Approach to Digital Literacy through the Integration of Media and Information Literacy. Media and Communication 7(2): pp 4–13. https://doi.org/10.17645/mac.v7i2.1931

Ling, LY., Ali, MSN., & Mustaffa, N. (2019). Youth media literacy in interpreting the ideology of the film documentary the Malayan emergency (2010). Jurnal Komunikasi: Malaysian Journal of Communication, 35(2): 195-210.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

https://doi.org/10.17576/JKMJC-2019-3502-12

Liubinienė, V., & Thunqvist, DP. (2015). Media literacy and digital divide:a cross-cultural case study of Sweden and Lithuania. Creativity Studies, 8(2): 134–148. https://doi.org/10.3846/23450479.2015.1046407

McGuinness, C., & Fulton, C. (2019). Digital literacy in higher education: A case study of student en-gagement with e-tutorials using blended learning. Journal of Information Technology Education: Innovations in Practice, 18, 1-28. https://doi.org/10.28945/4190

Michelle Schira Hagerman, MS. (2019). Digital Literacies Learning in Contexts of Development: A Critical Review of Six IDRC-Funded Interventions 2016–2018. Media and Communication, 7(2): pp 115–127.https://doi.org/10.17645/mac.v7i2.1959

Perović, J. (2015). Media Literacy in Montenegro. Media and Communication 3(4): pp91-105. https://doi.org/10.17645/mac.v3i4.335

Phuapan, P.Viriijavejakul., & Pimdee, P (2016). An analysis of digital literacy skills among Thai university seniors. iJET 11(3): pp 24-31. http://dx.doi.org/10.3991/ijet.v11i03.5301

Podgornik, BB., Dolničar, D. & Saša Aleksej Glažar, SA. (2017). Does the information literacy of university students depend on their scientific literacy? EURASIA

Journal of Mathematics Science and Technology Education 13(7):3869-3891. https://doi.org/10.12973/eurasia.2017.00762a

Razzaq, A., Samiha, YT. & Anshari, M. (2018). Smartphone Habits and Behaviors in Supporting Students Self-Efficacy. iJET – 13(2): pp 94-109. https://doi.org/10.3991/ijet.v13i02.7685

Rodriguez, MDM, & Megalrejo, IM. (2016). The dimensions and indicators of media literacy in the first stages of schooling. ATI - Applied Technologies and Innovations 12(2): pp.69-79. https://dx.doi.org/10.15208/ati.2016.06

Scolari, Carlos A.; Masanet, Maria-José; Guerrero-Pico, Mar; Establés, María-José (2018). Transmedia literacy in the new media ecology: Teens' transmedia skills and informal learning strategies". El profesional de la información, 27(4): pp.801-812. https://doi.org/10.3145/epi.2018.jul.09

Shinta, AD., Salleh MAM., & Ali MNS. (2019). Analysis of the moderating effect of media literacy on cervical cancer preventive behaviours. Jurnal Komunikasi: Malaysian Journal of Communication 35(1): 156-170. https://doi.org/10.17576/JKMJC-2019-3501-11

Library Paradigm and Challenges Towards the Era of Metaverse Society

Richard Togaranta Ginting[1], Syarifurohmat Pratama Santoso[2], Fransiska Timoria Samosir[3]
[1]*Udayana University, Bali,* [2]*Markas Besar TNI AL Jakarta,* [3]*Bengkulu University*
e-mail: richardtogaranta@unud.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

Advances in technology and information are increasingly advanced and developing, one of which is metaverse technology. Metaverse experiences that will be present around us are expected to create the ability to teleport from one experience to another. Metaverse can simply be defined as digital reality The concept of metaverse is also challenged to be applied in libraries. Libraries as an information organization are challenged to carry out the concept of real information services in the metaverse community. This paper will try to reveal the emerging paradigm in the application of libraries in the meterverse community, the roles and challenges faced, including the resource constraints involved in developing this concept. Presenting the library as an information organization on the metaverrse is a challenge in itself, especially in the interaction and communication between users and sources of information, librarians with users and libraries with one another.

***Keywords**: metaverse, metaverse society, library paradigm*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

The current digital era is a challenge for libraries and their ecosystems, including human resources, in order to maintain their existence. Libraries are also considered to have to answer the needs of the digital community in this era of Society 5.0, especially to face the era of metaverse society. Metaverse can simply be defined as a digital reality that is almost certain to become a reality in the future. Similar to the *World Wide Web*, but combines aspects of social media, augmented reality, online gaming, and cryptocurrencies, to allow users to virtually do activities and interact. The library field has also faced innovative challenges and opportunities to development related to emerging technologies such as the metaverse. Library management systems should incorporate smarter elements in process and overcome efficiency limitations and turn it into an intelligent system. Many systems today need to provide a connection between virtual and physical objects to create detailed maps related to situations and decisions based on the data obtained in addition with the help of metaverse as an object will become a smart device that can facilitates chain of abuse supply administration and efficient monitoring or control of a collection. This shows that sources of information about the metaverse are available in large numbers and are easily accessible. According to Scroble in his The Fourth Transformation, ten years from today, the center of our digital life will no longer be smartphones, but devices that look like ordinary glasses, those glasses will have settings for Virtual and Augmented Reality, known as the metaverse.

Challenges Towards the Era of Metaverse Society

What is actually seen and what is generated by the computer will be mixed so closely that it is impossible to really tell what is real and what is illusory. Instead of touching and swiping on the phone, we will make things happen by moving our eyes or with brain waves. When we talk to someone or play online games, we will see that person is in the same room as us. We will be able to touch and feel it through haptic technology. The application of metaverse technology in the implementation of library management systems plays a key role in global data access and the dissemination of human knowledge in an appropriate, intelligent, and efficient manner. The constraint on the hardware design of metaverse-based library systems is the need for a design that is adapted to the overall condition of the library system. Before deciding to implement the metaverse thoroughly in the library, it is necessary to have a library

First consider the various problems that may arise, namely:

1. Privacy and security of a library's database considering technology internet is very vulnerable to hacking (hacking).
2. Investment costs in the form of money, energy, and also the time required in application of metaverse technology is quite large.
3. The need for staff training on the use and application of metaverses technology in a library. The most important part is readiness to face and respond to a decline library visits and physical use of library collections.
4. Libraries need to convince users about privacy guarantees as well as security of their data, which libraries must be able to provide in the form of training for library staff and provide the necessary infrastructure adequately to can implement the internet of things in order to further enrich the service library and user experience.

The keywords of the metaverse function are easy and fast, and you could say instant. Metaverse is also very quickly accepted by the community because of its functions innovative and greatly facilitate the lifestyle of all kinds of community activities. Metaverse can provide

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

efficient and effective solutions with minimal resources, which serves to can reduce human effort in carrying out tasks and save time.

Considering the development of the internet of things is very fast due to the implementation artificial Intelligence (AI) technology that continuously learns and influences data. How many examples of the use of the metaverse and have been applied by the metaverse community themselves are already all around us, but we have not realized or even aware of the metaverse. The existence of damage caused by the existence of metaverse there are several cases of damage in the use of metaverse caused by the system weak security, due to flaws in some aspects of the metaverse.

DISCUSSION

Metaverse is predicted to be a more efficient future lifestyle. A new era that is able to connect humans in real-time without knowing geographical boundaries. At that time, the social media that we use today will look like primitive and outdated goods. It's a world that promises but also has the potential for big problems. The metaverse frenzy began when Mark Zuckerberg announced in June last year that his company name had changed from Facebook to Meta. This name change was carried out as a change of Facebook's image from a social media company to a technology company. Meta will focus on developing the metaverse with the mission of connecting people, finding communities, and growing businesses.

Meta's metaverse is called Horizon Worlds. Launched in December 2021, Horizon Worlds offers virtual life by providing arealistic presenceso that it feels like in the real world. To be able to access Horizon Worlds, users must wear Oculus glasses and gloves for motion control. Thus, the user seems to be on the internet, not just looking at him through the gadget. Just like in the animated Ralph Breaks the Internet (2018) and Ready Player One (2018).

Besides Meta, the tech giants who are also building their metaverse are Apple, Google, and Microsoft. Metaverse has the potential to be a very useful technology for humans. One of them is for people with disabilities who have physical limitations to carry out mobility in the real world. However, the inclusivity of the metaverse is still questionable, especially for the visually impaired and those who do not have access to the internet. Not only that, the potential for addiction to the metaverse will be greater than the addiction to social media., Research such as social media, smartphones, and games can lead to depression. We need research to find out how it impacts if someone is addicted to living in the metaverse. For example, face-to-face meetings will feel awkward and awkward compared to virtual human interactions. It is also possible that the inhabitants of the metaverse will be polarized as a result of the algorithm which can lead to misinformation, cyberbullying, and division. Not to mention the issue of cross-border cybercrimes, theft of personal data, and sexual harassment which will become increasingly complex.

For this reason, the state needs to immediately provide a legal umbrella in the form of the Personal Data Protection Law (PDP) and the Sexual Violence Criminal Act (TPKS) which also accommodates virtual domain arrangements to overcome potential problems that will occur in the metaverse.What needs to be understood, we need to provi de a limit to the extent to which the metaverse need to be used to support activities and daily life. Movement logout periodically can be done by humans not forgetting that real life is in the real world. Not in a metaverse full of fantasy and imagination as a form of escapism from life in the real world.

The government through the Ministry of Communication and Informatics encourages multi-stakeholder collaboration in pioneering and realizing the Indonesian version of the metaverse in order to provide benefits to the Indonesian people in the digital era. The

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

development of this metaverse will take a long time and will be carried out in stages until 2024. The development of this Indonesian metaverse will eventually penetrate into various sectors of life, including the library sector. Metaverse libraries also require the readiness of human resources who have talent in the digital world. In the next 5 years, namely in 2025 the library will enter the metaverse world, where people visit the library and use library services with virtual technology.

CONCLUSION

In addition to concluding remarks, Metaverse has great potential in supporting the digital transformation of education in the post-covid-19 pandemic, where internet of things innovations have so much developed and collaborated. Metaverse has great potential in supporting digital transformation education during the covid-19 pandemic, where so many metaverse innovations have been developed and collaborated. metaverse is the big thing after computer and internet technology that will bring about a large number of changes in the world of libraries, especially the way libraries communicate and relate to their users. Therefore we must learn how to apply the metaverse in a library, what are the impacts, benefits, and drawbacks, as well as the advantages so that we can find better ways to maximize the benefits of applying metaverse in a library and information organization, especially in an effort to change a company library in order to experience maximum development. In the implementation of metaverse has enormous potential for libraries, if the implementation is done properly metaverse can bring enormous benefits and can add value to library resources and services. metaverse does have many benefits than disadvantages, but there are several things that must be the main focus, namely the threat that lurks if there is no security system in the daily implementation of metaverse, with the high demand for metaverse tools. There is a bad impact, namely the existence of irresponsible parties who can change the metaverse from used as a tool for humans to become, a lethal weapon that brings great influence and loss. It is a big thing after computer and internet technology that will bring about a large number of changes in the world of libraries, especially the way libraries communicate and relate to their users.

REFERENCES

Azmar, N. J. (2018). Masa depan perpustakaan seiring perkembangan revolusi industri 4.0: mengevaluasi peranan pustakawan. IQRA: Jurnal Ilmu Perpustakaan dan Informasi (e-Journal), 12(1), 33-41.

Collins, C. (2008). Looking to the future: Higher education in the Metaverse. Educause Review, 43(5), 50-52.

Duan, H., Li, J., Fan, S., Lin, Z., Wu, X., & Cai, W. (2021, October). Metaverse for social good: A university campus prototype. In Proceedings of the 29th ACM International Conference on Multimedia (pp. 153-161).

Fernandez, P. (2022). Facebook, Meta, the metaverse and libraries. Library Hi Tech News.

Indarta, Y., Ambiyar, A., Samala, A. D., & Watrianthos, R. (2022). Metaverse: Tantangan dan Peluang dalam Pendidikan. Jurnal Basicedu, 6(3), 3351-3363.

Jones, A. Metaverse Libraries: Communities as Resources

Nevelsteen, K. J. (2018). Virtual world, defined from a technological perspective and applied to video games, mixed reality, and the Metaverse. Computer Animation and Virtual Worlds, 29(1), e1752.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Priyanto, I. F. (2022). Metaverse & Perpustakaan Sebagai Agen E-Learning.

Priyatma, J. E. (2014). Perpustakaan 3.0 Perpustakaan Masa Depan dan Masa Depan Perpustakaan. Info Persadha, 12(2), 66-75.

Sholeh, M., Triyono, J., Haryani, P., & Fatkhiyah, E. (2021). PENGGUNAAN DAN PENGEMBANGAN APLIKASI BERBASIS AUGMENTED REALITY UNTUK DUNIA PENDIDIKAN. JMM (Jurnal Masyarakat Mandiri), 5(5), 2524-2536.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Digital Learning Ecosystem in Indonesian Open University Library

DM Rachmaningsih
Universitas Terbuka
Email: dewi.rachmaningsih@ecampus.ut.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

The important role of technology has brought human civilization into the digital age. One example of the effects of the digital age is the changing of learning styles. Today's society cannot be separated from electronic devices, consequently people have begun to evolve to study in the digital age. Library as a source of information and learning assistance should be flexible to innovate and evolve according to developments that occur, for that libraries are required to facilitate and support the learning ecosystem in the digital age. The purpose of this paper is to describe the library support facilities in supporting the digital learning ecosystem. The method used is descriptive qualitative. Data collection used are observation techniques and literature study. The chosen object is the Universitas Terbuka's Library, because Universitas Terbuka is the only university in Indonesia that applies a distance learning system, and has adopted digital technology. Universitas Terbuka's Library is facilitating learning needs through the address www.pustaka.ut.ac.id. The website contains catalogues, SUAKA UT, RBV, e-resource, repositories, and social media. Universitas Terbuka has facilitated a digital learning ecosystem that can be utilized in general. The public can access from anywhere and anytime, and can publish their learning results to repositories and journals.

***Keywords**: digital ecosystem; literacy; digital library; distance learning; universitas terbuka*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

Humans at first did not recognize the concept of technology in their lives. Even in prehistoric times, ancient humans recognized the concept of technology only as aids in finding food, aids in hunting, and processing food (Ngafifi, 2014). At that time the concept of technology was only used to survive. But the true technology is closely related to facilitate human work, both directly and indirectly felt. So that along with the development of civilization the development of technology is growing. The conclusion is that the more advanced the culture, the more developed the technology, because technology is the development of a rapidly advancing culture (Adib, 2011). The current technological developments bring various innovations that change people's lifestyles. Even today the term digitalization is known in various aspects of life. Such as the use of communication applications for access to information and messages, the use of gadgets as learning media, to the application of information networks in providing library catalogs and many other examples. Some theories say that currently human civilization has been in the digital age. Digital Era is a period where a shift process occurs from industrial based to aninformation-based economy using computers or other technology devices as medium or communication (Haris, 2018). The use of computer technology devices was adopted in order to facilitate human work / activities. Lau defined digital era as a time in which there is a widespread, ready and easy access to, sharing of and use of information in electronically accessible (Lau, 2003).

Nowadays technology is a necessity for everyone, so people gradually depend on the existence of technology for their daily lives. The adoption of digital technology has changed the process of learning activities that lead to changes in community learning styles towards a digital learning ecosystem. The existence of the internet has increasingly had a role in the development of the digital era.

LITERATURE REVIEW

The Role and Development of Technology in Education

It can be concluded that current technological advancements have been recognized and felt to have provided a lot of convenience and comfort for the lives of humanity (Dwiningrum, 2012). If observed every technological development that occurs will be directly proportional to its role in providing convenience. The development of technology will facilitate, provide efficiency and effectiveness for any activity, including education. The role of technology seems to provide a promise for a better future. Martono said there are several things promised by technology, among others: (1) Technology promises change, (2) Technology promises progress, (3) Technology promises ease, (4) Technology promises increased productivity, (5) Technology promises speed, (6) Technology promises popularity (Martono, 2012). One of the promises can be seen from the learning styles of the community, in the past people came to learning resources (campus) and came to information sources (libraries) with the help of technology today students can come virtually in cyberspace.

Technology also promises easy access to education for anyone, anywhere and anytime. One concrete example of the promised speed of technology in education is the dissemination of educational information, the speed of information dissemination will be maximized. The combination of internet and technology even promises popularity in the world of education. This is indicated by the term ranking, not only between regions but between countries. Today’s education must be flexible and evolve by adjusting technological developments. Not

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

without reason, the goal of future education is to improve the quality of education in the field of educating human resources. According to Hamzah B. Uno and Nina Lamatenggomen that future educational trends in Indonesia are as follows: (1) the development of open education with learning modes distance, (2) sharing resources between educational institutions, (3) use of interactive information technology devices (Budiman, 2017). At present the focus of several educational institutions is the implementation of distance education. The reason is that the demographics of the Indonesian population are spread across the archipelago so that distance is a barrier to the implementation and equitable distribution of education. Some educational institutions in Indonesia come together to form a network. Through these networks/communities educational institutions can help each other and support collaboration.

Issues of education in Indonesia that are sticking out at present include the equal distribution of educational opportunities, improving the quality / quality of education, relevance and efficiency of education. It is the role and demands that drive education to change to follow and adapt to technological developments. Research, innovation, comparison and adoption are needed to evolve in order to realize a better-quality education.

Learning Ecosystem in the Digital Age

In the digital era as it is today, learning without using the help of technology is considered impossible. With technology and information in the world of education initiated the presence of various distance learning methods. Universitas Terbuka is an example of the first educational institution in Indonesia to implement distance education. All activities in the Universitas Terbuka can be done online, such as seeing student grades, checking finances, seeing class schedules, sending assignments and so on.

In teaching and learning activities, the communication process is carried out using telephone, e-mail, social media, chat via the official website. The interaction of education services turns virtual. This is in line with the direction of the Universitas Terbuka to become a Cyber University in Indonesia. To expedite distance education activities, Universitas Terbuka is supported by the academic information system as follows:

Table 1. Information Technology Systems,
Source: (PSPJJ Library Science Study Program, 2019)

NO	Academic Information System	Hardware	Software	Media
1	Online Tutorial	Server, Router, Switch UPS, Computer, MCU, dan End Point Vicon	Moodle	• Computers with web browsers & internet / mobile device connections • UT's Bandwidth: Local: 2GB and international: 200MB, with a speed of 100 mbps.
2	Practicum / Dry Lab		Frontpage, dreamweaver	
3	Independent Training		Autoware	
4	Online exams		Exe-learning	
5	Course Enrichment Material		Frontpage	
6	Online Catalog		Os Commers	
7	Online Bookstore			
8	Digital Library		Polycom	
9	Virtual Reading Room		Powerbuilder	
10	UT TV			Channel Youtube
11	UT Radio			Web
12	Suaka			Web

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Slowly but surely distance learning activities in conventional ways are helped by technology in the application of the information system. The use of digital technology, especially internet-based, is becoming more common now, especially applications that support digital learning. The use of technology in the learning process will eventually give birth to new routines, where digital technology becomes the plural needed in the learning process.

Learning routines carried out by students, lecturers and administration (teaching staffs) even seem to form a new ecosystem. Ecosystems can be interpreted as a basic functional unit in ecology because they are the smallest units that have complete ecological components and niches, and there are ecological processes so that in the material cycle units and energy flows occur in accordance with the condition of the ecosystem (Manik, 2018). Of the several ecosystem definitions cited by Manik in his book, it emphasizes that there are complementary or interdependent relationships in a process. Edward Johnson in his book entitled Environmental Education and Advocacy: Changing Perspectives of Ecology and Education quoted O'Neill's opinion (1986) that "Some ecosystem theorists believe that the black-box approach is not a complete ecosystem perspective" then O'Neil (2001) argues again that "the ecosystem concept itself needs major revision". Since the foci, scale, and criteria of observation in population and ecosystem ecology are usually so different, their paradigms and constituent assumptions, approaches and lexicons are also different (Edward Johnson, Edward A. Johnson, 2005).

Based on some of these opinions it can be concluded that when we will understand the concept of ecosystems, we must expand our perspective or point of view of the complementary components within it (symbiosis) to form a process. By identifying learning ecosystems in the digital age, we will find a way or solution to the changing learning and teaching process. As Edward explained that each ecosystem has different paradigms, assumptions and case approaches. Ecosystem education accentuates the interdependence between formal and informal learning environments, which can be exploited in curricula, the design of learning materials and approaches for foster learning (Bruce, 2020). In this case Bruce emphasizes the dependence between formal and informal learning environments.

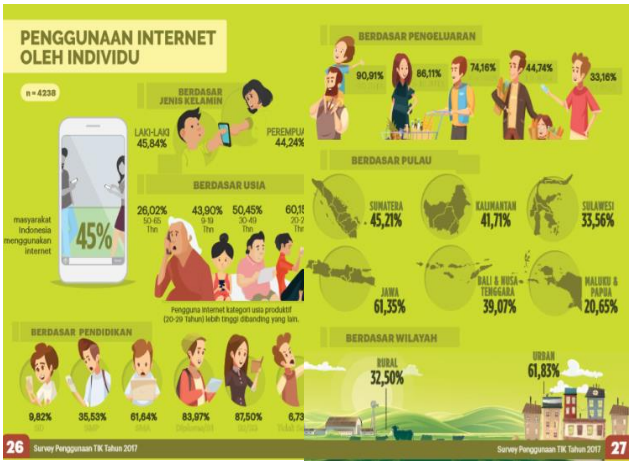
To support the learning ecosystem, lecturers and students can utilize formal sources such as lecture materials provided by their respective study programs, but other informal sources of information can be sought independently through libraries and other information media. The interesting thing is how it can be implemented to support the learning ecosystem in the digital age. The condition that cannot be denied is the increase in social interaction through electronic media. The use of information and computer technology (ICT) which massively and radically increases the digital literacy of the academic community. So that a significant digital learning ecosystem supported by cloud, prevalent software environment, interoperability platform, interconnection will facilitate learning system activities and services. But the digital diera learning ecosystem will not be realized if it is not balanced with an increase in user literacy.

The Center for Research and Development of Information and Information Technology and Public Communication Research and Development Agency Human Resources Ministry of Communication and Information of the Republic of Indonesia conducted a survey on the use of communication information technology in 2017. The background of the survey implementation is the growth of ICTs has changed the pattern of interaction and public communication towards digital, one of the changes that occur due to the massive use of ICT is a change in the socio-cultural aspects of urban and rural communities (Indonesia, 2017).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Picture 1. Survey Result
Source: https://literasidigital.id/books/797-2/

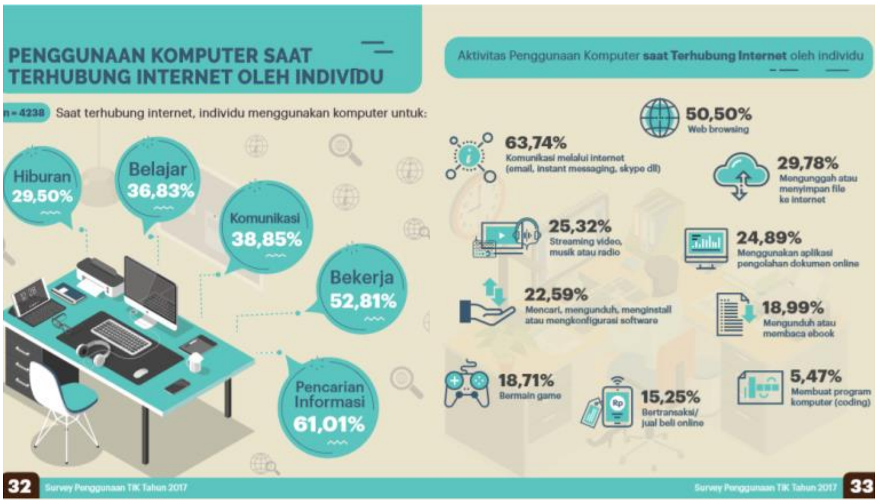
Respondents were consisting of men and women aged 9-65 years with a variety of jobs in following 34 provinces in Indonesia. The survey results showed 72.13% were ICT users and the remaining 27.87% were not ICT users, in one household at least one person used ICT. From the ICT user data 66.3% of individuals own a smartphone. The use of smartphones is dominated by urban / urban communities with a variety of jobs. Then the use of the internet is dominated by millennial generation, the majority of which are of reproductive age. The distribution can be seen in the following illustration:



Picture 2. Internet Users
Source: https://literasidigital.id/books/797-2/

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

The most astonishing survey results are proving that most Indonesian people who use ICTs and internet support to search for information, as much as 61.01%.



Picture 3. Computer Accsess
Sumber: https://literasidigital.id/books/797-2/

This shows that the level of literacy in Indonesian society has experienced significant changes, especially in the age range of 12-49 years or the equivalent of junior high school to university level. The conclusion is that good literacy will support the formation of a learning ecosystem in the digital age. Responding to the case study above, Universitas Terbuka as a provider of distance education with the concept of Cyber University, and supported by an adequate academic information system, is considered very possible to support the balance of the learning ecosystem in the digital age. Another supporting factor is the presence of stakeholders consisting of students, lecturers and administrative staff with good literacy.

RESULT AND DISCUSSION

Decree of the Minister of National Education Number 107/U/2001 concerning the Implementation of the Distance Higher Education Program (Nasional, 2001) further strengthens the existence of Universitas Terbuka. For the sake of expediting learning activities students and lecturers at Universitas Terbuka are equipped with the ability to study independently. Independent learning in the digital age is closely related to the ability to find sources of information to complement the literature or learning material. Maturity in applying and wisely balanced using ICT is one of the factors for successful self-study. The library of Universitas Terbuka exists to facilitate the process of independent learning as part of the digital learning ecosystem cycle. However, the characteristics of Universitas Terbuka as a provider of distance learning as well as the existence of scattered academic communities who have their respective activities become obstacles in carrying out learning activities, this is the role of the Universitas Terbuka's Library to bridge students with lecturers and academic staff (Ristiyono, 2011).

Universitas Terbuka's Library was established in conjunction with the inauguration of the Universitas Terbuka on September 4, 1984. At that time Universitas Terbuka's library was projected as a distance education library with a diverse collection of physical library

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

materials. Since 1996 the UT Library has developed a digital library (Universitas Terbuka's Library, 2020b). Adopting the internet network, the Universitas Terbuka's Library can be accessed via the website pustaka.ut.ac.id. This facility allows users to search, borrow and return information without having to come to the library. Based on the decision of the Universitas Terbuka's Rector Decree's Number: 112 / J31 / KEP / 2005 regarding the Main Tasks and Functions of Work Units in the Universitas Terbuka's Environment (Universitas Terbuka's Rector, 2005) stated that the library as a Library and Information Service Center has the task of providing library and information services for educational, research, and community service needs. Universitas Terbuka then launched the latest innovations and services namely Universitas Terbuka Interactive Digital Teaching Materials or better known as BA Digital on May 15, 2017 (Universitas Terbuka's Public Relations, 2017).

Universitas Terbuka's Library evolved along with technological developments. This is in line with his vision of becoming a library that excels in the field of distance education. To support this vision, the library carries out the following mission (Universitas Terbuka's Library, 2020b): (1) providing library access services to all UT students at home and abroad, (2) providing information source for scientific studies and distance education development, (3) developing the latest collections continuously, (4) developing collaboration networks with libraries / other institutions. The operational plan is seen in the facilities and services provided by the library. Library services are designed to support digital learning ecosystems so that the method distance learning runs consisting of collectimonographs, periodicals, films, etc. The e-book catalog contains a collection of electronic books purchased by the Universitas Terbuka and can be owned free of charge. Indonesia OneSearch (IOS) is a single search door for all public collections from libraries, museums and archives throughout Indonesia and provides access to international electronic sources (e-resources) subscribed to the Indonesian National Library.

Users can search for library collections using a simple search engine or advanced search. When using a simple search, users can simply type in keywords based on (title, author, publisher, subject, call number, ISBN, ISSN or ISMN) or material forms (monographs, electronic sources, films, periodicals, cartographic materials, graphic materials, video recordings / sound, music, multimedia, micro form, online sources, general scientific work or thesis). Search through advanced search can use keywords of the type of material, language, target audience and the form of work. It doesn't take long to search for literature using a catalog.

Picture 4. Universitas Terbuka Library Page
Source: opac.ut.ac.id

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Virtual Reading Room (RBV) is one of the learning assistance services in the form of a Basic Material Book (BMP).

Tabel 2. RBV Distribution
Source: Author

No	Study Program	Number of RBV
Faculty of Economics (FE)		**407**
1	Department of Development Economics	151
2	Management Major	129
3	Accounting Management	127
Faculty of Law, Social Sciences and Political Sciences (FHISIP)		**552**
4	Department of Administrative Sciences	251
5	Department of Communication and Information Science	203
6	Department of Social Sciences Law and Humanities	98
Faculty of Teacher Training and Education (FKIP)		**586**
7	Department of Language and Arts Education	113
8	Department of Mathematics Education and Natural Sciences	217
9	Department of Social Sciences Education	109
10	Department of Educational Technology	41
11	Department of Basic Education	106
Faculty of Science and Technology (FST)		**483**
12	Department of Mathematics and Natural Sciences	163
13	Department of Agriculture	241
14	Engineering Department	79
Graduate program		**124**
15	Master’s in public administration	15
16	Master’s in Management	50
17	Master’s in Fisheries Management	16
18	Master’s in Environmental Studies	New
19	Masters in English Education	15
20	Masters in Basic Education	14
21	Master’s in Mathematics Education	14
22	Doctor of Public Administration	New
23	Doctor of Management Science	New

BMP can be accessed online and can be read in full Text to support teaching and learning activities for those who have access to the UT Online Tutorial (elearning.ut.ac.id). RBV UT keeps a collection of 2152 RBV for 44 study programs in 23 majors spread across four faculties and one postgraduate (FE, FHISIP, FKIP, FST and Postgraduate).

The repository is an information service that contains all scientific work produced by the UT academic community. Scientific works stored in repositories include digital archives in the Universitas Terbuka environment such as speeches, Basic Material Books (BMP), articles, audio, news clippings, scientific orations, UT publications, videos, proceedings for national/international seminars/scientific meetings/associations, theses, dissertation, research, final project master program, web supplement. The access to the repository is through the library website or directly access it at the address http://repository.ut.ac.id. Like

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

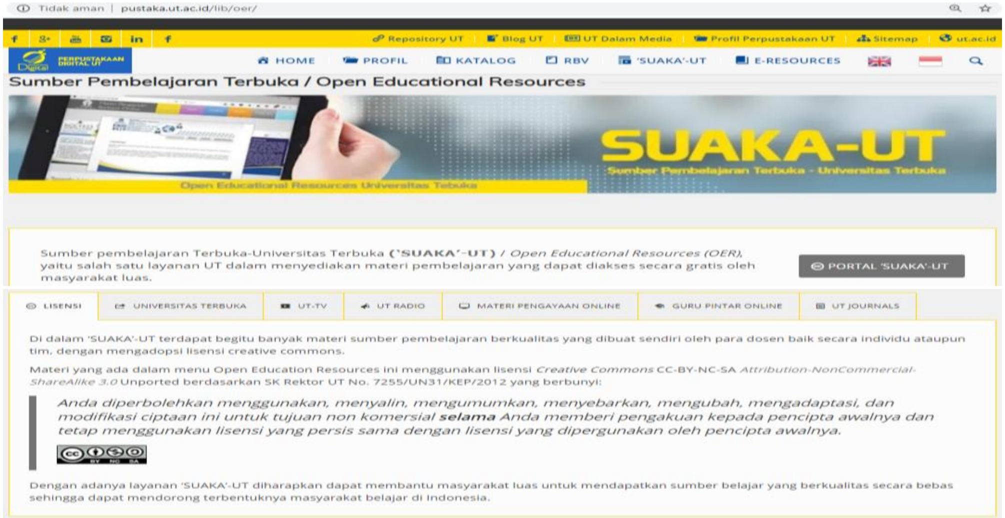
a catalog, a repository search uses keywords as a simple search and further search.

Picture 5. Repository Page.
Source: repository.ut.ac.id

E-resources consist of online journals, ebooks, online newspapers, and other reference works. The academic community who want to access e-journals must have a username and password. Username and password access are free of charge with the approval of the librarian, by filling out the online form provided on the page sl.ut.ac.id/access-eresources. The names of e-books and e-journals that can be accessed through Universitas Terbuka'se-resouces include ProQuest E-Journal, Wiley Online Liberial E-Journal, Wiley Online Liberial E-Book, EBSCO hosted E-Book, IG Publishing, ProQuest Ebook Central, Cambridge University Press, GALE CENGAGE Learning, Mc-Graw Hil E-Book Library, UT Journal, National Library e-resources, Kemenristekbrin e-resouces, DIKTI accredited journals, LIPI accredited journals, Garuda journals, Free access journals (AJODL, DOAJ , EURODL, IRRODL, JOLT), Dissemination of PKM Journal, Exploration: Journal of Tourism and Hospitality, Journal of Mathematics, Science and Technology, Journal of Organization and Management, Journal of Education, Journal of Open and Distance Education. In addition, Universitas Terbukaal subscribes to national online newspapers.

SUAKA (Open Learning Resources) University or known as Open Educational Resources (OER) is an online service owned by the Universitas Terbuka's Library, containing in-depth material and enrichment of courses or learning materials that can be accessed free of charge by students and the general public.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4



Picture 6. SUAKA UT Page
Source: pustaka.ut.ac.id/lib/

SUAKA UT contains a lot of material made by a team of lecturers dedicated to the advancement of education. Based on UT Rector's Decree No. 7255 / UN31 / KEP / 2012 all material contained in the Open Education Resources menu uses a Creative Commons CC-BY-NC-SA license. The types of OER in the SUAKA Universitas Terbuka Digital Library include UT TV, UTRadio, Online Based Enrichment Materials, Online Smart Teachers, UT Journal.

UT TV is a collection of learning materials in the form of videos that can be accessed online streaming. Learning materials are divided into several categories which are divided according to the faculty. In addition to video teaching materials, the UT TV channel also displays recorded activities at the Universitas Terbuka environment. At certain moments the public can watch the activities of the Universitas Terbuka account which can be accessed through the UT's youtube.

UT Radio is the pride of the Universitas Terbukainternet radio. Departing from the vision of the Universitas Terbukathat wants to become a world-class Open Distance Education Institution (PTTJJ) in producing higher education academic products. To support the achievement of this vision, Universitas Terbuka utilizes more varied internet technology. One of the utilizations of internet technology is by building an Internet Radio or streaming radio. By Universitas Terbuka, internet radio, hereinafter referred to as UT Radio, will be used as a means of learning, entertainment, and efforts to bring services closer to students. UT Radio Broadcasts can be enjoyed anywhere and anytime via a smartphone or PC connected to the internet by visiting the website http://utradio.ut.ac.id/

Online University Enrichment Material Universitas Terbuka is a distance and non-face-to-face tertiary institution. Students do not have to study in class. The process of student learning independently using various media, both print and non-print. Print products include modules, while non-print products include BMP audio, BMP video, interactive video, dry lab, radio programs, television programs and material enrichment, by visiting the website http://web-suplemen.ut.ac.id/

Online Smart Teacher (GPO) is designed as a reference source around education and personal development for the teaching profession and the development of school learning methods, both early childhood education, primary education and secondary education.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Facilities available include: (1) A smart clinic is a means for students to improve their knowledge and skills and the quality of learning. (2) Teachers' national scientific meetings are seminar activities as a forum for imitation as well as facilitating call papers with outputs in the form of publications, proceedings, journals. (3) Teachers' scientific work certificates are continuing education that equip participants to improve their writing skills. (4) Early Childhood Teacher Certification Program (PS-GPM) PAUD is a program to produce a young assistant teacher for early childhood with a minimum high school education background. (5) Indonesian for Foreign Speakers (BIPA) is a course intended for speakers to learn Indonesian, this course is divided into elementary, intermediate, advanced, free Indonesian cource. (6) Grounded Education and Teaching Laboratoty (GETLab) functions as an interface portal that provides counseling available discussion forums as a means of online discussion, available information references and legislation in Indonesia. All GPO facilities can be accessed through by visiting the website http://gurupintar.ut.ac.id/.

CONCLUSION

Since its inception in 1984, the Universitas Terbuka’s Library has been projected as a library of distance education so that the library acts as a source of information that bridges between lecturers, students, academic staff and the general public. The development of technology in the digital era is inevitable but adopted so that conventional libraries evolve into digital libraries.

The development of technology in the digital age has facilitated and changed human civilization, including education. A digital age learning ecosystem has been formed. A survey conducted by the Ministry of Communication in 2017 has proven that digital literacy in Indonesian society has been good. The existence of Universitas Terbukabegan to be strengthened by the issuance of the Decree of the Minister of National Education Number 107 / U / 2001 on the Implementation of the Distance Higher Education Program (National, 2001), then in 2016 announced that Universitas Terbukaopened student registration through the Joint Entrance Test for State Higher Education (SBMPTN).

SBMPTN is a policy carried out in Indonesia to recruit new students and selection tests are carried out simultaneously by State Universities throughout Indonesia. The main target of SBMPTN is high schoolfreshgraduate, thus indicating that the greater the composition of prospective Universitas Terbukastudents from generation Z with better digital literacy competencies. Universitas Terbukais also supported by an academic information system that synergizes in organizing distance education activities programs.

Increased literacy and technological development within the scope of the digital learning ecosystem have given rise to trends in the search for sources of information, patterns of information search have changed from conventional ways of being physically to digital. The Universitas Terbuka’s Library is present in accordance with its role to bridge the needs of students, lecturers, staff and the general public in providing learning resources. All learning resource facilities are integrated in the Universitas Terbuka’s Digital Library. The following lists the learning facilities available at the Universitas Terbuka’s Digital Library.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Table 3. List of Facilities available
at UT Digital Library

Facilities	Website Page	Explanation
Catalogue	http://opac.ut.ac.id/	OPAC (Online Public Access Catalog) Universitas Terbuka is a collection of search engines that are owned and stored physically in the library consisting of collectimono-graphs, periodicals, films, etc.
Electronic Book	http://www.pustaka.ut.ac.id/lib/catalog-e-book/	contains a list of electronic books purchased by Universitas Terbuka and can be owned for free, the list of e-books titles is always updated according to the budget year of purchase
Indonesia One Search	https://onesearch.id/	Indonesia OneSearch (IOS) is a single search door for all public collections of libraries, museums and archives throughout Indonesia and provides access to e-resources subscribed to the Indonesian National Library.
Ruang Baca Virtual	http://rbv.ut.ac.id/	RBV is a learning assistance service in the form of a Basic Material Book (BMP) that can be accessed online and can be read in full text to support distance learning activities.
Repository	http://repository.ut.ac.id/	Repository is an information service that contains all scientific works produced by the UT academic community
E-Resources	http://www.pustaka.ut.ac.id/lib/e-resources/	E-resources contain other electronic resources that are subscribed to by the UT' Library and can be utilized by the community. E-resources consist of online journals, ebooks, online newspapers, and other reference works.
Open Edu-cational Resources	http://www.pustaka.ut.ac.id/lib/oer/	SUAKA is one of the online services, containing deepening material and enrichment of courses or learning materials that can be accessed free of charge by students and the general public. SUAKA UT contains a lot of material made by a team of lecturers dedicated to the advancement of education.

All these facilities can be used free of charge from anywhere, anytime using any device. All facilities provided by the Universitas Terbuka's Library are designed to be easy to use and support the distance learning ecosystem in the digital age. Regarding the policy, some services are only provided after getting approval from the librarian, but most of the collections use creativecommon licenses. Friendly design as explained earlier, Bruce explained that ecosystem education is an interdependence between formal and informal learning environments. In this case, higher education learning as formal learning and digital libraries as informal learning media that provide access to the door to open links to other sources of information, in order to support the ecosystem of distance education in the digital age.

REFERENCES

Adib, M. (2011). FilsafatIlmu: Ontologi, Epistemologi, Aksiologi dan Logika Ilmu Pengetahuan. Yogyakarta: PustakaPelajar.

Bruce, B. C. (2020). Education's Ecosystems: Learning Through Life.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Budiman, H. (2017). Peran Teknologi Informasi Dan Komunikasi Dalam Pendidikan. Al-Tadzkiyyah: Jurnal Pendidikan Islam, Volume 8,.

DM Rachmaningsih. (2020). Perspektif Milenial Pendidikan Jarak Jauh. Tangerang Selatan: Universitas Terbuka.

DM Rachmaningsih. (2021). Perspektif Milenial Seri 2 Pejuang Masa Depan. Tangerang Selatan: Universitas Terbuka.

Dwiningrum, S. I. A. (2012). Ilmu Sosial & Budaya Dasar. Yogyakarta: UNY Press.

Edward Johnson, Edward A. Johnson, M. J. M. (2005). Environmental Education and Advocacy: Changing Perspectives of Ecology and Education. Retrieved from https://books.google.co.id/books/about/Environmental_Education_and_Advocacy.html?id=ac2M9upsf54C&redir_esc=y

Haris, A. R. (2018). Issues In Digital Era. (December 2016). Retrieved from https://www.researchgate.net/publication/328528038_Issues_In_Digital_Era/link/5bd275eba6fdcc3a8da64dd4/download

Humas Universitas Terbuka. (2017). Peluncuran Bahan Ajar Digital Interaktif UT. Retrieved April 1, 2020, from Berita website: https://www.ut.ac.id/berita/2017/05/peluncuran-bahan-ajar-digital-interaktif-ut

Indonesia, P. P. dan P. A. I. dan I. dan K. P. B. P. dan P. S. D. M. K. K. dan I. R. (2017). Survey Penggunaan TIK Series: frontpage. Retrieved from https://literasidigital.id/books/797-2/

Lau, L. J. (2003). Economic Growth in The Digital Era. Retrieved from http://web.stanford.edu/~ljlau/Presentations/Presentations/031129.pdf

Manik, K. E. S. (2018). Pengelolaan Lingkungan Hidup. Retrieved from https://books.google.co.id/booksid=Icu2DwAAQBAJ&pg=PA2&dq=ekosistem+adalah&hl=id&sa=X&ved=0ahUKEwid4PjPpbjoAhXzTgGHeg9CPQQ6AEIQjAD#v=onepage&q=ekosistem adalah&f=false

Martono, N. (2012). Sosiologi Perubahan Sosial: Perspektif klasik, modern, postmodern, dan postkolonial. Jakarta: Raja GrafindoPersada.

Nasional, M. P. Surat Keputusan Menteri Pendidikan Nasional tentang Penyelenggaraan Program Pendidikan Tinggi Jarak Jauh. (2001).

Ngafifi, M. (2014). Kemajuan Teknologi dan Pola Hidup Manusia dalam Perspektif Sosial Budaya. Jurnal Pembangunan Pendidikan: Fondasi Dan Aplikasi, Volume 2, 33–47.

De-contextual communication; A Transformation Model of Library Services in The Metaverse Era

Sri Sediyaningsih[1], Mohammad Pandu Ristiyono[2], Septian Dwi Cahyo S.T[3]
[1,2,3]Universitas Terbuka
Email: [1]dianb@ecampus.ut.ac.id, [2]pandu@ecampus.ut.ac.id, [3]septian-dwi@ecampus.ut.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

This article discusses how de-contextual communication construct a library's stakeholder habits. What is interesting from this discussion is the development of various technological devices and applications that further affects the personal habit of seeking information. . Furthermore, this pandemic have brought a significant transformation to communication patterns, especially through the use of technology. Through social presence theory, de-contextual communication, digital ecosystem, this article depicts that technology is able to make changes in library users to information seeking in metaverse era. A constructivist approach is used to gather and analyse data from students, lecture and staff as a stakeholder UT's library and library users report 2021 as a secondary data. The purpose of this article is to increase our awareness on the power of digital library in the formation of library stakeholder habits through de-contextual communication. De-contextual communication in library services is not only a model to transfer information, but a model that is powerful in shaping the attitude, behaviour and habits of a person, especially in the process of information searching in metaverse era.

***Keywords**: Social Presence Theory, De-contextual Communication, digital ecosystem and Metaverse society*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

Pandemic is making everything virtual too fast. The use of the internet and social media is massive and changes the face-to-face environment into a virtual one. The explosion of the internet and the spread of social media applications provide easy access to both hardware and software to make digital materials better represented in three dimensional virtual environments (Collins, 2008), (MacCallum, K., & Parsons, 2019). We have not fully experienced the digital environment, and now it will soon turn into a metaverse. The word metaverse is not new, as it was first used by Stephenson, 1992 in his science fiction novel. This metaverse facilitates our daily communication and interactions via the internet. So it can be said that the metaverse is a world which is a combination of physical reality and space. Interaction in the metaverse world is a form of interaction that is not face-to-face and through the media, so it is decontextual in nature (Sediyaningsih, 2010). The pandemic requires all of us to be in a decontextual communication pattern, including universities. Distance learning, which has been implemented since 1984, is a government breakthrough in the world of education.

The Indonesian Open University (UT) was develop to provide access to education for all through the distance method. At that time, printed material was still the main source of material. However, as technology advances, various modes are used for delivering lecture material, until this digitalization era. One of the main supporting units of an educational institution in the learning and teaching process is the library, where the main task of the library is to provide various library resources services for students or users. The distance education method, and the high level of student heterogeneity require libraries to adopt all forms of technology, metaverse is no exception. This is in accordance with what has been said (Jeon, J., & Jung, 2021) that the metaverse platform is an essential tool for learners to increase motivation and enthusiasm for learning. This article discusses how UT's library service transformation plan in the metaverse era, through constructivist research involving UT library managers and users, is supported by several concepts and theories regarding Social Presence Theory, De-contextual Communication, Metaverse Society.

LITERATURE REVIEW

Social Presence Theory

Starting the discussion of the literature review, we look back at the theory that was written decades ago which was expressed (Argyle, M. & Dean, 1965) which said that we must have the ability to imagine in interacting, because by interpreting proximity, whether it is physical distance, eye contact, smile and body language, then the communication process will go well. Therefore, in every interaction process, the presence of the interacting person greatly determines the quality of the interaction process itself. This is expressed by (Cui, G., Lockee & Meng, 2013) which shows that social presence is an acknowledgment of other parties who are in the interaction process for mutual respect. Face-to-face interaction, presenting all communication processes including the context, in which communication takes place and this will shape the overall meaning. Meanwhile, social presence theory is adopt various forms of communication using new media through computer-mediated-communication (CMC) which is currently being developed.

Social Presence Theory, is the ability to physically project, emotionally and experience someone who interacts. (Agichtein, E. et al., 2008). In media interaction, not all social signs

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

are present, so an effort is needed to anticipate or adopt various social signs in interacting. Until now, the theory of social presence is still relevant, especially in interpreting non-verbal signs. This condition triggers distance education in paying attention to the characteristics and social presence of online interactions. (Cobb, 2009). Social signs are very multi-interpretative, so we must be careful and wise in using them (Dixson, M. D. et al., 2017).

De-contextual Communication

Virtual communication that we face today is defined as a form of communication with technology as the medium, such as computer-mediated-communication (CMC), with a focus on the process of interaction between two or more people using media facilities. CMC is defined as communication that occurs between humans using two or more electronic devices. So many studies have focused on its social effects (McQuail, D. et al., 2005). This form of technology-mediated communication cannot fully bring you social signs in the interaction process so that it is said to be de-contextual communication, because of the lack of social signs, body language in the interaction process (Budiargo, 2015), whereas social signs and body language can give meaning in the communication process. both positive and vice versa. Discussing de-contextual, it is never separated from the process of communication in the virtual world and forms of media communication or CMC. The concept of virtual reality (VR) as something new in communication media will change according to the way people interact. (Biocca & Levy, 2013).

CMC is an interaction medium which refers to technology. With the existence of CMC, it opens interaction with various groups of people from different times and places, this overcomes geographical differences. However, it still has its advantages and disadvantages, namely the limitations of communication where not all social signs are present in the interaction process, as face-to-face. (Chin, n.d.). When compared to face-to-face, CMC provides more power than face-to-face (Jiang et al., 2013). This also indicates that CMC is more intimate than face-to-face and takes us outside the social sphere. (Dimmick, J., Ramirez Jr, A., Wang, T., & Lin, 2007).

Digital Ecosystem

According to Boley (Boley, H., & Chang, 2007) Digital ecosystem is an open, self-organizing agent environment containing human individuals, information services as well as network interaction and knowledge sharing tools along with resources that help maintain synergy among human beings or organizations..... In other words, the digital ecosystem is an open community, freedom to join for anyone, including individuals, information services as well as network interactions and knowledge sharing tools to be able to spread resources that maintain synergy between individuals or organizations. Hadzic (Hadzic, M., Chang, E., & Dillon, 2007) said; A Digital Ecosystem is the dynamic and synergetic complex of digital communities consisting of interconnected, interrelated andinterdependent Digital Species situated in a Digital Environment that interact as a functional unit and are linked together through actions, information andtransaction flows.

In other words, a digital ecosystem consists of interconnected digital communities with digital species in a digital environment that interact as functional units and are linked through actions

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

and information flows. Thus the digital ecosystem is an open community in a digital environment that includes individuals, information services and knowledge sharing tools to be able to disseminate resources for individuals or organizations.

Chang (Chang, E., & West, M.4, 2006) adds that the digital ecosystem includes an information infrastructure, in which there is a community that interacts with each other. It is supported by the existence of information data sources in its services, the use of information through electronics and networks. An environment that supports the fulfillment of different needs. The interaction of the various disciplines involved in productivity, welfare and growth, the existence of a knowledge base to support the provision of information in communication so as to allow mutual understanding, as well as self-preparation and self-organization aimed at creating a sustainable environment.

Metaverse Society

Recently, the term metaverse has come under fire in both social media and everyday conversation, especially when Facebook CEO Mark Zuckerberg announced that Facebook changes its name to Meta Platforms Inc. , this name change as a transition focus to build the Metaverse. Based on the search results Google on February 12, 2022, the results for the term Metaverse were 1,550,000,000 (44.400.000 news, 58.600,000 videos and 379.00 proceedings). As for the term metaverse library, the results obtained are 7,240,000. This shows that sources of information about the metaverse are available in large numbers and are easily accessible. Scroble in his book The Fourth Transformation says ten years from today, the center of our digital life will no longer be smartphones, but devices that look like ordinary glasses, those glasses will have settings for Virtual and Augmented Reality. What is actually seen and what is generated by the computer will be mixed so closely that it is impossible to really tell what is real and what is illusory. Instead of touching and swiping on the phone, we will make things happen by moving our eyes or with brain waves. When we talk to someone or play online games, we will see that person is in the same room as us. We will be able to touch and feel it through haptic technology (Scroble : 2016).

The term "Metaverse" was first mentioned by Neal Stephenson in the science-fiction novel "Snow Crash" in 1992. In the novel, it is concluded with a person who uses his digital avatar to explore a virtual world (Tirta: 2021). The Ministry of Communication and Informatics defines Metaverse as a collaborative universe that combines human interaction with avatars as well as various products and services between the real world and the digital world without boundaries, where everything can take place simultaneously and in parallel. It can further be said that in the metaverse, you can go to school, work, play games, watch concerts, browse store shelves, and much more without ever leaving your home. If the internet is two-dimensional (text and images on a flat screen) then the metaverse is three-dimensional and multi-sensory including touch (Nover: 2021). Metaverse is basically a large, interconnected network of virtual spaces.

DISCUSSION

The proliferation of digital libraries as one of the services provided by libraries to their users has also penetrated into Indonesia. This can be seen by introducing many new services, namely

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

digital libraries and one of them is an application-based digital library on smartphone devices. Libraries that provide this service are very diverse from various types of libraries, both national libraries, public libraries, special libraries, school libraries and even university libraries. The UT's Library , which was founded in 1984 along with the establishment of UT, has a main mission to provide facilities for the academic community in providing library materials. The journey of UT library services also follows technological developments.

Currently, various services are provided such as Online Catalogs (OPAC), RBV (Virtual reading room), E-resources (e-Books, e-Journals and other online reference works), Open Learning Resources (SUAKA UT), Repository, E- Book Mobile (Smart Library Gramedia), BMP Audio (UT), Webinar Tutorial Room, Internet Area and online consultation with librarians via e-mail or social media. (Pustaka.ut.ac.id)

The existence of this digital library program also aims to answer the needs of each individual regarding his own needs with sources of information or knowledge. The factors that encourage an individual to take an action can come from the individual's own desires or from outside the environment

Digital Library

The existence of a digital library is the result of the development of ICT or information technology which is a solution to the problem of conventional libraries which have limitations such as limited space, collections, staff and others. Digital libraries currently provide convenience for anyone or users to be able to access information sources in electronic form at an unlimited time.

According to Digital Library Federation (PENDIT, 2008) Digital Library is defined as

> "…an organization that provide the resources, including the specialized staff, to select, structure, offer intellectual access to, interpret, distribute, preserve the integrity of, and ensure the persistence over time of collections of digital works so that they are readily and economically available for use by a defined community or set of community".

With the development of libraries towards digital, this type of library has several advantages. First, save space. The existence of a digital library can store documents or collections in digital form that does not require conventional space but only requires a hard drive or digital space. Second, multiple access. Constraints that exist in conventional libraries are limited collections. Digital collections owned by digital libraries can be easily downloaded or read by multiple users or dual access terms. Third, it is not limited by space and time. Fourth, the collection can be in the form of multimedia as well as; Fifth, the cost is cheaper. (Saleh, 2015)

Digital Aspects of Ecosystem

In accordance with what Boley said, (Boley, H., & Chang, 2007) there are several aspects that must exist in the digital ecosystem, namely:

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

1. Interaction and engagement, as an institution or unit that provides services, must be able to interact with all communities and provide a program to create interest, which can ultimately bind.
2. Balance, providing harmonization, stability and sustainability in a digital atmosphere.
3. Clustered and loosely coupled domains, in this case each maintains its existence for the common good and supports each other.
4. Self-organization, able to stand alone and coordinate themselves in various actions needed in certain situations

Librarian and Librarian Challenge

In today's digital era we often hear the net generation or some say Generations Z and Y, Generation according to Manheim (Putra, 2017)) is defined as a social construction in which there is a group of people who have the same age and the same historical practice. Generation grouping according to (Diana Oblinger, E. D. U. C. A. U. S. E., Oblinger, J., Roberts, G., McNeely, B., Windham, C., Hartman, J., ... & Kvavik, 2005) there are several stages starting from Baby boomers (1947-1964), Generation X (1965-1980), Generation Y/ NetGen (1981-1995) and Post Millennials/ Generation Z (1995-2010). The existence of generations Y and Z coincides with the development of technology and information so that these two generations have similarities and are also referred to as digital natives or born with conditions that are already familiar with information technology devices. Some of the similarities between generations Y and Z are that they are familiar with technology and are familiar with sophisticated gadgets that affect the behavior of each generation. In addition, these two generations are also fanatical users of social media whose lives are highly dependent and influenced by the existence of their own technology.

Ministry of Communication and Information Technology in a press release no. 8/HM/KOMINFO/01/2022 Friday, January 14, 2022 regarding Indonesia has a great opportunity in developing the metaverse. The world says that Indonesia has a great opportunity in developing the metaverse because it has the advantage of noble values of the nation and local wisdom. One opportunity to showcase this role is in the 2022 G20 Indonesia Presidency. Therefore, the government through the Ministry of Communication and Information encourages multi-stakeholder collaboration in pioneering and realizing the Indonesian version of the metaverse in order to provide benefits to the Indonesian people in the digital era. The construction of this metaverse will take a long time and will be carried out in stages until 2024.

The development of this Indonesian metaverse will eventually penetrate into various sectors of life, including the library sector. Metaverse libraries also require the readiness of human resources who have talent in the digital world. In the next 5 years, namely in 2025 the library will enter the metaverse world, where people visit the library and use library services with virtual technology. There are 10 steps that librarians can take in the virtual world era, namely: Displays, Book Discussions, Machinima (video shot in a virtual environment, Professional Development, Exhibits (such as the Reader's Advisory on Info International Island), Historical Simulations (such as Shakespeare's Globe Theatre), Library Simulations (live interaction with a virtual library or resource), Storytelling, Plays or Re-anacmenst, Classrooms, Workshops, and Conferences (Hill : 2010). The Metaverse library is a joint effort of educators and information professionals to connect a virtual community oriented to high-quality education.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

The library metaverse can be developed through the concept of the Community Virtual Library (CVL). CVL is becoming the main hub for librarians in cyberspace who seek to embed information literacy (or meta-literacy) in immersive learning environments, including digital citizenship.

CONCLUSION

From the discussion above and the framework of thinking in this writing, it can be concluded that library services, including the available facilities, provide motivation for users to take advantage of existing facilities. To create a library with a metaverse atmosphere is not difficult if there is support from management and of course the study program as the core of a university. Before entering the metaverse, digitization must be fully realized, because the metaverse library is fully supported by the ability of a university to adopt its technology. The spread and heterogeneity of students causes the level of accessibility of the metaverse library to be uneven. Therefore, the UT library must continue to provide various forms of services, according to user needs.

REFERENCES

Agichtein, E., Castillo, C., Donato, D., & Gionis, A., & Mishne, G. (2008). Finding high-quality content in social media. In Proceedings of the 2008 international conference on web search and data mining (pp. 183-194).

Argyle, M., & Dean, J. (1965). Eye-contact, distance and affiliation. Sociometry.

Biocca, F., & Levy, M. R. (Eds. . (2013). Communication in the age of virtual reality. Routledge.

Boley, H., & Chang, E. (2007). Digital ecosystems: Principles and semantics. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.90.4199&rep=rep1&type=pdf

Budiargo, D. (2015). (2015). Berkomunikasi Ala Net Generation.

Chang, E., & West, M.4. (2006). Digital Ecosystems A Next Generation of the Collaborative Environment. C IiWAS, 214, 3–24. https://static.aminer.org/pdf/PDF/000/386/989/digital_ecosystems_a_next_generation_of_the_collaborative_environment.pdf

Chin, L. (n.d.). Advantage and disadvantace of CMC In The Context of UNIMAS Student and Staff. https://newtechnocomm.wordpress.com/2016/03/05/advantages-and-disadvantages-of-computer-mediated-communication-in-the-context-of-unimas-students-and-staff/

Cobb, S. C. (2009). Social presence and online learning: A current view from a research perspective. Journal of Interactive Online Learning, 8(3).

Collins, C. (2008). L. to the future: H. education in the M. (2008). Looking to the future: Higher education in the Metaverse. Educause Review, 5(43), 50–52.

Cui, G., Lockee, B., & Meng, C. (2013). Building modern online social presence: A review of social presence theory and its instructional design implications for future trends. 18(4).

Diana Oblinger, E. D. U. C. A. U. S. E., Oblinger, J., Roberts, G., McNeely, B., Windham, C., Hartman, J., ... & Kvavik, R. (2005). Educating the net generation (Vol. 272). Brockport Bookshelf, Book. https://doi.org/10.1177/0898010105275838

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Dimmick, J., Ramirez Jr, A., Wang, T., & Lin, S. F. (2007). Extending society': The role of personal networks and gratification-utilities in the use of interactive communication media. New Media & Society, 9(5), 795–810.

Dixson, M. D., Greenwell, M. R., Rogers-Stacy, C., Weister, T., & Lauer, S. (2017). Nonverbal immediacy behaviors and online student engagement: Bringing past instructional research into the present virtual classroom. Communication Education, 66(1).

Hadzic, M., Chang, E., & Dillon, T. (2007). Methodology framework for the design of digital ecosystems. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.133.6473&rep=rep1&type=pdf

Jeon, J., & Jung, S. K. (2021). Exploring the educational applicability of Metaverse-based platforms. 한국정보교육학회: 학술대회논문집, 361-368.

Jiang, L. C., Bazarova, N. N., & Hancock, J. T. (2013). From perception to behavior: Disclosure reciprocity and the intensification of intimacy in computer-mediated communication. Communication Research, 40(1).

MacCallum, K., & Parsons, D. (2019). Teacher perspectives on mobile augmented reality: The potential of metaverse for learning. World Conference on Mobile and Contextual Learning.

McQuail, D., Golding, P., & De Bens, E. (2005). Communication theory and research. Sage Publications.

PENDIT, P. (2008). Perpustakaan Digital Perguruan Tinggi: tantangan peningkatan kualitas jasa.

Putra, Y. S. (2017). Theoritical review: Teori perbedaan generasi. Among Makarti, 9(2). https://jurnal.stieama.ac.id/index.php/ama/article/view/142.

Sediyaningsih, Sri. (2010), Komunikasi Dekontekstual dalam pembentukan identitas sosial remaja, Disertasi Doktoral, Universitas Indonesia, 14 Januari 2010.

Siaran Pers No. 8/HM/KOMINFO/01/2022 Jumat, 14 Januari 2022. Tentang Indonesia Berpeluang Besar dalam Pengembangan Metaverse Dunia.

Capaian Smart Economy dan Tantangannya di Era Metaverse

Dedy Juniadi[1], Siti Aisyah[2], Zainur Hidayah[3]
[1,2,3] *Universitas Terbuka*
e-mail: dedy.juniadi@ecampus.ut.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

The objectives of this study aim to describe the transparency of local tax revenues and regional levies to support smart economy policies and their challenges in the Metaverse era. Research on the transparency of regional tax revenues and regional levies is very important to support the achievements of the Smart Economy so that sustainability or urban development in the economic field is realized. This article is the result of a qualitative study. Data collection was carried out through interviews with informants using snowball techniques and direct observation at the research location and media where the research was carried out in Semarang City. The data were analyzed by conceptualizing the interview results, empirical facts, and data collected using the NVIVO application. Then proceed with making a model from the results of the conceptualization. The findings of this study are 1). information on local tax receipts can be seen in real time by the public. 2) the city government provides project information and infrastructure improvements as well as food prices. 3) the availability of a forum for msME development that can be accessed by city residents. This study focuses on transparency and public access to economic information and its challenges in the era of the metaverse.

***Keywords**: Transparency, Local Taxes And Levies, Smart Economy*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

In the context of public finance, it often occurs in cities in Indonesia experiencing budget deficits, so to cover the budget deficit sometimes the government has to borrow funds from outside parties (Harahap, 2016). Based on the economic and social problems that are being faced by the City of Semarang today, the city of Semarang must make improvements. One of the things that needs to be improved is public financial management (APBD). Good and proper management of public finances will also affect the welfare of the people. State revenues are then used to finance government activities in carrying out its policies. Revenues and expenditures related to state finances must be regulated, because the purpose of a government is to prosper people's lives, to meet the needs of the community, the government must regulate public finances in a fair, honest and transparent manner (Arfah, 2020).

In economic studies, the term public finance or state finance as expressed by Harvey S. Rosen and Ted Gayer(2008), which emphasizes efforts to rationalize the role of the state in economic life on the basis of market failures and the need to modify the distribution of income resulting from the process of market mechanisms in accordance with the general norms and distributive justice(Noviyanti et al., 2015). Local governments as part of the national government subsystem need to strive for good and correct financial accountability, namely by setting Government Accounting Standards (SAP) according to with Government Regulation No. 24 of 2005. In 2010 the government ratified the accrual-based sap of local governments in accordance with Government Regulation Number 71 of 2010 (Gunawan, 2016).

Transparency explains the rules, plans, processes, and implementation to find out why, how, what, and how much, that needs to be informed to the public. Transparency ensures that public officials, civil servants, managers, board members, employers, can report on their activities so that the public can hold stakeholders accountable interests(Muis, 2020). Transparency will not work if the public is not involved in efforts to measure improvement, so the effectiveness of transparency also needs to be supported by public communication practices. The development of a Smart Economy is a manifestation of the changing demands of the times. Where economic activities that can win the competition are economies characterized by four indicators such as simpler, cheaper, accessible, and faster quickly). These four indicators can be achieved by mastering information technology and internet technology. The world of digitalization is increasingly rapidly developing, this is marked by the emergence of the Metaverse era, namely the concept of digital reality which is considered to have great potential for the development of the Indonesian economy in the future (Aditomo, 2021). This article aims to describe the transparency of regional revenues and expenditures based on the smart economy and its challenges in the metaverse era.

THEORETICAL REVIEW

Transparency

Mardiasmo (2002: 31) mentioned that transparency is the openness of the government in providing information related to public resource management activities to parties in need, namely the community. The objectives of transparency in the implementation of village government are: 1) One form of government accountability to; 2) the community; 3) Efforts to improve government management management; 4) Efforts improving management and good governance and reducing opportunities for KKN practices. Mustopadidjaya (2002: 261), the principle of transparency is not only related to matters related to finance, government

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

transparency in planning also includes 5 (five) things as follows: 1) Openness in important meetings where the public participates in providing their opinions; 2) Disclosure of information related to documents that need to be known by the public; 3) Openness of procedures (decision making) or the procedure for drafting a plan); 4) Openness of registers containing legal facts (civil records, land books etc.); 5)Openness to accept community participation. Mardiasmo (2006:73) mentions that transparency can be measured through several indicators: 1) Willingness and accessibility of documents; 2) Clarity and completeness of information; 3) Openness of the process; 4) A regulatory framework that ensures transparency.

In the current industrial era 4.0 , transparency can be implemented through various media. One of the concepts of realizing transparency in the field of public finance is through the application of smart cities, which include various smart economy programs and activities.

Smart Economy

According to Giffinger (2007), there are 6 (six) dimensions in the smart city concept along with indicators that support the realization of smart cities. For the smart economy dimension related to aspects of urban life, including industry, then smart people include education, smart governance includes the e-democratic process, smart mobility includes logistics and infrastructure, smart people environment includes efficiency & sustainability, and smart living includes safety & quality.

Smart Economy is a quality that produces innovation and is able to face competition. The greater the innovation carried out, the more it adds new business opportunities and increases business / capital market competition. Smart Economy, also means a smart city that has a good level of economy, efficiently and effectively utilizing resources or natural potential owned by the city. Hasibuan & Sulaiman, 2019). The step towards a smart economy is taken through 4 (four) work areas, namely: 1) innovation, 2) economic image, 3) productivity, 4) economic and trade infrastructure (Widiyastuti, ST., MT et al., 2021). Economic growth is one of the indicators to measure the level of development in an area in a certain period of time so that it can increase income and community welfare in general.

Local Taxes and Levies

According to Law Number 28 of 2009 concerning Regional Taxes and Regional Levies, "Local taxes are mandatory contributions to areas owed by individuals or entities of a coercive nature based on Law, with no direct remuneration and used for regional purposes for the greatest prosperity of the people (Rizqy Ramadhan, 2019). Meanwhile, according to Saragih (2003:65), the Regional Levy is "a regional levy as payment for certain services or permits that are specifically provided and or granted by Local government for the benefit of private persons or entities".

According to Siddik (2002), the efforts that need to be made by local governments in order to increase regional revenues through optimization of intensification of local tax collection include: 1) expand the admission base, 2) strengthen the collection process, 3) increase supervision, 4) improve administrative efficiency and reduce collection costs, 5) increase revenue capacity through planning the better(Ismail & Enceng, 2020).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Public Financials

According to Richard A. Musgrave (1959) public finance is a science that studies the economic activities of the government as a unit. As for in Carl C's view. Plehm (Noviyanti et al., 2015), public finance is a science that studies the use of funds by the government to meet the payment of government activities. Therefore, the above definition makes the term public finance synonymous with the terms state finance, public economy, and public sector economy. "Normative" public finance is the study of State finance on ethics and value judgement, namely how state financial activities, taxation, expenditures and state loans can be creating efficiency in resource allocation, macroeconomic stabilization, equalization or distribution of income and so on. So, the study of "normative public finance" revolves more around the problem areas of state financial policy (fiscal policy) (Harvey S. Rossen, 2002:5) In this regard, government policy related to revenues and expenditures to improve economic stability needs to be carried out in the form of fiscal policy . (Haryanto & Priyo, 2020) mentioned that public finance, has a scope that includes: 1) state expenditures; 2) state revenues; (3) state administration; 4) stabilization and growth; 5) the influence of state revenue and expenditure budgets on the economy.

According to democracy, the use of these public funds must be used for the needs of the people. This is in line with the understanding of democracy, namely from the people, by the people, and for the people. The use of these funds should stick to the principle of accountability, one of which is the principle of budget transparency.

HDI (Human Development Index)

Human development measurement was first introduced by UNDP in 1990. UNDP introduced a new idea in human development measurement referred to as the Human Development Index (HDI). Since then, HDI has been published regularly in the annual Human Development Report (HDR). IPM explains how residents can access development outcomes in obtaining income, health, education, and so on. According to UNDP, the Human Development Index (HDI) measures human development achievements based on a number of basic components of quality of life. As a measure of quality of life, HDI is built through a basic three-dimensional approach. These dimensions include: long and healthy life; knowledge and decent standard of living. The three dimensions have a very broad understanding because they are related to many factors. HDI must be viewed as a simplification of the complex reality of the vastness of the dimensions of human development, since it covers only three basic dimensions of human quality of life (Mongan, 2019).

The Human Development Index (HDI) is one of the important indicators in looking at the other side of development. HDI has important benefits, including being an important indicator to measure success in efforts to build the quality of human life (society / population) and being able to determine rankings or the level of development of a region/country. For Indonesia, HDI is strategic data because apart from being a measure of government performance, HDI is also used as one of the factors that determine the size of the allocation of the General Allocation Fund (DAU) (BPS, 2015).

METHODOLOGY

This article presents the results of qualitative research conducted in Semarang City. Data collection was carried out through interviews with informants using snowball techniques and direct observation at research sites and media. The key informants are the Head of the Semarang City Communication and Informatics Service and other necessary informants.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Observations were carried out directly at the research site in Semarang City and using media, which was carried out in 2020. The topic of the interview was about the transparency of local tax revenues and regional levies, which support the achievement of the smart economy, which has an impact on the welfare of the community, and other elements that support increased regional revenue. Primary data includes interviews and the results of discussions with informants. Secondary data comes from documents, data available on the website, and other data that supports the analysis. Data analysis was carried out by conceptualizing the interview results, empirical facts, and data collected and processed using the NVIVO application. A model was developed from the results of conceptualization.

Data analysis is focused on 3 (three) things: the achievement of transparency in regional tax recipients, projects and infrastructure improvements as well as basic food prices, and the availability of an accessible MSME development platform by the townspeople. The achievement of smart economy policies includes the results of program realization, and the impact of smart economy policies. The success of the smart economy can be seen from the availability of applications, human resources and MSMEs that grow in one. Smart Economy Achievements and Challenges in the Metaverse Era.

RESULTS AND DISCUSSION

Transparency

Transparency in the financial management of a region is the most important thing in order to increase regional revenues and prevent the use of existing funds. The people of Semarang City can monitor economic data and investment in Semarang City quickly at the link https://data.semarangkota.go.id/data/list/8. Figure 1 is a menu display on Economic Data and Investment in Semarang City.

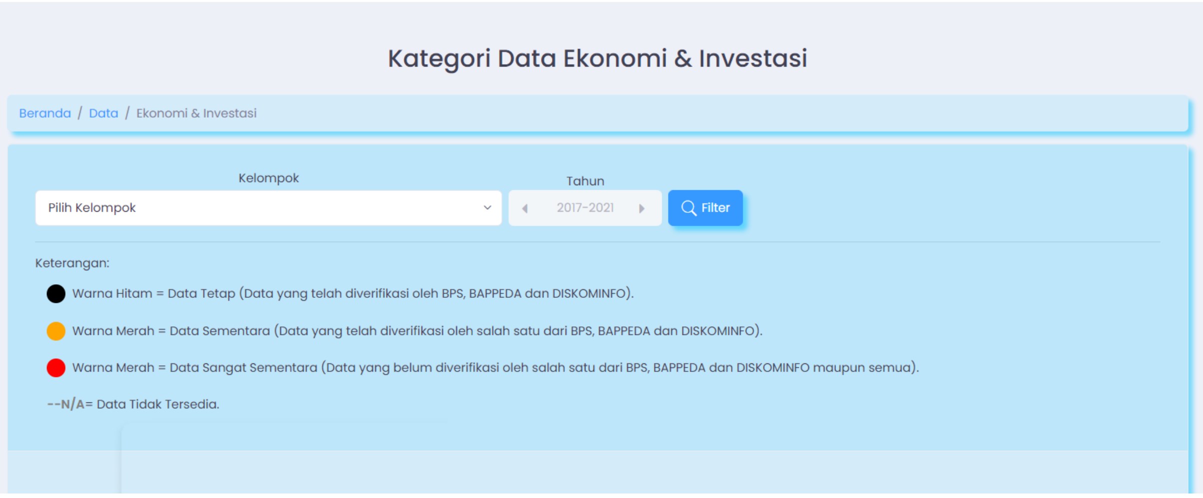


Figure 1. Menu view on Economic Data and Investment
Source ; https://data.semarangkota.go.id/

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Economic Data and Investment consists of several categories and is a means to see all matters related to economic and investment data in the city of Semarang whose data can be obtained from BPS, BAPPEDA, and DISKOMINFO.

- **The achievements of Smart Economy**

The city of Semarang participated in the 100 Smart City movement in Indonesia. The town has an area of 373.70 km2 with a population of 1,653,524 as of 2020. The average achievement of 6 (six) dimensions of a smart city is 3.2 (from the range of 1-4). The highest achievements for smart governance are 3.6, smart economy is 3.3, smart society and living 3.2, and smart branding and living 3.0. In this study, it will be discussed about the smart economy because economic problems are the most basic problems faced by a local government.

Smart Economy or smart economy includes innovation and competition, if more and more new innovations are developed, it will add new business opportunities and increase business / capital market competition. The increasing number of business actors has resulted in increasingly fierce market competition. So that new innovations need to be created to maintain the business existence of these business actors. Figure 2 depicts the Smart Economy Road Map in Semarang City.

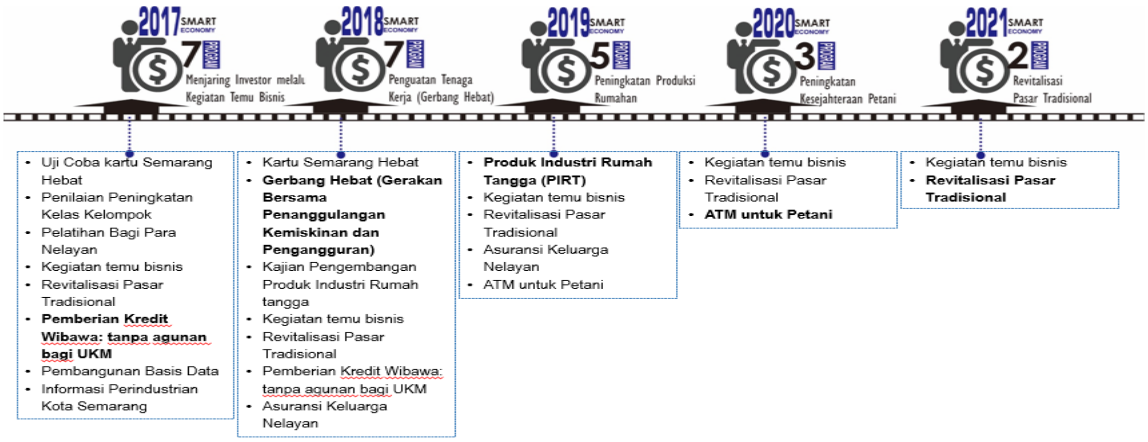


Figure 2. Smart Economy Road Map in Semarang City

In the smart city website of Semarang City, there are several priorities in the smart economy. The public can visit the website to see everything that is accommodated by the smart economy in semarang city. Figure 3 is a menu on the Smart Economy menu in Semarang City.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Figure 3. menu on the Smart Economy menu in Semarang City
Source : http://www.smartcity.semarangkota.go.id/

From the picture above, there are several smart economy priorities found on the semarang city smart city site, namely: 1) Crafts, including handycraft and craft. 2) Processed food consists of cherries and crackers, fish, soybeans, snacks and catering, salted eggs, food stalls, food processors, and SMEs fostered in 2014. 3) Centra Souvenirs consists of souvenirs and souvenirs. 4) Agriculture, consisting of electronic documents, agricultural and livestock commudities, the location of agricultural extension centers, and the location of gardens. 5) SiHati (Commodity Price and production Information System) is a place to see superior commodity information. 6) Wibawa Credit (Entrepreneur rises to become a champion) is a credit given to entrepreneurs where the credit is unsecured and the interest is 3% per year. 7) Semarang Digital Creative (SDK) in collaboration with Telkom Indonesia, Udinus Semarang, Suara merdeka and the Central Java Chamber of Commerce. 8) Semarang Creative Gallery (SGK) where here is a promotional media for 28 excellent SMEs registered with interactive video formats. 9) E-Commerce has not been used optimally where the services on this menu are not yet available. 10) Gulo Asem (Original online local micro-business outlet), is a promotional medium for leading SMEs, where there is a list of SME names, products, and prices.

Table 1. the following are the results of observations and interviews with informants, which are the outcomes of the results of the development of communication networks built to support the achievement of a web-based smart economy, which is an indicator of outcomes in measuring self-assessment

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Table 1. Smart Economy-Based Communication Network in Semarang City
Source : Smart City Kota Semarang

No	Smart Economy	Program Name
	Smart Economy Indicators	
	Minapolitan Region	http://perikanan.semarangkota.go.id/detailpost/sosialisasi-pengembangan-kawasan-minapolitan
	Semarang Digital Creatif (SDK)	Provision of facilities for citizens who want to develop entrepreneurship through digital creative. The listed city communities are Semarang Android Development Center (Sandec), AIDIA Semarang, Instastreetid Semarang, Gamerang (Game Development Semarang, Vector Veksel Indonesia, Semarang Open Go, Overdose, Dinus Open Source Community, Polytecnic Computer Club, Inakriya, and so on. SDK information can be accessed via https://sdk.semarangkota.go.id/web/
	Project information and infrastructure improvements	Receive requests for data on public works being worked on the territory of the city through access to: https://dpu.semarangkota.go.id/Dashboard
	Basic Food Price Information	https://www.ayosemarang.com/bisnis/pr-772827276/update-harga-bahan-pokok-kota-semarang-4-maret-2022-cabai-rawit-merah-rp61750-per-kg
	Local Tax Revenue Information	https://realtime.bapenda.semarangkota.go.id/

The smart economy program is reflected in project information and infrastructure improvements, the Minapolitan Area (fisheries development), Semarang Digital Creative (SDK), Food Price Information, and Regional Tax Revenue Information (https://realtime.bapenda.semarangkota.go.id/). The SDK facilitates people who want to be entrepreneurial. Community groups registered in SDK include Semarang Android Development Center (Sandec), AIDIA Semarang, Instastreetid Semarang, Gamerang (Game Development Semarang, Vector Veksel Indonesia, Semarang Open Go, Overdose, Dinus Open Source Community, Polytechnic Computer Club, Inakriya, and others. SDK-related information is available at: https://sdk.semarangkota.go.id/web/. Several Corporate Social Responsibility (CSR) programs and regional tax incentives are collaborations with the private sector.

- **Public Finance**

Economic growth in an area is good if the welfare of its people increases from year to year. In terms of the economy is a benchmark for the success of the region and its dreamers, the more a region's economy is good, the more successful the region and its leaders will be,

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

and vice versa. The city of Semarang experienced fluctuations in terms of its economic growth, the decline was caused by the Covid 19 outbreak. Figure 4 is the Pace of Economic Growth in Semarang City.

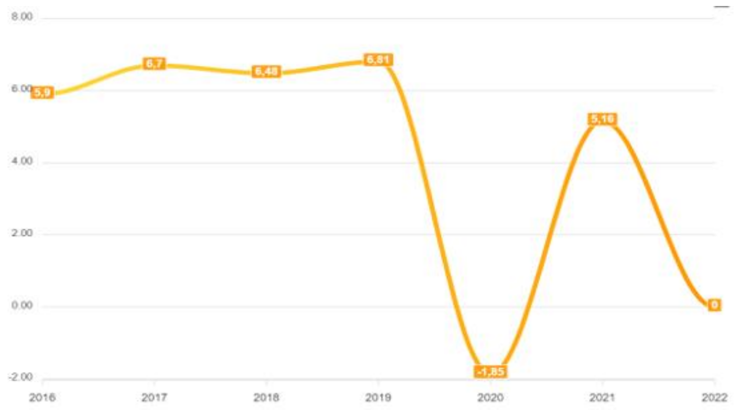


Figure 4. The Pace of Economic Growth in Semarang City
Source : https://data.semarangkota.go.id/

The economic growth rate of Semarang City in the 2016 period was 5.9%. In 2017 it increased from the previous year to 6.7%, in 2018 it decreased slightly so that the pace of economic growth became 6.48%. In 2019, it increased by 0.33% to 6.81. In 2020, the pace of economic growth experienced a very significant decline due to the peak of the pandemic in that year, so that the rate of economic growth in that year was -1.85. In 2021 it increased again to 5.16%.

Table 2. Realization of Regional Original Income, with the following details:
Source : https://ppid.semarangkota.go.id/

Year	Original regional income (Rp)
2016	1,502,440,908,012.00
2017	1,862,771,710,964.00
2018	1.821.274.103.250,00
2019	2.066.333.418.588,00
2020	2.202.788.037.231,00
2021	2.460.508.562.751,43

The Original Regional Revenue in the Operational Report for the fiscal year 2017 period was realized at Rp1,862,771,710,964.00, an increase of Rp360,330,802,952.00 or 23.98% compared to the realization in 2016 of Rp1,502,440,908,012.00. The original revenue in 2018 was 1,821,274,103,250.00, a decrease of 0.0223% from 2017. The original regional income in 2019 amounted to Rp. 2,066,333,418,588.00, an increase of Rp. 245,059,315,338.00 or 13.46% compared to the realization in 2018 of 1,821,274,103,250.00. The original 2020 regional compaction was 2,202,788,037,231.00, an increase of 6.60% from 2019. The original regional revenue in 2021 was 2,460,508,562,751.43, an increase of 257,720,525,520.43 or 11.70% compared to the realization in 2020.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

- **Tax and Rattribution area**

Regional tax revenues and regional levies in Semarang City are the most reliable and the highest sources of income. That's why the local government seeks to make taxpayers obedient and obedient in paying local taxes and levies.

Table 3. The Realization Of Regional Tax and Levy Revenues from 2016 to 2021.
Source : https://ppid.semarangkota.go.id/

Year	Local Taxes	Regional Levy
2016	1.062.248.674.906,00	100.755.829.691,00
2017	1.292.437.496.813,00	84.787.289.854,00
2018	1.331.817.746.450,00	107.791.109.630,00
2019	1.561.698.569.340,00	113.680.849.539,00
2020	1.506.649.161.050,00	87.906.641.048,00
2021	1.590.323.980.886,00	96.940.602.998,00

The basic table above regional tax revenue in 2017 was realized at Rp.1,292,437,496,813.00, an increase of Rp. 230,188,821,907.00 or 21.67% compared to 2016 which was realized at Rp. 1,062,248,674,906.00. Regional Levy Revenue in 2017 was realized at Rp. 84,787,289,854.00 decreased by Rp. 15,968,539,837.00 or 15.85% compared to 2016 which was realized at Rp100,755,829,691.00. In 2018 the realization of regional tax revenue was Rp.1,331,817,746,450.00, while the regional levy in that year was Rp.107,791,109,630.00. In 2019 the realization of regional tax revenue was Rp.1,561,698,569,340.00, the regional levy was Rp.113,680,849,539.00. In 2020 the realization of regional tax revenues was Rp.1,506,649,161,050.00, while the regional levy was Rp.87,906,641,048.00. In 2021, the realization of regional tax revenues was Rp.1,590,323,980,886.00, the regional levy in that year was Rp. 96,940,602,998.00.

Human Development Index (HDI)

Based on the outcome indicator, Semarang City got the highest score, which was 3.82. These benefits are reflected in the indicator of development success, in 5 (five) years. The outcome of the smart economy program can be seen from the achievement of human development indicators in Semarang City which show good growth, as shown by the data in Table 4 below.

Source: Semarang City in Numbers, 2016-2020,2021

Year	Human development index (HDI) (index)
2016	81,19
2017	82,01
2018	82,72
2019	83,19
2020	83,05
2021	83,55

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

From the table above, it can be seen that the human development index from year to year has increased which can be seen from 2016 is 81.19% until 2019 it is around 83.19%, but in 2020 it is 83.05% a decrease of 0.14% from 2019, in 2021 it is 83.55% an increase of 0.50% from the previous year. From this data, it can be seen that the human development index in Semarang City is running well. The Poverty Rate in Semarang City can be seen in the table below, as shown by the data in Table 5 below.

Source: Semarang City in Numbers, 2016-2020,2021

Year	Poverty Rate (%)
2016	4,85
2017	4,62
2018	4,14
2019	3,98
2020	4,34
2021	4,56

The poverty rate in semarang city in 2016 was around 4.85%, while in 2017 it was 4.62%, in 2018 it was around 4.14%, in 2019 the poverty rate was 3.98%, in 2020 it was 4.34%, in 2021 the poverty rate in Semarang City was 4.56%. Judging from this data, it is hoped that it can be an input for local governments in improving the poverty rate index in Semarang City, whose main goal is to prosper people's lives.

CONCLUSION

The success of economic development in Semarang City is shown by improving the quality of life of the community, which can be seen from the development index and the impact of policies and programs on the community. The role of the government as a regulator is demonstrated through the city's Medium-Term Development Plan (RPJM), action plan, and master plan operationalized in 6 (six) dimensions of the city smart, indicators, and OPD work programs in the output of activities to support sustainable development. The role of the government as a facilitator is demonstrated through cooperation with the industrial sector, academia, and journalists. All elements of the collaboration are in an environment of civil society that is open to change. Research data was collected during the Covid-19 pandemic, so that more observations were made with observations in the media. Referring to the smart city level category, Semarang is at level 4 because the city government already has data and information processing for decision making. The theoretical implication of this study is the need to develop the concept of smart city development that is well integrated at the level of public policy, by providing space for local wisdom and characteristics of various cities in Indonesia as well as the development of a single portal system. in the context of open government data /IGP.

The real challenge faced by business actors is the quality of human resources and network coverage that is still low in Indonesia. Smart Economy focuses on public financial transparency, information disclosure regarding PAD receipts, product innovation, increasing HDI, information availability and distribution networks. It takes time and energy to be able to improve HR skills, because if you don't upgrade your abilities, many jobs will be replaced by digital/robots. The Metaverse requires a number of expensive equipment, so massive utilization is still difficult. Although it will be a potential trend in the future, the metaverse

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

also requires adequate computer capacity and capable internet speed. In the era of the metaverse affecting the unit of data use, the preparation of regulatory, legal, aspects must also be considered. On the other hand, law enforcement must be equipped with digital capabilities. In the economic sector , it will make a big impact on business actors, for those who carry out innovation and follow technology, their business will continue to run. Meanwhile, for business actors who cannot follow, it will make their business will not survive

ACKNOWLEDGEMENTS

We would like to thank the Open University, the Semarang City Government and all those who supported during this research.

REFERENCES

Aditomo, K. (2021). Indonesia's Economic Revival in the Metaverse Era. Kompas.Tv. https://www.kompas.tv/article/243995/kebangkitan-ekonomi-indonesia-di-era-metaverse

Arfah, T. arfah. (2020). Public Finance In An Islamic Economic Perspective. Journal of Islamica, 3(2), 24–35. https://doi.org/10.37859/jsi.v3i2.2121

Gunawan, D. R. (2016). Implementation of the E-Budgeting System towards Transparency and Accountability of Public Finances (Study on the Surabaya City Government). ACCRUALS: Journal of Accounting, 8(1), 72. https://doi.org/10.26740/jaj.v8n1.p72-102

Harahap, K. (2016). Public Financial Management Policy During the Caliphate of Umar Bin Abdul Aziz. Journal of Applied Science and Technology, 8(2), 58–69. https://doi.org/10.22216/jit.2014.v8i2.424

Haryanto, & Priyo. (2020). Public Finance in Islamic Education (Conception, Basic Footing, and Correlation). Journal of Intelligence, 08 No.02(Haryanto, Priyo. (2020). Public Finance in Islamic Education (Conception, Basic Footing, and Correlation). Journal of Intelligence, 08 No.02, 171.), 171. https://ejournal.unisnu.ac.id/JI/article/view/1446

Hasibuan, A., & Sulaiman, oris krianto. (2019). Smart City, The Concept of Smart Cities as an Alternative to Solving District/City Urban Problems. Main Bulletin of Engineering, 14(2), 127–135. https://jurnal.uisu.ac.id/index.php/but/article/view/1097

Ismail, T., & Water. (2020). Local Taxes and Regional Attribution (A. Canty & F. Syarif (eds.); 4th ed.). Open University.

Mongan, J. J. S. (2019). Indonesian Treasury Review. Journal of Treasury, State Finance And Public Policy, 4(2), 163–176.

Muis, A. R. C. (2020). Public Policy Transparency as a National Strategy in Tackling the Covid-19 Pandemic. SALAM: Syar-I Social and Cultural Journal, 7(5). https://doi.org/10.15408/sjsbs.v7i5.15317

Noviyanti, R., IAIN Sheikh Nurjati Cirebon, A., & Economics UIN Maulana Malik Ibrahim Malang, F. (2015). Munich Personal RePEc Archive MANAGEMENT OF PUBLIC FINANCE IN INDONESIA: Review of Islamic Public Finance. IQTISHODIA Journal of Islamic Economics, 1(1), 95–109.

Rizqy Ramadan, P. (2019). The Effect of Regional Taxes and Levies on The Original Income of Regencies/Cities in North Sumatra. JOURNAL OF ACCOUNTING AND BUSINESS : Journal of Accounting Study Program, 5(1), 81. https://doi.org/10.31289/jab.v5i1.2455

Widiyastuti, ST., MT, I., Nupikso, D., Putra, N. A., & Intanny, V. A. (2021). Smart Sustainable

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

City Framework: Proposed Sustainable and Integrative Smart City Model. Journal of PIKOM (Communication and Development Research), 22(1), 13. https://doi.org/10.31346/jpikom.v22i1.3

The Potential of Virtual Methods as a Means of Ecotourism Education in the Era of Society 5.0

Putu Nomy Yasintha[1], Richard Togaranta Ginting[2], I Dewa Ayu Putri Wirantari[3]
[1,2,3]Udayana University, Bali, Indonesia
e-mail: putu_nomy@unud.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

The goal of this research is to see how the potential of technological applications can be used to educate the public about ecotourism during the pandemic. This study employs a qualitative descriptive approach, with data collected through observation and a review of the literature. According to the findings of the study, tourism activities in Bali are still primarily focused on direct experience, with only tourists who can afford it (have the time and money) having access to ecotourism education activities. Bali, which has the potential for many tourist villages, should be able to implement hybrid education using technology to support the achievement of society 5.0. There is still potential for tourism education through the use of technology such as VR (virtual reality), which tourism actors in Bali can and should develop. So far, the Bali government has not used technology to direct its tourism development strategy toward a more inclusive direction.

Keywords*: Virtual Methods, Education 5.0, Society 5.0, Ecotourism.*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

The tourism industry is highly developed and in high demand in many countries, including Indonesia. Indonesia has a wide range of attractions that are easily sold in the international market. This also places Indonesia among the leaders in the tourism sector, with Bali emerging as a tourism icon in the country.

Bali is one of the provinces in Indonesia where the majority of people work in the tourism industry (Disparda, 2000). The tourism industry has always received a lot of attention from the government as a leading sector. The Bali provincial government is always striving to develop Bali's tourism potential by carrying out various developments and developments that can help the tourism industry in Bali progress. Of course, some disruptions or disturbances have occurred in the development of tourism in Bali. This began with the Bali bombing in 2002, which established Bali as a hotspot for dealing with terrorism cases at the time. This was followed by the Bali Bombing 2 in 2005, the Mount Agung eruption in 2017, and now the Covid-19 Pandemic.

The Covid-19 pandemic has had a significant impact on the drop in the number of visitors to Bali, resulting in massive layoffs. According to Bank Indonesia data, the number of tourism workers in Bali was 328,000 in 2019, and this number is expected to fall to 236,000 in 2020. (BPS, 2020).

This has an effect on visits to tourism destinations, particularly ecotourism destinations. Tourism objects, particularly ecotourism, rely heavily on physical tourist visits. Constraints imposed during the Pandemic period, when people's mobility was severely limited, forced the manager of Ecotourism tourism objects to travel a long distance. So far, environmental tourism has been identified as one of the educational tours capable of providing character education to the community (Sutrisno, 2018).

The limited number of visits also has a significant impact on the availability of funds in the conservation process undertaken by ecotourism tourism objects. Given this, it is necessary to seek out new strategies, one of which is the use of information technology. This is the importance of this research because there are few studies on the involvement of information technology and tourism education activities, particularly in ecotourism tourism.

METHODOLOGY

This research question was answered by looking into the potential use of information technology in ecotourism education activities in Bali. This study is a descriptive qualitative study. Research analysis in qualitative research seeks to uncover and provide an overview of a phenomenon that occurs. This qualitative approach is used to obtain a description and an overview of the potential of information technology to be used in the tourism process, as well as how to describe the use of information technology in ecotourism-related tourism activities.
A literature review on various articles from various journals and documents that discuss the ecotourism tourism sector and its relationship to Information Technology was used as the research method (IT). This study collects information in the form of words, sentences, or pictures rather than numbers. The data analysis process included data collection, data reduction, data presentation, and data verification.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

RESULTS AND DISCUSSION

Bali Ecotourism Tourism Industry Changes During the Pandemic Natural beauty and cultural diversity have always been the main draws for foreign tourists to visit Indonesia. Bali is an iconic object in Indonesia that plays an important role in the tourism industry. From an economic standpoint, Bali's popularity benefits the Balinese people, but it has a negative impact on nature conservation in Bali.

The government has taken notice of the massive tourism development, particularly in the southern Bali region. The concept of ecotourism was introduced to anticipate this. Ecotourism activities are tourism activities that are closely related to sustainable tourism and are related to the preservation / conservation of nature and culture with the goal of improving the welfare of the local community (Suciarto, 2020).

Tourism activities are not always profit-driven; they are also expected to contribute to education. Ecotourism activities can teach you a lot of things. William and Shaw (Muhanna, 2006) propose four strategic approaches: (1) Raising public awareness and providing educational opportunities for the community. Ecotourism activities must be able to educate the community about the importance of environmental preservation efforts. It is also critical to promote ethical standards for the use of natural and cultural resources, as well as to assist communities in understanding conservation efforts. (2) Tourism industry activity. Tourism sector actors, particularly the private sector, have a responsibility to package their tourism products in a way that does not harm the environment. Tourism stakeholders must make efforts to introduce environmentally friendly tourism activities. Tourism industry stakeholders must also collaborate to develop guidelines for the development of environmentally friendly tourist destinations and tourism supporters. (3) Destination Development and Planning Governments and non-governmental organizations both have roles to play in the planning and development of tourist destinations. Before deciding to develop an area into a tourist destination, the government must be able to conduct research.

In the meantime, non-governmental organizations serve on advisory boards for all government decisions. As a result, all government decisions will not contradict the values of non-governmental tourism organizations. (4) Expansion of the ecotourism marketing concept. The traditional marketing system, also known as the 4Ps (Price, Promotion, Place, and Product), must be improved. Price: the amount charged for the product or service offered to tourists. Promotion: A series of communication and sales activities are required to encourage potential customers to become aware of and purchase ecotourism products. Location: a distribution system through which customers purchase ecotourism products from non-profit and non-profit organizations. A product is a combination of benefits, products, and services.

Ecotourism activities have the potential to be profitable during a pandemic. The pandemic condition puts a strain on tourism activities, forcing them to change and adapt to new circumstances. Tourism activities will become more in line with the Health protocol, where; (1) Tourism activities must be based on the Health protocol. Tourism activities are expected to continue to follow the government's rules in accordance with the Health protocol. Having a CHSE (Clean, Health, Safety, and Environment) certificate should be a top priority in tourism. (2) Limited contact. Tourism activities must be designed with a low-contact tourism system in mind. Physical contact will be avoided during the pandemic because it is the main source of Covid-19 transmission. As a result, the tourism industry's nature has shifted from high to low

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

touch. Digital can be used as a short-term or long-term solution. (3) Limited mobility. Because of the possibility of Covid-19 transmission, community mobility will be reduced. Tourists are likely to take short trips. Travel by plane will be avoided at first in favour of private vehicles. (4) Staying away from crowds. Tourists will choose destinations and attractions in remote areas away from crowds, as crowds are increasingly avoided during the pandemic. As a result, during the pandemic's fear and mental suffering, health and awareness will be increasingly sought after. Because of its location in an open space, ecotourism has the potential to be a popular tourism option during a pandemic. As long as tourism actors can limit the number of visitors, ecotourism activities can become environmentally friendly while remaining within health protocol guidelines.

The emergence of the Covid-19 virus in early 2019 prompted a shift in tourism implementation style, including: (1) Attraction. There are more tourist attractions that offer the concept of nature, eco, wellness, and adventure (NEWA). Because it is considered safer to travel in open spaces, the demand for this type of tourism is increasing. Tourists are more likely to choose domestic tourism due to shorter travel distances, so domestic tours have a higher market share, (3) Amenity. More people will accept HILL (Hygiene, low touch, less crowd) solutions.

Virtual Reality’s Potential Use in Tourism Activities in Bali Technological advancements continue to have an impact on the development of tourist destinations. Tourism is an important industry in many countries, generating revenue that can be used to fuel economic growth. There is an adaptation of technology used in society 5.0 can see that technology is held in a centralized role and cannot be integral to human life today. As seen in the sector's industrial activity tourism, sync progress technology is extremely important as sector tourism progress. As for some type of advancement technology that can be used to promote tourism, there is an existing benefit in virtual reality or one could say as benefit virtual space. Promotion as well as improved service, particularly service visit sightseeing good domestic tourists or traveler real foreigner must be managed by manager destination tourist or our could call POKDARWIS where every village has group aware tours that can provide innovative service, particularly in the tourism sector.

Virtual reality is a technology that allows users to interact directly with the environment to be targeted in a virtual world projected or simulated by a computer, giving users the impression that they are in that environment. The use of Virtual Reality is intended to make users feel present and to allow them to experience the situation projected by Virtual Reality firsthand. This technology has been widely used by tourist destination managers to promote their destinations. The appearance of virtual reality is important in making a good first impression. The goal of virtual reality in the tourism industry is, of course, to increase tourist visits. VR is becoming more popular around the world, especially since the pandemic. Because of the many restrictions on people's mobility, this has become a popular way for people to find entertainment without having to leave their homes. They only need a good internet connection to visit the location of their choice as if they were physically present. This demonstrates how technology has shifted the tourism industry's development in a new direction.

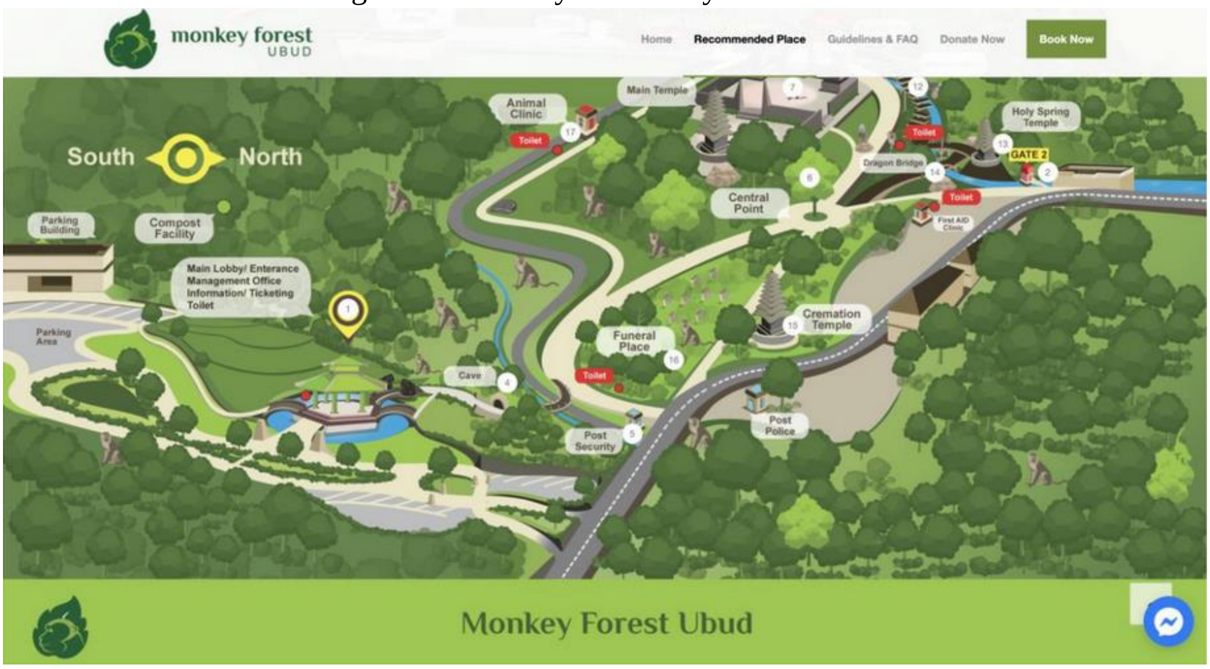
Bali is a popular tourist destination in Indonesia. The tourism industry generates the majority of Bali's regional income. However, many changes have occurred in the tourism industry since the pandemic, one of which is adaptation to the presence of VR. The manager

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

of the Ubud Monkey Forest tourist attraction in Gianyar Regency also does this; they offer Virtual Reality services via the website www.monkeyforestubud.com. Visitors can virtually click the button on their website to get an overview of the Ubud Monkey Forest layout directory. The Monkey Forest Ubud tourist destination's use of virtual reality managers creates a new atmosphere for the people during the Covid-19 pandemic. VR technology can be used as a promotional platform for both domestic and international tourists. Tourists who want to visit Monkey Forest will previously see an overview of the location through vlogs created by YouTubers, but with VR, they will be able to get a virtual direct experience.

According to research (Guttentag, 2010:640-44), virtual reality applications in the tourism sector include planning and management, marketing, entertainment, education, accessibility, and heritage preservation. The use of Virtual Reality at Monkey Forest Ubud will not directly increase the number of tourists, but this technology has the potential to increase the attractiveness of existing tourist attractions. The use of digital technology will bring new life and opportunities to those who earn a living from the tourism industry. At least with VR, tourism promotion will continue even if people's mobility is restricted.

Figure 1. Directory in Monkey Forest Ubud

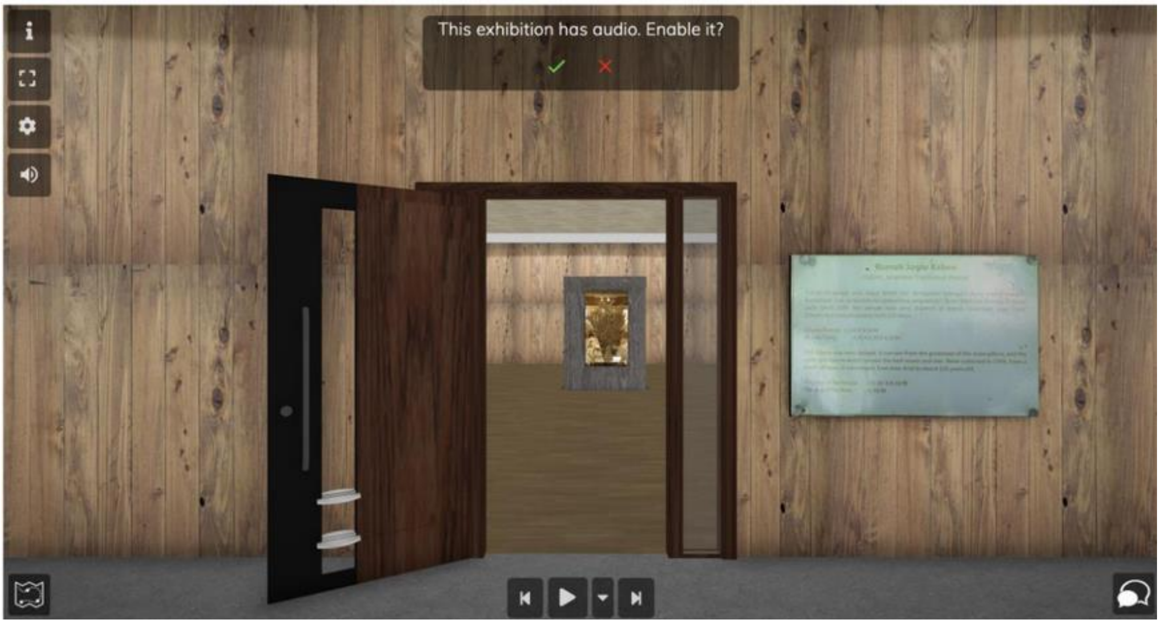


Source: monkeyforestubud.com

In addition to the use of virtual reality at the Monkey Forest Ubud tourist attraction, the Setia Darma mask house has begun to use virtual reality. In practice, virtual reality is used to create virtual exhibitions that can be accessed by anyone online. The use of information technology, in this case virtual reality, at the Setia Darma mask house demonstrates that anyone can get art education that is accessible from anywhere and at any time. Dharma offers education about the art of masks, both domestic and foreign masks from their collections, through this suggestion, the house but the one who is loyal.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Figure 2. Virtual Reality at the Setia Darma Mask House



Source: maskandpuppets.com

Challenges of Using Virtual Reality in the Tourism Industry

Of course, the use of VR in its implementation has benefits and drawbacks, particularly when applied to the tourism sector. The novelty aspect of VR is obvious, as VR employs a three-dimensional computer simulation known as Computer Assisted Instruction (CAI). CAI's three-dimensional virtual reality projection provides a realistic experience of visiting a tourist attraction without having to travel directly to the location. These three-dimensional projections can provide the complexity of the tourist situation, with the goal of entertaining or satisfying the desire to travel by CAI in the tourist destination's Virtual Reality.

The use of Virtual Reality enables the presentation of objects from all sides. This gives VR users a more accurate picture of the condition of a tourist attraction. Tourists can enjoy the details, enter the object, walk around looking around, and observe every part of the object when an attraction is displayed in Virtual Reality, for example. Finally, Virtual Reality encourages tourist interactivity or intimacy, allowing them to enjoy the appearance of a tourist destination. Tourists will be able to enjoy their surroundings more fully because they will not be disturbed by the noise of other tourists.

Attraction managers can benefit greatly from using VR technology. One thing they can do is use VR technology to improve the branding of their tourist attraction by increasing creativity and innovation. This will serve as an inspiration and a new business model for the management of a tourist destination. This is also one of the initiatives aimed at achieving society 5.0. Based on these advantages, it is possible to conclude that the use of Virtual Reality is advantageous not only to tourists but also to managers of existing tourist destinations.

However, in addition to all of the benefits gained from the use of VR, there are several future challenges associated with the use of VR in the tourism industry that must be overcome collaboratively. According to Haag, Cunnings, and Dawkin (Kadir and Triwahyuni, 2013:

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

214), people who use VR too frequently in their daily lives are more likely to develop cybersickness. This disruption causes Virtual Reality tourists to be psychologically carried away by the virtual (pseudo) atmosphere created by CAI projections on the Virtual Reality system, even after they return to the real world. This must be a common concern, where even if someone uses VR to enjoy a tourist attraction, the tourist attraction must impose a limit. Overall, the use of virtual reality in tourism will have a significant impact on tourists' impressions of tourist destinations when they visit them in person.

Another challenge is the difficulty for VR visitors to navigate. It should be explained in advance what VR visitors can expect from the VR technology adopted by a particular tourist attraction. They must provide an understanding that although VR technology is an advanced technology, it still has limitations and is not the same as the feeling of emotion and satisfaction that is caused to someone if they visit a tourist attraction in person. The most obvious challenge here is also the issue of cost, where not all tourist attractions will be able to adopt this technology. The creation, education of tourism object owners, promotion and maintenance of the system will be obstacles for tourist objects that have limited funds.

A better tourism management system is required to overcome these challenges. We can explain what we need in the development of virtual reality in the tourism industry by referring to Henry Fayol's management system, namely POAC (Planning, Organizing, Actuating, and Controlling) (Saputra and Ali, 2022). In terms of planning, all elements of government and non-government are expected to be involved in the design of a tourism object. This is necessary to determine an area's potential and how development can be tailored to meet the needs of tourists. On the organizing side, a clear inventory of various types of attractions is required. Each type of attraction, of course, necessitates its own set of resources and financial planning systems. Using the actuating system, getting members of the organization to perform in ways that will help the organization achieve its goals. Finally, controlling requires coordination among stakeholders.

CONCLUSION

The use of virtual reality (VR) technology in the tourism industry creates a new picture in which tourists can enjoy a tourist attraction without having to visit in person. Of course, it must be understood that while VR has several advantages, it is not without challenges that may prevent a tourism object from adopting VR. The use of VR cannot be applied to all tourist attractions, especially if the tourist attraction still faces challenges such as a lack of worker skills and limited funds.

Based on this, the author makes several recommendations. To begin, when developing Virtual Reality, it is critical to focus on creating a user-friendly interface system that allows users to run applications with ease. It is critical to provide visitors with a pleasant experience. Furthermore, tourist attraction managers must continue to monitor the transformation of Virtual Reality and adapt it to the needs of visitors. Second, in terms of managing Virtual Reality, tourism object managers must adapt to collaborate with all parties, including the government and citizens, in order to socialize this breakthrough to the broader group.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

ACKNOWLEDGEMENTS

The author would like to thank the writing team who have helped during the writing process. In addition, thanks are also extended to all presenters.

REFERENCES

Badan Pusat Statistik. 2020. Pertumbuhan Ekonomi Bali Triwulan I-2020. BPS Provinsi Bali, Dirujuk dari https://bali.bps.go.id/pressrelease/2020/05/05/717411/pertumbuhanekonomi-bali-triwulan-i-----2020.html pada tanggal 1 Juli 2022

Disparda Provinsi Bali. 2020. "Menparekraf Launching Program 'We Love Bali'. Dirujuk dari https://disparda.baliprov.go.id/menteri-kemenparekraf-launching-program-welove-bali/2020/10/ pada tanggal 1 Juli 2022

Guttentag, D. A. (2010). Virtual reality: Applications and implications for tourism. Tourism Management, 31(5), 637–651. https://doi.org/10.1016/j.tourman.2009.07.003

Muhanna, Emaad. 2006. Sustainable Tourism Development and Environmental Management for Developing Countries. Journal Problem and Perspectives in Management. Dirujuk darihttps://www.businessperspectives.org/images/pdf/applications/publishing/templates/article/assets/519/PPM_EN_2006_02_Muhanna.pdf pada tanggal 1 Juli 2022

Saputra, F., & Ali, H. (2022). Penerapan Manajemen POAC: Pemulihan Ekonomi Serta Ketahanan Nasional pada Masa Pandemi Covid-19 (Literature Review Manajemen POAC). Jurnal Ilmu Manajemen Terapan, 3(3), 316-328

Suciarto, S., & Ferijani, A. (2020). Implementasi Green Business dalam Ekoturisme di Jawa Tengah (Studipada Tiga Obyek Wisata). Jurnal Ekonomi, Manajemen Akuntansi dan Perpajakan (Jemap), 3(1), 72-94.

Sutrisno & Afendi, 2018. Penerapan Konsep Edu-Ekowisata Sebagai Media Pendidikan Karakter Berbasis Lingkungan. Dirujuk dari https://media.neliti.com/media/publications/280286-penerapan-konsep-edu-ekowisata-sebagai-m-34e36216.pdf pada tanggal 1 Juli 2022

The Effect Marketing Media Social on Competitive Advantage and Performance

Khoiriyah Trianti[1], Karina Utami Anastuti[2]
[1,2] *Fakultas Ilmu Administrasi, Universitas Islam Malang*
e-mail: khoiriyaht@unisma.ac.id

Article Info

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Article of OSC 2022

Abstract

This study focused on Amangtiwi Micro Small and Medium Enterprises (MSME) in Malang Regency, to examine the effect of marketing media social on competitive advantage and performance company. This study processed primary data obtained using a questionnaire distributed to 148 MSME. The research sample was selected using stratified random sampling method. This study uses a cluster sampling method involving 148 respondents and uses PLS (Partial Least Square) analysis tools with SmartPLS 3.0 software. The result showed that marketing media social affect on competitive advantage and performance MSME.

***Keywords**: Competitive Advantage, Performance, Marketing Media Social.*

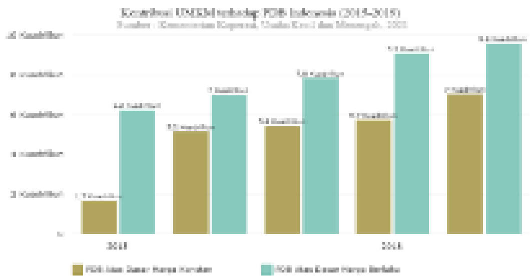
ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

LATAR BELAKANG

Keberadaan Usaha Kecil dan Menengah (UMKM) merupakan kegiatan bisnis yang menyokong pertumbuhan daerah maupun nasional. Selama ini terbukti UMKM dapat diandalkan sebagai katup pengaman dimasa krisis, melalui mekanis menciptaan kesempatan kerja dan nilai tambah. Keberhasilan dalam meningkatkan kemampuan UMKM berarti memperkokoh bisnis perekonomian masyarakat.

Data Kementerian Koperasi dan UMKM menyebutkan, jumlah pelaku UMKM saat ini sebanyak 64,1 juta atau mencapai 99% dari jumlah pelaku usaha yang ada di Indonesia. Tenaga kerja yang terserap pada sector UMKM mencapai 116 juta. (kemenkopUMKM.go.id 9 agustus 2021).

Gambar 1. Kontribusi UMKM PDB Indonesia Tahun 2015-2019



Pandemi Covid-19 yang awalnya ditemukan di Wuhan China penyebarannya meluas ke berbagai negara di dunia termasuk Indonesia. Penyebaran Covid-19 sangat masif, dengan meningkatnya jumlah orang yang terinfeksi Covid-19. Pemerintah Indonesia tidak mengambil kebijakan lockdown, untuk meminimalisir penyebaran Covid-19, namun pemerintah menerapkan kebijakan Pembatasan Sosial Berskala Besar (PSBB) dengan harapan dapat mengurangi dampak krisis ekonomi. Kebijakan PSBB memunculkan peraturan pemerintah yang mengatur pembatasan jarak fisik yang leih tegas, dispilin, dan efektif. Menurut Peraturan Pemerintah Nomor 21 Tahun 2020, untuk pembatasan wilayah karena wabah penyakit, daerah harus mendapat penetapan dari Kementrian Kesehatan. Pembatasan sosial berskala besar ini diterapkan pada level provinsi dan kabupaten/ kota. Upaya pemerintah untuk menekan penyebaran Covid 19 masih terus silakukan. Setelah PSBB pemerintah mengeluarkan kebijakan pemberlakuan pembatasan kegiatan Masyarakat (PPKM) Jawa Bali pada awal Januari 2021. Langkah ini diharapkan bisa mencegah penularan Covid-19 antara pusat, daerah, dan antar daerah itu sendiri.

Adanya pandemic covid-19 menyebabkan penutupan usaha mikro telah menurun dari 48 persen pada Maret-April 2020 menjadi 5 persen periode yang sama tahun 2021. Sementara itu, penutupan usaha kecil menurun dari 54,4 persen menjadi 1,8 persen, dan penutupan usaha menengah menurun dari 31,3 persen menjadi 6,3 persen. Namun demikian, pelaku UMKM yang mengalami penurunan permintaan domestik yang memengaruhi pendapatan masih meningkat. Usaha kecil yang mengalami penurunan permintaan domestic meningkat dari 27,9 persen pada Maret-April 2020 menjadi 60,2 persen di periode yang sama 2021, usaha kecil dari 40 persen menjadi 68,7 persen, dan usaha menengah dari 43,8 persen menjadi 64,6 persen. (Merdeka, 19 Agustus 2021).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Sembilan dari sepuluh usaha mikro, kecil dan menengah (UMKM) di Indonesia mengalami penurunan permintaan terhadap produk mereka selama pandemi Covid-19. Di sisi lain, lebih dari 80% telah mencatat keuntungan yang lebih rendah.Adanya penurunan tersebut mengungkapkan 44% UMKM beralih ke platform online untuk menjual produk mereka. Hal ini dilakukan supaya bisnis tetap bertahan. Agar bisnis tetap bertahan usaha perlu melakukan sebuah inovasi dan menciptakan keunggulan bersaing.

Keunggulan bersaing merupakan kemampuan daya saing yang tinggi jika dibandingkan dengan pesaingnya ataupun UMKM lainnya. Untuk memenangkan suatu persaingan perusahaan perlu menerapkan strategi bersaing, yang mana biasanya dilakukan oleh divisi kreatifitas yang ada. Didalam membangun strategi bersaing yaitu bermula dari pengembangan formula umum mengenai bagaimana bisnis akan dikembangkan, apa sebenarnya yang menjadi tujuan dari pengembangan tersebut dan kebijakan apa yang perlu dilakukan untuk mencapai tujuan dimaksud. Porter (2008) menjelaskan bahwa keunggulan bersaing adalah nilai superioritas yang dimiliki oleh suatu perusahaan didalam menghadapi suatu persaingan. Keunggulan bersaing merupakan jantung kinerja pemasaran untuk menghadapi persaingan.

Keunggulan bersaing diwujudkan dalam strategi pemasarannya yaitu menggunakan platform online khususnya media social dalam pemasaran. Menurut Safitri (2015) dan Kautsarina (2013) bahwa UMKM harus cermat dalam memilih media sosial yang sesuai dengan tujuan pemasarannya. Facebook lebih cocok untuk tujuan menjangkau lebih banyak audiens karena karakter penggunanya meluas dari semua level sehingga UMKM dapat membangun relasi (relationship) dan kesadaran (awareness) dengan pemanfaatan fitur events, update status, maupun membalas langsung feedback dari konsumen. UMKM dapat memaksimalkan Facebook dengan membuat updates yang deskriptif disertai foto dan link website untuk call-to-action. Sedangkan Twitter cocok untuk membangun komunikasi yang sifatnya lebih terbuka dan untuk membangun awareness. Dalam menggunakan Twitter, UMKM harus meng-update dengan focus wording yang sederhana dan mudah dimengerti dan disertai dengan link website untuk call-to-action. Sementara itu untuk Instagram cocok untuk membangun awareness dan menciptakan hubungan dengan konsumen. Kelemahan Instagram adalah tidak dapat menaruh link yang langsung terkoneksi ke laman website, sehingga UMKM harus mengunggah foto tentang behind the scenes pembuatan produk/ shooting iklan, teaser produk baru, endorsement dari selebriti, dan kontes foto.

Penggunaan media social merupakan pola perilak dari seseorang yang dilakukan secara online melalui jaringan virtual media social (Verduyn et al, 2017). Manfaat yang bisa diperoleh dari penggunaan media social bagi UMKM adalah menghasilkan konten yang beragam, memperluas jangkauan pemasaran, serta dapat digunakan untuk memantau konten pesaing (Rashid et al, 2020). Keuntungan lain yang diperoleh adalah menciptakan kesadaran merek, menciptakan hubungan yang baik dengan konsumen, dan meningkatkan jumlah penjualan (Jones et al, 2015).

Penggunaan media social memiliki hubungan positif terhadap kinerja keuangan UMKM (Tajvidi & Karami, 2017). Penggunaan media social untuk aktivitas pemasaran memberikan dampak signifikan terhadap pertumbuhan pangsa pasar, peningkatan laba dan peningkatan pendapatan (Tajvidi & Karami, 2017). Hal ini diperkuat oleh pendapat Sidi & Yogatama (2019) bahwa pertumbuhan pendapatan, pertumbuhan jumlah konsumen, dan meningkatnya volume penjualan merupakan bukti adanya kinerja pemasaran. Kinerja pemasaran tersebut otomatis berdampak terhadap kinerja keuangan yaitu adanya peningkatan pendapatan dalam UMKM.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Hal ini tentu saja juga akan mendukung keunggulan bersaing bagi UMKM. Berdasarkan paparan di atas, maka penelitian ini bertujuan untuk mengetahui pengaruh penggunaan media social terhadap kinerja perusahaan dan keunggulan bersaing dengan objek penelitian ini adalah pelaku UMKM di Kota Malang.

KAJIAN PUSTAKA DAN PERUMUSAN HIPOTESIS

Pemasaran melalui Media Sosial

Media sosial merupakan grup aplikasi berbasis internet yang mengijinkan penggunanya untuk menciptakan dan saling berbagi konten (Kaplan & Haenlein, 2010). Adapun, aktivitas pemasaran media sosial didefinisikan oleh Chan & Guillet (2011) sebagai proses sosial dan manajerial yang dilakukan individu dan kelompok dalam memeroleh apa yang dibutuhkan dan diinginkan melalui media teknologi yang mengijinkan penggunanya untuk saling berkolaborasi.

Penggunaan media social adalah pola perilaku yang dilakukan secara online baik penggunaan media social secara aktif meupun penggunaan media social secara pasif. Perilaku aktif ditandai adanya feedback antar penggunanya, sperti saling menyukai, memberikan komentar, membagikan psotingan, mengirim pesan dan hal-hal lainnya yang memiliki keterlibatan langsung antar pengguna. Sedangkan, perilaku pasif yakni penggunaan media social yang intensitasnya hanya sebatas melakukan dan menatau aktivitas orang lain di social media tanpa adanya keterlibatan secara langsung (Verduyn Iet al., 2017).

Penggunaan media social menjadi penting karena memiliki jangkauan yang tidak terbatas. Hal tersebut akan memberikan keuntungan yang banyak bagi para pelaku. Tujuan dari penggunaan media social diantaranya untuk kegiatan pemasaran dan mengurangi biaya pemasaran (Parveen *et al*., 2015. UMKM menggunakan media social untuk mempromosikan produk atau jasa melalui platform yang tersedia dan membangun hubungan yang baik dengan konsumen (Olanrewaju *et al*., 2020)

Keunggulan Bersaing

Pada umumnya setiap perusahaan selalu berusaha bagaimana caranya agar usaha yang dijalankan senantiasa berkinerja baik sehingga mampu berkembang dan bertahan hidup lebih lama. Bharadwaj *et al.* (1993) menjelaskan bahwa keunggulan bersaing merupakan hasil dari implementasi strategi yang memanfaatkan berbagai sumberdaya yang dimiliki perusahaan. Keahlian dan asset yang unik dipandang sebagai sumber dari keunggulan bersaing. Keahlian unik merupakan kemampuan perusahaan untuk menjadikan para karyawannya sebagai bagain penting dalam mencapai keunggulan bersaing. Kemampuan perusahaan dalam mengembangkan keahlian para karyawannya dengan baik akan menjadikan perusahaan tersebut unggul dalam penerapan strategi yang berbasis sumber daya manusia dan akan sulit untuk ditiru oleh para pesaingnya. Sedang asset atau sumber daya unik merupakan sumber daya nyata yang diperlukan perusahaan guna menjalankan strategi bersaingnya. Kedua sumber daya ini harus diarahkan guna mendukung penciptaan kinerja perusahaan yang berbiaya rendah dan memilki perbedaan dengan perusahaan lain. Pendapat yang serupa juga dikemukakan oleh Porter (2008), yang menjelaskan bahwa keunggulan bersaing adalah nilai superioritas yang dimiliki oleh suatu perusahaan di dalam menghadapi suatu persaingan. Ada tiga landasan strategi yang dapat membantu organisasi memperoleh keunggulan bersaing, yaitu keunggulan biaya, diferensiasi, dan fokus. Porter menamakan ketiganya strategi umum (strategi generik)

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Keunggulan biaya menekankan pada pembuatan produk standar dengan biaya per unit sangat rendah untuk konsumen yang peka terhadap perubahan harga. Diferensiasi adalah strategi dengan tujuan membuat produk yang menyediakan jasa yang dianggap unik di seluruh industri dan ditujukan kepada konsumen yang tidak terlalu peduli dengan perubahan harga. Fokus berarti membuat produk dan menyediakan jasa yang memenuhi keperluan sejumlah kelompok kecil konsumen. Strategi Porter menjelaskan bahwa keunggulan bersaing adalah kinerja pemasaran untuk menghadapi persaingan. Keunggulan bersaing diartikan sebagai strategi benefit dari perusahaan yang melakukan kerjasama untuk menciptakan keunggulan bersaing yang lebih efektif dalam pasaranya.

Kinerja Perusahaan

Hafeez (2011) menyatakan bahwa, Kinerja pada hakekatnya merupakan ukuran prestasi yang diperoleh dari aktifitas proses pemasaran secara menyeluruh dari sebuah perusahaan atau organisasi. Selain itu, kinerja perusahaan juga dapat dipandang sebagai sebuah konsep yang digunakan untuk mengukur sampai sejauh mana prestasi pasar yang telah dicapai oleh suatu produk yang dihasilkan perusahaan. Bhuian *et al.* (2005), menyatakan bahwa kinerja perusahaan merupakan faktor yang seringkali digunakan untuk mengukur dampak dari strategi yang diterapkan perusahaan. Strategi perusahaan selalu diarahkan untuk menghasilkan kinerja perusahaan yang baik dan juga kinerja keuangan yang baik. Hasil kinerja ini kurang tepat apabila hanya dilihat dari satu dimensi saja. Salah satu strategi perusahaan agar dapat meningkatkan kinerjanya yaitu melalui peningkatan keunggulan bersaing (Anik, 2015). Olivares *and* Lado (2003) menyatakan bahwa *market orientation* dapat meningkatkan kinerja perusahaan dimana dengan *item innovation degree, innovation performance*, dan *customer loyalty*.

Para peneliti menyepakati bahwa pengukuran kinerja usaha/perusahaan tidak hanya cukup menggunakan ukuran tunggal (Jaworski *and* Kohli, 1993). Terdapat beberapa pendekatan dalam mengukur kinerja perusahaan, ukuran keberhasilan organisasi mencakup profitabilitas, pertumbuhan penjualan, ukuran *competitiveness* dan *market share* (Jacobson, 1988).

Selanjutnya Bhuian *et al*. (2005) juga menyatakan bahwa kinerja perusahaan yang baik dinyatakan dalam tiga besaran utama nilai, yaitu nilai penjualan, pertumbuhan penjualan, dan porsi pasar. Beberapa peneliti yang mengukur kinerja usaha pada usaha kecil dengan indikator–indikator pertumbuhan seperti pertumbuhan penjualan, pertumbuhan keuntungan, pertumbuhan aset dan penurunan biaya antara lain adalah Brown *and* Duguid (1991), Wiklund (2003), Ferreira *and* Azevedo (2007), dan Suci (2009), sementara Smirnova *et al.* (2011), dan Boso *et al.* (2013) mengukur kinerja dilihat dari dua dimensi yaitu *sales performance* dan profitabilitas. Olivares and Lado (2003) mengukur kinerja perusahaan yang tercermin dari tiga indikator yaitu pertumbuhan modal, pertumbuhan penjualan, dan pertumbuhan keuntungan tiap tahun. Begitupula dengan Anik (2015) yang mengukur kinerja perusahaan dengan menggunakan tiga dimensi yang meliputi pertumbuhan penjualan, kemampulabaan, dan pertumbuhan pangsa pasar. Mengingat pengukuran kinerja usaha kecil tidak ada kesepakatan tentang bagaimana dan dengan prosedur apa pengukuran kinerja harus dilakukan, oleh karena itu pengukuran kinerja yang digunakan dalam penelitian ini ialah melalui pertumbuhan penjualan, pertumbuhan keuntungan dan pertumbuhan modal.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Kinerja UMKM dapat dilihat dari beberapa hal, yaitu penciptaan kesempatan kerja, sangat penting dalam meihat sukses tidaknya suatu usaha. Dengan demikian banyaknya tenaga kerja yang diserap, maka semakin besar pula peranna UMKM dalam menganggulangi masalah pengangguran. Begitu juga dengan produktivitas.

HUBUNGAN ANTAR VARIABEL DAN PENGEMBANGAN HIPOTESIS

Pengaruh Pemasaran Media Sosial dengan Keunggulan Bersaing

Penggunaan media sosial secara optimal akan membantu perusahaan dalam membangun jaringan yang solid dengan konsumen maupun pesaingnya, sehingga dapat meningkatkan kabalitas mereka yang akhirnya berdampak pada kinerja yang lebih baik. Peningkatan kinerja dapat dilihat dari meningkatnya volume penjualan, pertumbuhan kosumen, dan pertumbuhan pendapatan (Tajvidi & karami, 2017). Penggunaan media social merupakan salah satu stategi pemasaran. Intensitas yang tinggi dalam mempromosikan produk melalui social media dapat meumbuhkan ketertarikan calon pembeli untuk membeli produk tersebut (Wang & Kim, 2017). Semakin banyak jumlah penjualan yang dihasilkan dari aktivitas promosi melalui media social maka akn berdampak pada peningkatan jumlah pendapatan. Apabila jumlah penddapaatn penjualan meningkat maka akan mencapai kinerja pemsaran yang lebih baik. Penggunaan media social terbukti berpengaruh signifikan terhadap kinerja UMKM dalam meningkatkan laba dan pendapatan penjualan (Tajvidi & Karam, 2017. Dalam penelitian Chanthinok Iet al (2015), Tafesse & Wien (2018) berhasil membuktikan penggunaan media social memiliki hubungan positif terhadap kinerja. Hipotesis penelitian yang diajukan dalam penelitian ini adalah sebagai berikut:

H1 : Terdapat pengaruh positif penggunaan media sosial terhadap keunggulan bersaing.

Pengaruh Pemasaran Media Sosial dengan Kinerja Perusahaan

Pemasaran media sosial digambarkan dengan penggunaan media sosial kepada pesaing dan penggunaan media sosial kepada pesaing. Dengan mengetahui permintaan dari pelanggan, sehingga perusahaan mampu melakukan pengembangan produk dan mengimplementasi pemasaran media sosial sehingga berpengaruh terhadap kinerja hubungan pelanggan dan kinerja keuangan. (CharoensUMKMongkol, 2020). Sejalan dengan penelitian (Athia, Primanto 2020) menyatakan ada hubungan antara pemasran media social dengan keunggulan bersaing. Telah terbukti secara empiris bahwa pentingnya penggunaan media sosial untuk CRM sebagai praktik pemasaran yang dapat membantu usaha mikro di Thailand mencapai kepuasan kinerja bisnis yang lebih tinggi. Secara keseluruhan, ini temuan menawarkan kontribusi tambahan untuk penelitian sebelumnya yang mengusulkan manfaat penggunaan media sosial dalam bisnis, khususnya di bidang CRM. Semakin banyak dan semakin banyak perusahaan mulai menggunakan media sosial dalam bisnis untuk memanfaatkan peluang pasar yang dihadirkan oleh meningkatnya jumlah pengguna media sosial, sangat penting untuk perusahaan, terutama usaha mikro, untuk belajar mengadaptasi media sosial untuk tujuan pemasaran, untuk membantu mereka bersaing secara efektif dalam bisnis. (CharoensUMKMongkol, 2017). Hipotesis penelitian yang diajukan dalam penelitian ini adalah sebagai berikut:

H2 : Terdapat pengaruh positif penggunaan media sosial terhadap kinerja perusahaan.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Pengaruh Keunggulan Bersaing dengan Kinerja Perusahaan

Keunggulan bersaing digambarkan dengan enam dimensi unik, harga bersaing, jarang dijumpai, tidak mudah ditiru, tidak mudah diganti untuk dapat diperoleh dari kemampuan perusahaan untuk mengelola dan memanfaatkan sumber daya dan modal yang dimilkinya. (Chapman et al. 2003), menyatakan bahwa pada gilirannya keunggulan bersaing merupakan faktor penting dalam mengasilan kinerja yang baik. Story et al. (2011) menyatakan bahwa pengembangan keahlian, inkubasi dan akselerasi sebagai indikator penting dalam memicu terciptanya keunggulan bersaing guna meningkatkan kinerja perusahaan. Hipotesis penelitian yang diajukan dalam penelitian ini adalah sebagai berikut:

H3 : Terdapat pengaruh positif keunggulan bersaing terhadap kinerja perusahaan

METODE PENELITIAN

Penelitian ini dilakukan pada UMKM di Kota Malang. Adapun populasi penelitian ini adalah seluruh pelaku UMKM di Kota Malang dari berbagai sektor. Penelitian ini menggunakan teknik non probability sampling dengan metode pengambilan sampel yang digunakan adalah purposive sampling untuk memilih responden sesuai dengan kriteria penelitian yakni UMKM yang menggunakan media social, Facebook, Twitter, Instagram, Youtube dan Whatsapp sebagai sarana pemasaran mereka. Instrumen penelitian ini menggunakan kueioner kepada responden**.** Data yang digunakan dalam penelitian ini meliputi dua jenis yaitu data primer dan data sekunder:

a. Data primer, yaitu data yang diperoleh peneliti dari pimpinan atau pelaku usaha UMKM.

b. Data sekunder, yakni data yang diperoleh peneliti melalui studi yang dilakukan oleh pihak lain untuk sasaran mereka sendiri atau melalui studi pustaka dengan mempelajari berbagai tulisan yang berhubungan dengan keunggulan bersaing, Pemasaran melalui media sosial, dan kinerja perusahaan serta dokumen yang berasal dari Dinas Koperasi dan Usaha Kecil Menengah Kota Malang. Pengumpulan data dalam penelitian ini yaitu dalam bentuk kuesioner (angket).

Analisis deskriptif digunakan untuk mendeskripsikan variabel-variabel penelitian yang dinyatakan secara absolut dan persentase. Item-item pada setiap variabel dihitung dan dicari rata-ratanya. Penelitian ini juga menggunakan analisis cause and effect yaitu dilakukan untuk mengkaji kemungkinan hubungan sebab akibat antar variable yang menjadi penyebab atau gejala dan dampak yang diteliti. Menurut Pedhazur dalam Winarsunu (2004), analisis jalur (path analysis) merupakan sebuah metode yang digunakan untuk melihat akibat langsung atau tidak langsung dari suatu variabel yang dihipotesiskan sebagai penyebab terhadap variabel yang diberlakukan sebagai akibat. Variabel dalam analisis jalur ini dibedakan menjadi dua yaitu eksogen yang merupakan variabel penyebab dan endogen atau variabel akibat (Sarwono, 2006).

Analisis jalur dilakukan untuk menemukan penjelasanpenjelasan mengenai pola-pola hubungan langsung dan tidak langsung berdasarkan pertimbangan-pertimbangan teoritis serta pengetahuan dari peneliti yang ditampilkan dalam bentuk gambar (path diagram/diagram jalur) yang berfungsi membantu dalam melakukan konseptualisasi masalah yang kompleks dan mengenali implikasi empirik dan teori yang sedang diuji.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Alasan dari penggunaan analisis path dalam penelitian ini yaitu ingin mengetahui pengaruh secara langsung dan tidak langsung dari tiap variable yang akan diuji. Adaya kemampuan inovasi dalam kewirausahaan sangat penting agar mampu bersaing dengan kompetitor lainnya. Inovasi tersebut dapat berupa produk maupun cara penjualannya. Produk yang yang diinovasi mampu untuk menarik minat konsumen sehingga mampu bersaing dengan produk lainnya.

Definisi Operasional

Pemasaran melalui Media Sosial Berdasarkan penelitian Rapp, Beitel spacher, Grewal, & Hughes, (2013) terdapat indicator dari pemasaran melalui media sosial:

1) Media sosial untuk pesaing. Indikator ini diturunkan ke dalam item sebagai berikut:
   1. Memantau pesaing
   2. Membandingkan konten promosi pesaing
2) Media sosial untuk pelanggan. Indikator ini diturunkan ke dalam item sebagai berikut:
   1. Bekomunikasi dengan pelanggan
   2. Mencari pelanggan baru
   3. Memberikan informasi promosi
   4. Menggali saran yang membangun dari pelanggan
   5. Menciptakan hubungan pelanggan yang inti
   6. Menjaga relevansi pelanggan

Keunggulan bersaing adalah nilai superioritas yang dimiliki oleh pengusaha F&B Kota Malang didalam persaingan, dimana produk- produk yang dihasilkannya lebih berkualitas dari produk pesaing, harga produk yang lebih kompetitif serta produk yang dihasilkan memiliki keunikan dari produk pesaing. Berdasarkan penelitian Bharadwaj et al. (1993) terdapat 5 indikator dari keunggulan bersaing, yaitu :

1) Produk memiliki keunikan dari produk pesaing. Produk yang dihasilkan oleh perusahaan berbeda dari produk yang dihasilkan oleh pesaing. Indikator ini diturunkan ke dalam item sebagai berikut:
   1. Produk yang berbeda dengan produk yang lain.
   2. Produk yang dihasilkan merupakan produk baru.
2) Harga yang lebih terjangkau dari produk pesaing. Indikator ini diturunkan ke dalam item sebagai berikut:
   1. Harga produk lebih murah dari produk pesaing.
   2. Harga produk dapat dijangkau oleh konsumen.
3) Jarang dijumpai, berarti keberadaanya langka dalam persaingan.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Indikator ini diturunkan ke dalam item sebagai berikut:

1. Produk yang dihasilkan tidak diproduksi oleh pesaing.
2. Produk yang dihasilkan merupakan produk yang langka.

4) Tidak mudah ditiru, berarti dapat ditiru oleh pesaing namun tidak sempurna. Indikator ini diturunkan ke dalam item sebagai berikut:

1. Produk yang dihasilkan memiliki ciri khas.
2. Pesaing akan sulit meniru produk yang dihasilkan.

5) Tidak mudah digantikan berarti, tidak memilki pengganti yang sama. Indikator ini diturunkan ke dalam item sebagai berikut:

1. Tidak ada produk yang sama dengan produk yang dihasilkan perusahaan.
2. Tidak ada pengganti dari produk perusahaan.

Kinerja Perusahaan

Kinerja perusahaan yaitu menggambarkan perkembangan hasil yang dicapai oleh UMKM di Kota Malang dalam menjalankan aktivitas-aktivitas usaha yang dilakukannya. Perkembangan hasil itu berupa persepsi tentang pertumbuhan penjualan, pertumbuhan laba dan pertumbuhan modal. Berdasarkan penelitian Anik (2015) terdapat 3 indikator, yaitu:

1) Pertumbuhan penjualan yaitu perkembangan atau peningkatan penjualan yang dicapai oleh UMKM setiap tahunnya. Indikator ini diturunkan ke dalam item sebagai berikut:

1. Pertumbuhan volume penjualan.
2. Pertumbuhan jumlah pelanggan.
3. Pertumbuhan jumlah pendapatan.

2) Pertumbuhan Laba yaitu perkembangan atau peningkatan laba yang diperoleh oleh UMKM setiap tahunnya. Indikator ini diturunkan ke dalam item sebagai berikut:

1. Pertumbuhan keuntungan yang diperoleh.
2. Tingkat penambahan modal.

3) Pertumbuhan modal yaitu perkembangan atau peningkatan jumlah modal yang dimiliki oleh UMKM setiap tahunnya. Indikator ini diturunkan ke dalam item sebagai berikut:

1. Tingkat pengembalian modal usaha.
2. Tambahan modal mampu meningkatkan kinerja perusahaan.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

ANALISIS DAN PEMBAHASAN

Deskripsi responden

Penyebaran kuesioner dalam penelitian ini, disebarkan secara langsung pada responden yaitu UMKM yang menggunakan media sosial. Peneliti mengolah data dari hasil kuesioner yang telah disebarkan. Penyebaran dilakukan dengan cara menyebarkan secara langsung pada dengan memberikan jangka waktu tertentu selama 1 minggu.

Tabel 1. Deskripsi Responden

Kuesioner yang disebar	150
Kuesioner yang kembali	125
Kuesioner yang tidak dapat diolah	25
Kuesioner yang dapat diolah	100
Total Kuesioner	**100**

Deskripsi Responden Berdasarkan Usia

Hasil penelitian menunjukkan bahwa usia responden berkisar antara 35 tahun sampai dengan 58 tahun. Untuk menentukan kelas interval dihitung dengan rumus Struges :
Rumus Struges menentukan panjang kelas.

$K = 1 + 3{,}3 \log_{n}$

$K = 1 + 3.3 \log_{148}$

K = 8,16 dibulatkan menjadi 8

Keterangan :

K = Jumlah Kelas
n = Jumlah Data Observasi
log = logaritma

Menentukan panjang interval :

$$C = \frac{rentang\ kelas rentang\ kelas}{banyak\ kelas\ banyak\ kelas}$$

C = (58-35) : 8
= 3

Gambaran responden berdasarkan usia dapat dilihat pada Tabel 2 sebagai berikut :

Tabel 2. Distribusi Responden Berdasarkan Usia

No.	**Usia**	**Jumlah**	
		Frekuensi	**Persentase (%)**
1	35 – 38	12	10,8
2	39 – 42	50	33,8
3	43 – 46	9	4,7
4	47 – 50	15	25
5	51 – 54	4	11,5
6	55 – 58	10	14,2
Total		**100**	**100**

Sumber: Data primer yang diolah, 2022

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Deskripsi Responden Berdasarkan Jenis Kelamin

Gambaran responden berdasarkan Jenis Kelamin dapat dilihat pada Tabel 3 sebagai berikut :

Tabel 3. Deskripsi Responden Berdasarkan Jenis Kelamin

Jenis Kelamin	Jumlah Responden (Orang)	Persentase (%)
Laki-Laki	23	12,2
Perempuan	77	87,8
Total	100	100

Sumber: Data primer yang diolah, 2022

Deskripsi Responden Berdasarkan Pendidikan Terakhir

Gambaran responden berdasarkan pendidikan terakhir dapat dilihat pada Tabel 4 sebagai berikut :

Tabel 4. Deskripsi Responden Berdasarkan Pendidikan Terakhir

Pendidikan	Jumlah Responden (Orang)	Persentase (%)
SMP	21	14,2
SMA	63	68,2
Diploma	5	8,1
Sarjana	11	9,5
Total	100	100

Sumber: Data primer yang diolah, 2022

Tabel 4 menunjukkan bahwa anggota Paguyuban UMKM Amangtiwi, yang berpendidikan akhir SMA merupakan kelompok responden mayoritas yaitu sebesar 68,2%, diikuti dengan kelompok SMP berjumlah sebesar 14,2%.

Deskripsi Responden Berdasarkan Lama Usaha

Gambaran responden berdasarkan Lama Usaha dapat dilihat pada Tabel 5 sebagai berikut:

Tabel 5. Deskripsi Responden Berdasarkan Lama Usaha Berdiri

Lama Usaha	Jumlah Responden (Orang)	Persentase (%)
3 Tahun	13	9,5
4 Tahun	11	14,9
5 Tahun	54	50
6 Tahun	9	23,6
7 Tahun	13	2
Total	100	100

Sumber: Data primer yang diolah, 2022 (Lampiran 3)

Dari data diatas rata-rata anggota paguyuban memiliki jangka waktu usaha sekitar 5 tahun sebesar 50%, kemudian usaha yang memiliki jangka waktu selama 6 tahun sebanya 23,6%, usaha yang menjalankan selama 4 tahun sebanyak 14,9.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Tabel 6. Deskripsi Responden Berdasarkan Pengalaman Mendapatkan Pelatihan

Pelatihan	**Jumlah Responden (Orang)**	**Persentase (%)**
Pernah	95	96,6
Tidak Pernah	5	3,4
Total	100	100

Sumber: Data primer yang diolah, 2022

Pelaku UMKM berpengalaman mendapatkan pelatihan UMKM dari Dinas Perdagangan dan Perindustrian Kota Malang dan Jawa Timur. Dari tabel tersebut dapat dijelaskan bahwa mayoritas anggota Paguyuban UMKM Amangitiwi mendapatkan pelatihan yaitu dengan jumlah 143 responden (96,6%) dari jumlah responden sebanyak 148 orang dan yang belum berpengalaman mendapatkan pelatihan hanya sebanyak 5 orang responden (3,4%).

Deskripsi Responden Berdasarkan Pengalaman Mendapatkan Modal

Gambaran responden berdasarkan pengalaman mendapatkan modal dapat dilihat pada Tabel 7 sebagai berikut :

Tabel 7. Deskripsi Responden Berdasarkan Pengalaman Mendapatkan Modal

Modal	**Jumlah Responden (Orang)**	**Persentase (%)**
Pernah	27	8,8
Tidak Pernah	73	91,2
Total	100	100*

Sumber: Data primer yang diolah, 2022

Tabel 8. Deskripsi Responden Berdasarkan Pemasaran Produk

Lokasi Pemasaran Produk	**Jumlah Responden (Orang)**	**Persentase (%)**
Dalam Negeri	95	99,3
Dalam dan Luar Negeri	5	0,7
Total	100	100*

Sumber: Data primer yang diolah, 2022

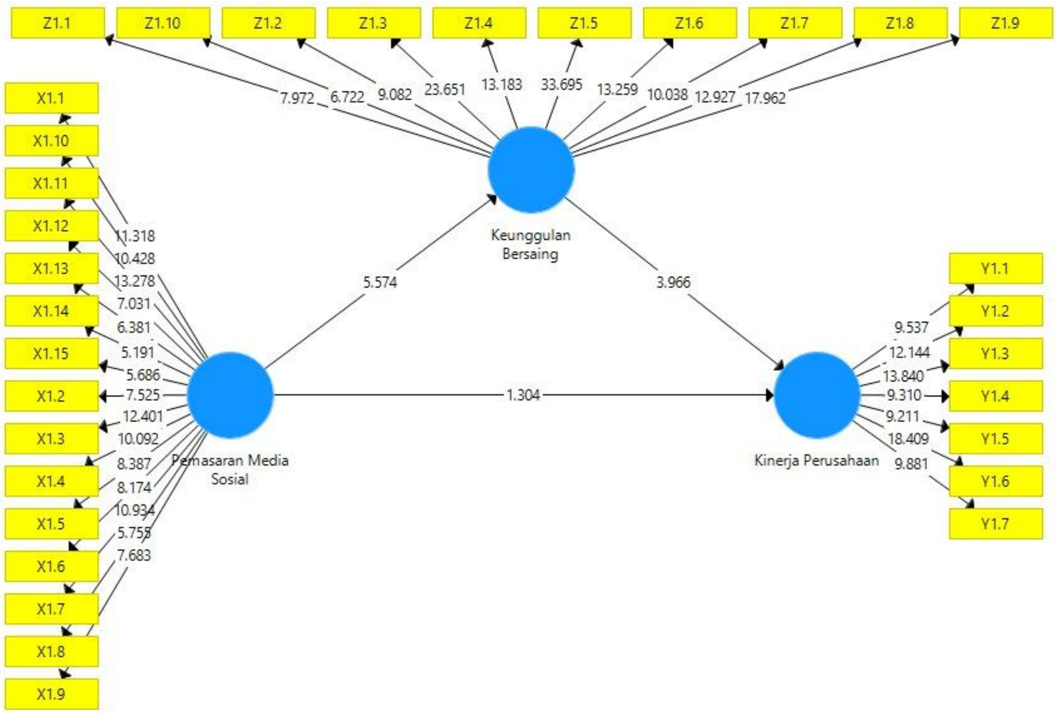
Deskripsi responden berdasarkan pemasaran produknya mayoritas pemasaran produk pelaku UMKM adalah di dalam negeri yaitu dengan jumlah 95 orang responden atau (99,3%) dari jumlah responden sebanyak 100 orang dan pemasaran yang di dalam dan luar negeri sebanyak 5 orang responden (0,7%). Hal ini menunjukkan bahwa masih sedikit UMKM yang mengembangkan usahanya untuk lintas negara atau melakukan aktivitas ekspor.

Hasil Model Pengukuran (*Outer Model*)

Evaluasi model pengukuran merupakan tahapan yang bertujuan untuk mengevaluasi validitas dan reliabilitas konstruk. Pengukuran outer model memiliki tiga kriteria, yaitu: *convergent validity*, *discriminant validity*, dan *composite reliabiliality*.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Gambar 2. Outer Model



Convergent Validity

Convergent validity bertujuan untuk mengetahui validitas setiap hubungan antara indikator dengan variable latennya. Variabel konvergen dari model pengukuran dengan reflektif indicator dinilai berdasarkan korelasi antar skor item atau *compenent skor* dengan skor variable laten atau *construct score* yang dihitung dengan PLS. Nilai *convergent validity* dikatakan valid jika skala pengukuran nilai loading ≥ 0,50 (Urbach & Ahleman, 2010).

Discriminant Validity

Discriminan validity berfungsi sebagai pembuktian bahwa konstruk laten memprediksi ukuran pada blok tersebut lebih baik daripada ukuran pada blok lainnya. *Discriminant validity* dengan model pengukuran indicator reflektif dapat dinilai dari pengukuran *cross loading* dengan konstruk. Indikator dikatakan valid apabila nilai *cross loaing* yang dituju lebih besar dibdningkan nilai cross loading konstruk lainnya (Nezakati et al., 2016). Model memiliki *discriminant validity* yang baik apbila setiap nilai cross loaing dari setiap indicator dari sebuah variable laten memiliki nilai *cross loading* yang paling besar dengan nilai *cross loading* lain terhadap variable laten lainnya.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Tabel 9. Nilai *cross loading*

	Keunggulan Bersaing	**Kinerja Perusahaan**	**Pemasaran Media Sosial**
X1.1	0,506	0,481	**0,792**
X1.2	0,520	0,451	**0,726**
X1.3	0,499	0,465	**0,837**
X1.4	0,544	0,488	**0,782**
X1.5	0,553	0,492	**0,752**
X1.6	0,484	0,411	**0,761**
X1.7	0,554	0,536	**0,811**
X1.8	0,373	0,390	**0,571**
X1.9	0,486	0,490	**0,726**
X1.10	0,525	0,518	**0,754**
X1.11	0,519	0,562	**0,831**
X1.12	0,446	0,382	**0,666**
X1.13	0,388	0,303	**0,636**
X1.14	0,349	0,317	**0,607**
X1.15	0,394	0,340	**0,546**
Y1.1	0,534	**0,783**	0,528
Y1.2	0,558	**0,774**	0,422
Y1.3	0,529	**0,817**	0,450
Y1.4	0,590	**0,683**	0,506
Y1.5	0,556	**0,684**	0,456
Y1.6	0,598	**0,802**	0,441
Y1.7	0,565	**0,749**	0,468
Z1.1	**0,688**	0,518	0,518
Z1.2	**0,750**	0,520	0,559
Z1.3	**0,867**	0,626	0,595
Z1.4	**0,773**	0,580	0,472
Z1.5	**0,876**	0,626	0,545
Z1.6	**0,738**	0,550	0,540
Z1.7	**0,753**	0,595	0,500
Z1.8	**0,780**	0,540	0,421
Z1.9	**0,772**	0,585	0,460
Z1.10	**0,609**	0,529	0,431

Composite Reliability

Evaluasi model pengukuran dengan square root of average variance extracted adalah membadningkan nilai akar AVE dengan korelasi antar konstruk. Jika nilai akar AVE lebih tinggi daripada nilai korelasi di antara konstruk, maka *discriminant validity* yang baik tercapai. Selain itu, nilai AVE ≥ 0,50 sangat direkomendasikan,pengujian selanjutnya untuk menganalisis outer model adalah dengan melihat reliabilitas konstruk variable laten yang

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

diukur dengan dua kriteria yaitu composite reliability dan cronbach alpha. Konstruk dinyatakan reliable jika nilai composite reliability maupun nilai cronbach alpha ≥ 0,60 (Urbach & Ahleman, 2010).

Tabel 10. *Godness of Fit*

Variabel	**Cronbach's Alpha**	**rho_A**	**Composite Reliability**	**Average Variance Extracted (AVE)**
Pemasaran melalui media social (X) **a. Media social untuk pesaing** 1. Memantau pesaing 2. Promosi pesaing 3. Harga pesaing 4. Interakasi pesaing dengan pelanggan 5. Kualitas produk pesaing **b. Media social untuk pelanggan** 1. Interaksi dengan pelanggan 2. Mengumpulkan data pelanggan 3. Menyajikan informasi produk 4. Saran dan *review* pelanggan 5. Mengkategorikan produk 6. Menjaga kualitas produk 7. Menjual produk sesuai dengan deskripsi 8. Menjual produk sesuai dengan foto produk 9. Memudahkan pelanggan menghubungi	**0,919**	**0,922**	**0,933**	**0,584**
Keunggulan Bersaing (Y) 1. Produk berbeda 2. Merupakan produk baru 3. Harga produk lebih murah dari pesaing 4. Harga produk dapat dijangkau oleh konsumen 5. Produk yang dihasilkan tidak diproduksi oleh pesaing	**0,875**	**0,875**	**0,904**	**0,574**

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

6. Produk yang dihasilkan merupakan produk yang langka 7. Produk memiliki ciri khas 8. Sulit untuk meniru produk 9. Tidak ada produk yang sama dengan produk perusahaan				
Kinerja Perusahaan (Z) 1. Meningkatkan volume penjualan 2. Meningkatnya jumlah pelanggan 3. Meningkatkan jumlah pendapatan 4. Meningkatkan keuntungan yang diperoleh 5. Adanya tambah modal 6. tingkat pengembalian modal usaha	**0,934**	**0,941**	**0,943**	**0,527**

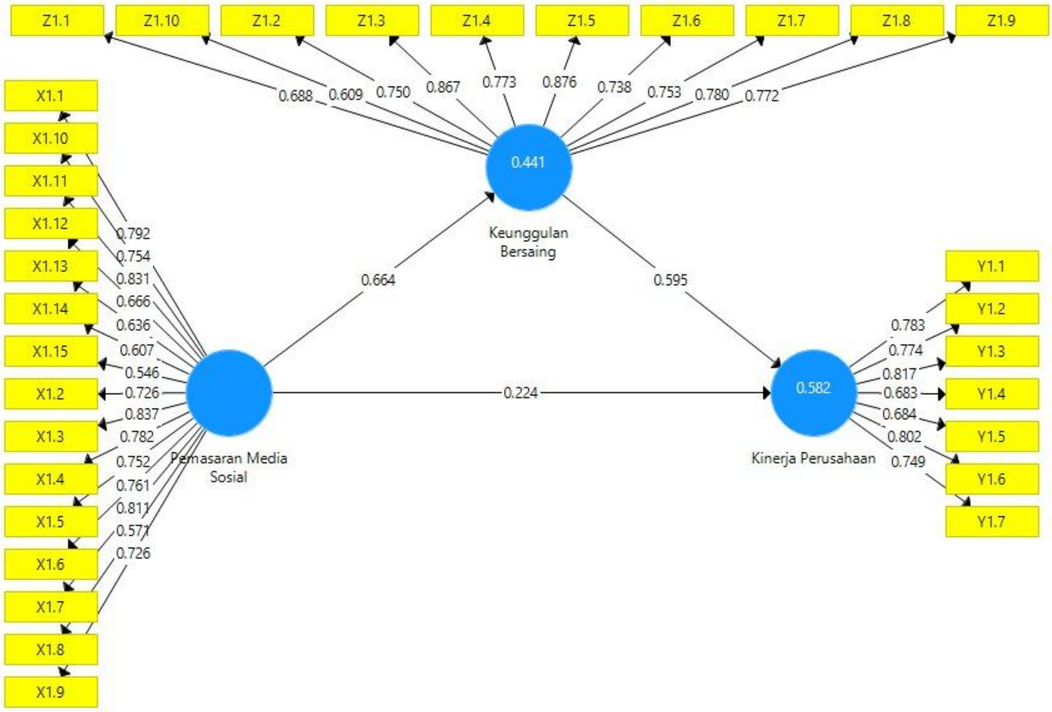
Dari Tabel 5, nilai AVE untuk 4 (empat) konstruk tersebut lebih besar dari 0,50 sehingga dapat disimpulkan bahwa evaluasi pengukuran model memiliki *discriminant validity* yang baik. Dan nilai composite realibility maupun cronbach alpha di atas 0,60. Sehingga dapat disimpulkan bahwa konstruk memiliki reliabilitas yang baik.

Model Struktural (*Inner Model*)

Pengajian mode strukturan (*inner model*) bertujuan untuk menguji hubungan antar variable. Ada beberapa ukuran yang bisa digunakan dalam SmartPLS 3.0 untuk menguji model structural. Pengujian ini dilakukan untuk mengetahui kekuatan prediksi dari model structural. Dalam SmartPLS, nilai tersebut dapat dilihat mellaui R-Square yang terdapat pada variable endogen (dependen). Kekuatan prediksi dapat dilihat dengan menggunakan kriteria R-Square 0,67 kuat; 0,33 moderat; 0,19 lemah (Urbach & Ahleman, 2010)

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Gambar 2. *Inner Model*



Inner model atau disebut model structural dievaluasi menggunakan R-square untuk konstruk dependen. *Stone-Geisser Q-Square test* untuk predictive relevance dan uji-t serta signifikansi dari koefisien parameter jalur structural. Perubahan nilai R-square dapat dipergunakan untuk menilai pengaruh variable laten independen tertentu terhadap variable laten apakah mempunyai pengaruh yang subtantif.

Sedangkan dengan melihat nilai Q-square dapat mengukur seberapa baik nilai observasi dihasilkan oleh model dan juga estimasi parameternya. Nilai Q-square lebih besar dari 0 (nol) menunjukkan bahwa model mempunyai prediktif relevan, sedangkan apabila nilai Q-square kurang dari 0 (nol) menunjukkan bahwa model kurang mempunyai prediktif relevan.

Tabel 11. Nilai R-Square

Variabel	**R Square**
Keunggulan Bersaing	**0,441**
Kinerja Perusahaan	**0,582**

Tabel 11 menunjukkan nilai R-Square untuk variable keunggulan bersaing (Y1) diperoleh sebesar 0,441. Nilai R-Square tersebut menunjukkan bahwa 41, 1 persen variable keunggulan bersaing (Y1) dapat dipengaruhi oleh variable pemasaran melalui media social (X1). Sedangkan sisanya dipengaruhi oleh variable lain di luar penelitian. Nilai R-Square untuk variable kinerja perusahaan (Y2) diperoleh sebesar 0,582. Hal tersebut menunjukkan bahwa 58,2 persen variable kinerja perusahaan (Y2) dapat dipengaruhi oleh variable pemasaran

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

melalui media social (X1), dan keunggulan bersaing (Y1). Dan sisanya dipengaruhi oleh variable lain di luar penelitian ini.

Hubungan Inner Model

Berdasarkan hasil pengujian secara statistik secara langsung menunjukkan bahwa Pemasaran media sosial (X) mempunyai pengaruh signifikan terhadap Keunggulan Bersaing (Z). Pengaruh yang signifikan mempunyai arti bahwa pemasaran media sosial yang terdiri dari media social untuk pesaing, dan media social untuk pelanggan dapat mempengaruhi variabel Keunggulan Bersaing (Z). Hal ini menunjukkan Paguyuban UMKM Amangtiwi Kota Malang semakin memperlihatkan dapat unggul untuk bersaing dalam hal sektor makanan dan minuman, pakainan, dan kerajinan.

Nilai rata-rata dari variabel pemasaran media sosial dengan 14 item yang diajukan sebesar 0.664 dan nilai tersebut masuk dalam kategori tinggi. Item menjaga kualitas yaitu seberapa besar usaha UMKM Amangtiwi untuk menjaga kualitas yang sesuai dengan yang ditampilkan dan dideskripsikan dalam media sosial rata-rata item tertinggi yaitu sebesar 0,837. Dengan banyaknya bisnis *start up* dan juga penggunaan *e-commerce* diperlukan untuk tetap menjaga kualitas yang sesuai dengan foto dan yang dideskripsikan pada halaman media sosialnya, agar pelanggan tetap setia dan percaya pada produk UMKM Amangtiwi sehingga dapat meningkatkan kinerja perusahaannya.

Penggunaan media sosial untuk pelanggan yang dicerminkan dengan membangun hubungan dengan pelanggan untuk mengetahui permintaan pelanggan, menjaga kualitas produk agar dapat membangun kepercayaan dari pelanggan sehingga dapat membangun keunggulan bersaing untuk mencapai kinerja perusahaan agar dapat bersaing dengan UMKM maupun perusahaan lainnya. Melihat bahwa perkembangan UMKM saat ini memasuki pasar yang sangat terbuka dan banyaknya persaingan khususnya bisnis *start up* yang mulai menjamur di Kota Malang. Maka dari itu, UMKM sebaiknya tanggap dengan teknologi untuk mengatasi permintaan dan persaingan dengan terus memperbaiki hubungan dengan pelanggan. Hal itu dibutuhkan untuk unggul dalam pasar, kreatif dan inovatif serta melihat peluang yang baik.

Hasil analisis deskriptif dari variabel keunggulan bersaing ada 10 item yang diajukan dan memperoleh skor rata–rata sebesar 0,664 dan nilai tersebut masuk dalam kategori tinggi. Item produk yang dihasilkan tidak diproduksi oleh pesaing memiliki rata-rata item tertinggi yaitu 0,876, dan item tidak ada pengganti dari produk perusahaan memiliki nilai item terendah yaitu 0,609 hal tersebut terjadi karena produk yang diproduksi dan dijual banyak yang memiliki kemiripan dengan sesama anggota Amangtiwi atau bahkan dengan pesaing yang lain.

Dari hasil analisis jalur didapatkan nilai sebesar 0,664 atau 66,4%. Artinya bahwa keunggulan bersaing dipengaruhi sebesar 66,4%. oleh pemasaran media sosial. Dengan thitung sebesar 6,392, karena thitung lebih besar dari ttabel maka keputusannya H0 ditolak, berarti hipotesis yang menyatakan pemasran media sosial berpengaruh signifikan terhadap keunggulan bersaing diterima. Hal tersebut ini menunjukkan jika keunggulan bersaing ditingkatkan maka akan diikuti oleh peningkatan keunggulan bersaing. Oleh karena itu, untuk lebih memaksimalkan keunggulan bersaing, UMKM Amangtiwi harus meningkatkan orientasi kewirausahaan khususnya item yang memiliki rata - rata (mean) rendah seperti menyajikan informasi kepada pelanggan yang bernilai 0,571. Item menyajikan informasi kepada pelanggan karena umur dari pemilik UMKM paling banyak 39-42 tahun sebanyak 50%, dimana umur ini bisa dikatakan umur yang produktif, tetapi dengan perkembangan zaman sekarang yang

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

memerlukan keahlian dalam menggunakan media social, rata-rata dengan umur tersebut kurang detail dalam menyajikan informasi produk dalam sosial media

Pengujian Hipotesis

Dalam PLS pengujian secara statistic setiap hubungan yang dihipotesiskan dilakukan dengan menggunakan simulasi. Dalam hal ini dilakukan metode bootsrapping terhadap sampel. Pengujian dengan bootstrapping juga dimaksudkan untuk meminimalkan masalah ketidaknormalan data penelitian. Hasil pengujian dengan bootstrapping dari analisis PLS sebagai berikut:

Tabel 12. *Path Coefficient*

Variabel	Original Sample (O)	Sample Mean (M)	Standard Devviation (STDEV)	T-Statistics ($\|O/STDEV\|$)	P-Values
Keunggulan Bersaing -> Kinerja Perusahaan	**0,595**	**0,548**	**0,150**	**3,966**	**0,000**
Pemasaran Media Sosial -> Keunggulan Bersaing	**0,664**	**0,664**	**0,119**	**5,574**	**0,000**
Pemasaran Media Sosial -> Kinerja Perusahaan	**0,224**	**0,260**	**0,172**	**2,304**	**0,193**

Sumber: Data diolah, 2019

Pengaruh Pemasaran Media Sosial Terhadap Keunggulan Bersaing

Pemasaran Media Sosial mempunyai pengaruh positif dan signifikan terhadap keunggulan bersaing. Nilai variable pemasaran media social terhadap kinerja perusahaan UMKM dengan koefisien jalur 0,664 dan t-statistics sebesar 5,574, nilai tersebut menunjukkan bahwa thitung lebih besar dari t-tabel (1,960) serta memiliki nilai p-value sebesar 0,00 < 0,005. Dari pengujian statistic menunjukkan bahwa hipotesis dua didukung, yang artinya pemasaran media social mempunyai pengaruh positif dan signifikan terhadap keunggulan bersaing.

Hasil penelitian ini menunjukkan bahwa terdapat variable pemasaran media social memliki pengaruh langusng terhadap keunggulan bersaing. Artinya bahwa ketika variable pemasaran media social ditingkatkan sebesar satu kali, maka variable keunggulan bersaing akan meningkat pula sebesar 66,4 persen. Pengaruh positif tersebut dikarenakan usaha yang menerapkan pemasaran media social memiliki keunggulan bersaing yang lebih besar dibandingkan dengan usaha yang tidak menggunakan pemasaran melalui media social. Penggunaan media social sebagai media untuk memasarkan akan dapat meningkatkan keunggulan bersaing para pelaku UMKM.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Pengaruh Pemasaran Media Sosial Terhadap Kinerja Perusahaan

Pemasaran media social mempunyai pengaruh positif dan signifikan terhadap kinerja perusahaan. Nilai variable pemasaran media social terhadap kinerja perusahaan dengan koefisien jalur sebesar 0,224 dan t-statistik sebesar 2,304. Nilai tersebut menunjukkan bahwa t-hitung lebih besar dari t-tabel (1,960), serta memiliki nilai p-value sebesar 0,05 > 0,05. Nilai t-hitung lebih kecil dari t-tabel artinya bahwa pemasaran melalui media social mempengaruhi kinerja perusahaan.

Hasil penelitian ini menunjukkan bahwa variable pemasaran melalui media social berpengaruh secara langsung terhadap variable kinerja perusahaan dengan koefisien orelasi sebesar 22,4 persen, yang artinya ketika variable pemasaran melalui media social ditingkatkan sebesar satu kali, maka variable kinerja perusahaan akan meningkat sebesar 22,4 persen. Pengaruh positif tersebut menunjukkan bahwa UMKM yang menggunakan pemasaran melalui media social akan meningkatkan kinerja perusahaan. Artinya semakin intens tingkat penggunaan media social oleh UMKM, maka kinerja perusahaan juga akan meningkat.

Hasil tersebut juga mendukung penelitian Tajvidi & Karami (2017) bahwa penggunaan media social berpengaruh terhadap kinerja perusahaan. Manfaat dari penggunaan media social ini tidak dapat diabaikan, media social berkontribusi penuh terhadap pertumbuhan penjualan. Keberadaan media social sebagai penggerak aktivitas pemasaran yang berkelanjutan secaraterus- menerus. Penggunaan media social juga bermanfaat bagi publisitas produk atau brand agar memiliki basis jaringan sangat kuat.

Berdasarkan jawaban responden untuk mengukur penggunaan media social, item pernyataan yang memiliki nilai tertinggi yaitu media social membantu dalam membangun hubungan dengan konsumen. Hal ini dikarenakan pada masa pandemic Covid-19 media social menajaid salah satu sarana yang digunakan oleh UMKM untuk menjalin interaksi dengan konsumen. Menggunakan media social sebagai alat pemasaran bukan berarti menggantikan media tradisional seperti kontak pribadi dengan konsumen, supplier, hingga mitra. Tetapi, keberadaan media social dapat menajdi pelengkap dari saluran tradisional. Keberadaan media social bermanfaat untuk mempertahankan jalinan komunikasi dan kontak yang teratur serta menginformasikan produk dengan pihak-pihak tertentu. Hal ini tentunya juga membutuhkan kreativitas dalam penggunaan media social, berinovasi serta membranding produk yang dipasarkan oleh UMKM.

Pengaruh Keunggulan Bersaing Terhadap Kinerja Perusahaan

Pengaruh keunggulan bersaing terhadap kinerja perusahaan mempunyai pengaruh positif dan signifikan terhadap kinerja UMKM. Nilai variable keunggulan bersaing terhadap kinerja perusahaan dengan koefisen jalur sebesar 0,595, dan t-statistics sebesar 3,993 lebih besar dari t-tabel (1,960), serta memiliki p-value sebesar 0,00 < 0,05. Dari hasil tersebut menunjukkan bahwa H1 didukung, sehingga keunggulan bersaing berpengaruh positif dan signifikan terhadap kinerja perusahaan.

Hasil penelitian ini menunjukkan bahwa variable keunggulan bersaing berpengaruh secara langsung terhadap kinerja perusahaan dengan koefisien korelasi 59,5%, yang artinya ketika variable keunggulan bersaing ditingkatkan sebesar satu kali, maka variable kinerja perusahaan juga meningkat bebesar 59,5 persen. Hasil penelitian ini juga menunjukkan bahwa UMKM yang memiliki keunggulan bersaing mampu meningkatkan kinerja perusahaan.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Hasil penelitian ini didukung oleh penelitian sebelumnya yaitu Lakhal (2009) menunjukkan bahwa tingkat yang lebih tinggi dari keunggulan kompetitif dapat menyebabnkan peningkatan kinerja organisasi. Keunggulan bersaing dapat dibuat dengan menyediakan sarana untuk mengungguli pesaing dan juga memperhatikan factor-faktor eksternal (Pardi, et al., 2014), keunggulan bersaing berpengaruh signifikan terhadap kinerja (Mulyana, 2014). Djodjobo dan Tawas (2014) juga membuktikan bahwa keunikan atribut dalam produk serta kualitas rasa produk terjamin dan harga yang dimiliki masih sesuai dengan kemampuan konsumen membuat konsumen mau berkunjung, melakukan pembelian yang membawa laba terhadap usaha.

KESIMPULAN

Hasil dari uji hipotesis membuktikan bahwa penggunaan media social berpengaruh terhadap kinerja UMKM. Melalui penggunaan media social UMKM dapat memperluas jaringan promosi dan jangkauan wilayah pemasaran. Selain itu, menggunakan media social juga dapat mempertahankan hubungan yang baik dengan konsumen, meskipun dalam kondisi pandemic yang membatasi kegiatan bertatap muka. Sehingga UMKM tetap bisa menghasilkan kinerja yang optimal dalam hal peningkatan volume penjualan, pertambahan konsumen dan kenaikan pada laba penjualan melalui saran media social. Melalui penggunaan media social UMKM dapat mengkomunikasikan merek dengan lebih konsisten dan memastikan bahwa aktivitas-aktivitas tersebut berhasil mendapatkan perhatian dari konsumen.

Penelitian ini juga membuktikan bahwa penggunaan media social juga berpengaruh terhadap keunggulan bersaing perusahaan. Penggunaan media social juga menuntut adanya kreativitas dan inovasi dalam memasarkan dan branding produk UMKM. Kemampuan inovasi yang baik akan mendorong kesuksesan UMKM dalam menciptkan perbedaan dengan pesaing, sehingga memunculkan ketertarikan konsumen pada produk dan layanan yang ditawarkan. Hal itu menjadikan UMKM satu tingkat lebih unggul dibandingkan pesaing.

Penelitian ini hanya terbatas pada lima jeis media social seperti WhatsApp, Instagram, Facebook, Youtube, Twitter, sehingga kemungkinan akan menghasilkan temuan yang berbeda jika menggunakan media social lain. Dalam penelitian ini penggunaan social media digeneralisir untuk semua jenis industry dan tidak ada batasan untuk satu jenis usaha. Penelitian ini juga hanya memfokuskan UMKM dengan skala (mikro, kecil, dan menengah). Maka penelitian selanjutnya dapat meneliti jenis industri atau usaha yang bukan UMKM dengan skala lebih besar. Penelitian selanjutnya juga dapat menambahkan factor lain yang mempengaruhi penggunaan media social seperti ukuran perusahaan, konsentrasi pasar, dan usia perusahaan sehingga penggunaan media social mungkin akan memiliki pengaruh yang berbeda menurut jenis industri dan tingkatannya.

Berdasarkan fenomena yang terjadi akibat pandemi Covid19, teknologi informasi terutamaaplikasi belanja online dan media sosial menjadi media utama yang menjembatani interaksi antara penjual dengan konsumen. Hal ini untuk menghindari risiko penularan virus ketika berkunjung langsung ke toko konvensional. Atas dasar itu UMKM banyak yang berpindah dan memulai untuk membuka toko virtualdi media sosial, sehingga akan muncul pesaing-pesaing baru. Antisipasi yang dapat dilakukan adalah dengan inovasi produk dan layanan yang lebih banyak dibutuhkan oleh konsumen saat inisebagai pelengkap produk atau layanan sebelumnya. UMKM juga dapat memanfaatkan fitur yang tersedia di media

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

sosial untuk melakukan brandingdan aktivitas-aktivitas lain yang bisa mendorong konsumen untuk melakukan pembelian. Dengan demikian akan memberikan keuntungan bagi UMKM jika dapat menarik konsumen dan calon konsumen dalan jumlah yang besar.

DAFTAR PUSTAKA

Anik, Muhammad. 2015. Strategi Operasi dan Keunggulan Bersaing untuk Meningkatkan Kinerja Perusahaan. *Jurnal Bisnis Strategi Vol 24 no 1*: Juli 2015.

Arikunto, Suharsimi. 2006. *Prosedur Penelitian Suatu Pendekatan Praktik*.Jakarta : Rineka Cipta.

Aziz, Nurul Nadia *and* Samad, Sarminah. 2016. Innovation and Competitive Advantage: Moderating Effets of Firm Age in Foods Manufacturing SMEs' in Malaysia. *Procedia Economics and Finance,* 35, 256-266.

Bharadwaj, Sunder G., P.R. Varadarajan and J.Fahy. 1993. Sustainable Competitive Advantage in Service Indutries : A Conceptual Model and Research Propositions. *Juornal of Marketing 57 : 83-99.*

Budi, Mulyana. 2006. Pengaruh Penyajian Neraca Daerah dan Aksebilitas Laporan Keuangan Terhadap Transparansi dan Akuntabilitas Pengelolaan Keuangan Daerah. *Jurnal Akuntansi Pemerintahan*, 2 : 1 Mei 2006, (65-78).

Djodjobo, C. V., dan Tawas, H. N. 2014. Pengaruh Orientasi Kewirausahaan, Inovasi Produk, dan Keunggulan Bersaing Terhadap Kinerja Pemasaran Usaha Nasi Kuning di Kota Manado. Jurnal Riset Ekonomi, Manajemen Bisnis dan Akuntansi, 2 (3): 1214-1224.

Fiore, A. M. (2008). The digital consumer: Valuable partner for product development and production. *Clothing and Textiles Research Journal*, *26*(2), 177–190. Diakses pada: https://doi.org/10.1177/0887302X07306848

Kautsarina. (2013), "Pemasaran Elektronik Melalui Aplikasi Jejaring Sosial", Jurnal Studi Komunikasi dan Media. 17(2). 135-148.

Kottler, Philip. 2001. *Marketing Management*. Prentice Hall International.

Lakhal, L. 2009. Impact of Quality in Competitive Advantage and Organizational Performance. Journal of the Operational Research Society, 60 (25): 637- 645. Oliver, R. L., and Swan, J. E. 1989. Consumer perceptions of interpersonal equity and satisfaction in transactions: A field survey approach. *Journal of Marketing, 53, 21–35.*

Olivares, Albert Maydeu. Lado, Nora. 2003. Market orientation and business economic performance A mediated model. *Emerald International Journal*

Porter, Michael, E. 1990. *Competitive Strategy*. The Free Press. New York,p.20

Porter, Michael E. and Klaus Schwab. 2008. The Global Competitiveness Report 2008-2009.World Economic Forum, Geneva, Switzerland.

Rapp, a., beitelspacher, l. s., grewal, d., & hughes, d. e. (2013). Understanding social media effects across seller, retailer, and consumer interactions.

Pardi, S., Suyadi, I., and Arifin, Z. 2014. The Effect of Market Orientation and Entrepreneurial Orientation toward Learning Orientation, Innovation, Competitive Advantages and Marketing Performance. European Journal of Business and Management, 6(21): 69-80.

Tajvidi, R., & Karami, A. 2017. The effect of social media on firm performance. Computers in Human Behavior, 1-10. Diakses pada 24 April di https://doi.org/10.1016/j.chb.2017.09.026Stephen, A. T., & Galak, J. (2010). The

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Complementary Roles Of Traditional And Social Media Publicity In Driving Marketing Performance.working paper Insead The Business School of the World.

Branding In Metaverse: Why Big Brand Advertising In Metaverse

Arsa Widitiarsa Utoyo[1], Tobias Warbung, Nunnun Bonafix[2], Hervina Diah Aprilia[3], Julianto Oei[4]
[1,2,3,4]Universitas Bina Nusantara
e-mail: Arsa_w@binus.ac.id

Article Info

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Article of OSC 2022

Abstract

Aim This study aims to introduce and explain the concept of Metaverse that almost every industry will change and can be considered a 3D version of the Internet. In particular, the article examines Metavers' "building blocks" and how they work in a case study. Design/Method The Metaverse concept is explained in the Nike-Roblox case study, in which the authors examine the customer benefits provided by the Nikeland project Results. The Nike Roblox case study shows that virtual platforms, content services, consumers and business behavior are the most important and visible "building blocks" for Nikeland visitors to the Nike Roblox Alliance. Metaverse is gaining popularity in major global markets. It is hoped that Metaverse will be a great success as other tier markets, regional markets and local markets enter Metaverse. Creative/Value Metaverse is an emerging marketing platform for presenting and revitalizing all types of brands in interactive 3D digital spaces. The Metaverse is a digital replica of how we function in the physical world. In this 3D digital space, users can communicate through avatars that look like them. This will have a major impact on how companies use marketing functions and how we will communicate with each other in the future.

***Keywords**: Metaverse, Branding, Advertising*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

Metaverse is a buzzed-about term in the tech world since 2020. The 3D virtual world inhabited by real avatars, created by Neal Stephenson in his novel Snow Crash (1992), will be one of the latest technological concepts in 2021, known as the metaverse. Google Trends shows that this active term has been searched since early 2021. Roblox launched on March 10, when Nvidia CEO Jensen Huang said in April that the company's next step would be to create a meta version (Shapiro 2021), and Facebook CEO Mark Zuckerberg announced his decision to rename the company to the new name. Yuan, Oct. 28. Zuckerberg also announced that the change will come with a new logo (infinity symbol) and even a new ticker symbol MVR S (Kelly 2021).

Many critics argue that the meta version is an ambiguous term, such as the "good feeling of an exciting future" created by tech giants, that there aren't enough apps to benefit users (WORD 89.9 FM Madison 2021), or that it's just a fantasy world. Created by the forces here that control our lives and lead us into a “consumption black hole” (Bogost 2021). However, many still believe that metaversion is not a buzzword but an ongoing evolution (Lee 2021).

In fact, the meta version is not a new concept that tech companies have only recently considered. The Metaverse roadmap published in 2007 (Smart, Cascio, and Paffendorf 2007) predicted that within the next 10 years, the Internet would become "an all-encompassing digital playground where people are immersed in the constant flow of digital information" or wandering in physical spaces or diving into virtual worlds. ”(Terdiman 2007) Prediction is not just a fantasy, but is based on newly developed technologies such as reality, lifelogging, virtual worlds and mirror worlds. In less than 15 years, leading technology companies now see opportunities to mix scenarios and create a world outside the real world: meta version.

Many leading tech companies are chasing the meta version trend. Nvidia Omniverse, Facebook Horizon, Microsoft's Enterprise Metaverse, and more are leading the way. Consumer brands like Gucci and Coca-Cola sell their unique tokens (NFTs) on virtual world platforms like Decentraland. We are already witnessing the emergence of a meta-transformation ecosystem in which many players, large and small, work together to create a second world that mimics the real world (Caulfield 2021). According to the Newzoo Global Games Market Report of 2021, metaverse ecosystem players include metaverse ports that provide platforms and content (eg, Roblox, Zepeto, Fortnite, Sandbox, and Decentraland), feature providers (eg, avatar). tech [bgl. Tafi], social media, user interface and immersion [e.g., Oculus] and economics [e.g., Coinbase]) and infrastructure (e.g., cloud, artificial intelligence, advertising technology and connectivity). These players can be divided into sub-segments according to who created the content and whether the experience is centralized (e.g.,Fortnite) or decentralized (e.g., Decentraland). Because the Internet cannot be owned by one company, the metaverse cannot be owned by one company or just a few technology giants (Brown 2021). Although many see metaverse as another site, Web 3.0 as a spatial site (Cook et al. 2020), it can be a major change in the way we act digitally. world (Austin 2021), there is no clear consensus on how to define or describe meta version due to its complexity (Smart, Cascio and Paffendorf 2007).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Others outline it as (1) "a totally aware digital world that exists on the far side the analogues we have a tendency to live in" (Herrman and Browning 2021), a Scripture of OASIS prepared Player One (Cline 2011); (2) "a massive virtual world wherever lots of folks – or their avatars - act in real time"(Collins 2021); (3) "extensive network of constants, period of time 3D worlds that support the continuation of identity and objects "(Ball 2021a); or (4)" a shared virtual 3D world as worlds that area unit interactive, immersive, and cooperative"(Caulfield 2021). Blogger (Srushti IMX 2021) describes this well and defines metaverses as a gaggle of virtual shared areas consisting of a universe whose users select in their avatars,

"build homes and businesses, hold conferences, attend courses, search. there's another perspective that appears at metaverse to attach virtual worlds, as antecedently steered within the Metaverse Roadmap - "Metaverse isn't like virtual area, however sort of a node or affiliation of our physical and virtual worlds. "(Smart, Cascio, & Paffendorf 2007, p. 4) – and pro re nata by the Open Metaverse ability cluster (2021), that seeks to t technological standards for connecting virtual worlds. additionally, you furthermore might get to consider the connections between the $64000 world and virtual worlds, wherever virtual experiences will have direct consequences within the globe. Another read is that he's the additional most well-liked heir to the net and to the ever-evolving web setting, that offers additional opportunities for a person's sense of presence (Ball 2021a).

Although these are random and phenomenological concepts, they are useful for constructing the scientific definition of meta version that is necessary to construct theory and model how advertising works in the metaverse. In addition to definitions, common metaversion characteristics seem to be continuity (or continuity) of identity and objects, shared environment, use of avatars (as self-composition), synchronization, trinity. dimensional (or virtual) interoperability. and a user experience that is interactive, immersive, and social. In combination, the working definition of meta version may be that it is an interoperable, continuous network of shared virtual environments, where people can simultaneously interact with other agents and agents through their avatars. knob. This is a broad and evolving definition that can be transferred as meta version continues to be built and used.

METHODOLOGY

McLuhan is of the read that technology is AN extension of men and their wants, and the technology that has been created has been supposed to facilitate all human activities, and an extension of our 5 senses. writer believes that human creation causes cultural modification in society. additionally, humans conjointly dominate the planet by increasing their means of communication, that is supported by the event of communication tools technology that continues to grow up to now. however up to now, the machine itself has management over humans. till finally as we can currently feel that the social organization in society contains a terribly shut foundation with the utilization of technology. the majority activities metaverse influenced and need technology to form it simple, from light-weight activities to tough activities that metaverse virtually ne'er separated from the technology that supports it. this is often what supports McLuhan's statement that technology is extension of humans, however within the finish the convenience provided by the technology itself makes it easier for humans and provides a way of technological dependence.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Data collection process was between October 10, 2020, and December 20, 2021. The qualitative method is being use, the data was taken from the journals and books. The aim of the research, which the research team shared on social media platforms including the universities' respective Facebook pages and WhatsApp groups as well. Participation in the study was on voluntary basis. 100 questionnaires were randomly distributed to students and the research team recorded a response rate of 86% (86/100 were completed). Completed questionnaires were authorized to be included in the evaluation process and incomplete ones (13/100) were excluded. Primary reasons for the inclusion of student population in the study are their relevance to study topic and due to them being the main end-users of technology.

Students can request their teachers and institutional heads a replacement of a technology that isn't beneficial to their learning. At times, students are unfamiliar with the practical use of technology, as they only possess theoretical knowledge from different social media platforms.

RESULTS AND DISCUSSION

What is the role of the ad metaverse? can it work an equivalent as within the real world? will metaverse still apply analysis results to early advertising? the solution has nonetheless to be explored. in line with Kerr and Richards (2020), advertising is often taken as "paid, closely-held and purchased mediate communication, driven by a recognizable complete and geared toward persuading customers to create a modification in thinking, feeling or behavior, currently or within the future" (p. 190). Though The inclusion of proprietary and purchased media within the definition are often debatable and there are a unit many various ways in which to outline advertising (eg Leckenby and Li 2000; Richards and Curran 2002; Dahlen and Rosengren 2016), the common parts wont to verify advertising area unit 1) mediate, 2) geared toward a transparent recipient (eg consumer) associate degreed 3) junction rectifier by an known sponsor 4) with a convincing intention to draw in some supposed answers. These parts recommend that the distinctive nature of the mediate atmosphere, self-composition as a recipient of communication, and distinctive opportunities for activating market interactions with customers within the meta version are often defended or however customers method, read and answer advertising. within the metaverse.

The Journal of Interactive Advertising (JIA) was launched in 2000 because of its 2 founders, John Leckenby and Hairong Li. They needed to make a forum for mistreatment interactivity in our tutorial discussion and for addressing the numerous "challenges and complexities of interactive net advertising arising from new technology" (Leckenby and Li 2000, p. 2). Because of the net was once "not simply a replacement medium, however an inspiration that might modification all aspects of advertising and marketing" (p. 2), they argued that JIAs ought to be printed "to contribute to the event of data ... regarding advertising and business communication. Interactive nature" (p. 2). Metaverse was not only a new medium, but could also be a well-known idea that would revolutionize all aspects of advertising and marketing. Because the meta version is more interactive in nature and experiences the user through its avatars, it may be necessary to update the original interactivity modes in the meta version by incorporating a second or embodied self-perspective (ie, avatar). As the title of the journal suggests, JIA publishes scientifically proven research, groundbreaking studies, and insights that are important enough to help us understand the role and impact of advertising in an interactive environment. Following the goals and scope of the magazine "to improve

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

knowledge of interactive advertising, marketing and communication in an ever-expanding network world", JIA intends to look for manuscripts that will continue to contribute to our progressive understanding of the role and impact of metaverse advertising.

Simply put, the question to explore on the way ahead is this: How does meta version advertising work? To answer this great question, we must test, copy, and expand traditional advertising theories in this new world. The process will require not only qualitative observation and conceptualization, but also empirical data (eg man and machine) for testing and construction. theories that can explain and predict how meta version advertising will work. To scientifically examine the role of metaverse advertising, two basic areas need to be considered first:

1. Conceptualization - supplementing the definition of meta-version of clarity and boundaries, considering the advertising context;
2. Methodological framework - clearly against implicit measures (see Alcan ~ iz, Bign e and Guixeres 2019) to examine consumer behavior and prospective criteria of experience with meta version advertising;
3. One of the first models useful for Research in the Internet Age is Rodgers and Thorson's Interactive Advertising Model (IAM) (2000) (Rodgers, Ouyang and Thorson 2017). Their model would be a very good start for our joint research journey to create a model that can be called a meta version advertising model. According to the IAM, potential areas of research examining meta version advertising can be classified, inter alia.
4. A structuralist approach to identifying and classifying the characteristics of a message, a composite user, and the interaction between a message and multiple users in a metaverse.
5. What types and forms of advertising can be used or designed in the metaverse? What are the advantages or disadvantages of a particular format in terms of the effects of thinking, feeling, and behaving (including attention, behavior, trustworthiness, and memory - memory and recognition)? How does functional versus perceived interactivity differ in the meta version user experience?
6. Functionalist approach to the identification of motives (e.g., shopping, entertainment, socialization) and approaches (e.g., serious to playful) for reversionary use; increased potential for mixed meta version motifs and their effects.
7. Information processing method to examine how individuals view and process advertising messages in the meta-version through their avatars. It also includes negative effects such as ad removal and ad blindness in the metaverse. Some additional research plans may be included as they evaluate meta version ads, key performance metrics (KPIs) of meta version ads, link meta version KPIs to actual KPIs.
8. Interoperability within meta version, interoperability between meta version and the real world. How interoperability affects integrated marketing communication (ie IMC-Integrated Marketing communication).
9. Computational advertising in meta version.
10. Data science for meta version audience analysis and advertising data.
11. How goods and services are valued in the meta-version. How will advertising affect them? How does the NFT concept change the chain of advertising effects in the metaverse?
12. Intercultural aspects of meta version advertising and marketing.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

13. Ethical and privacy issues in metaverse advertising and marketing.

In line with this swollen necessitate future manuscripts, the JIA can shortly launch a necessitate special publication articles centered on metaverse advertising. I hope that this downside can function one among the factors for metaverse ad analysis. With today's special issue line of work for influencers (edited by subgenus Chen|bird genus} Lou and Venus Jin) and AI and social media (edited by Huan Chen and rule Feng), JIA expects to receive articles within the future to assist USA prepare, delineate within the future to handle the height of interactivity. Meta interactivity, wherever everything within the meta version is interactive, affects our advertising analysis paradigm.

CONCLUSION

First the net as internet one.0, then a sensible phone like internet a pair of.0, then social media, then virtual / increased / mixed / increased reality, currently it looks that the convergence of of these technological advances is mixed during a metaverse like internet three.0. several definitions, concepts, and platforms nowadays claim to be true in terms of metaverse. Though meta versions won't replace the net as a full, folks can read it as a vital a part of their digitally connected life (Smart, Cascio and Paffendorf 2007). And, as Zuckerberg foreseen in his revenue challenge, advertising could be a meaningful a part of a meta-version (Associated Press, 2021).

Matthew Ball, a plunger and author, doesn't see the meta version as a virtual house, however as an alternate state of the mobile net. He sees meta version as a framework for a long-interconnected life and as a state that may step by step emerge as totally different product and potentialities unfold. Thus, there's no totally different pre-meta version and post-meta version amount (Ball 2021b). Therefore, our ad analysis ought to monitor and manage the state of the meta version because it evolves.

REFERENCES

Associated Press. 2021. “Facebook wants to lean into the meta- verse. Here’s what it is and how it will work.” October 28,https://www.npr.org/2021/10/28/1050280500/what-metaverse-is- and-how-it-will-work.

Alcan~iz, Mariano, Enrique Bigne, and Jaime Guixeres. 2019. “Virtual Reality in Marketing: A Framework, Review, and Research Agenda.” Frontiers in Psychology 10:1530.

Austin, Sarah. 2021. “The New Wave of Web 3.0 Metaverse Innovations.” Entrepreneur, September 8,https://www.entrepreneur. com/article/380250.

Ball, Matthew. 2021a. “Framework for the Metaverse.” MatthewBall.vc, June 29, https://www.matthewball.vc/all/forwardtothemetaverseprimer.

Ball, Matthew. 2021b. “The Metaverse: What It Is, Where to Find It, Who Will Build It, and Fortnite.” MatthewBall.vc, September 15, https://www.matthewball.vc/all/themetaverse.

Bogost, Ian. 2021. “The Metaverse Is Bad.” The Atlantic, October 22, https://www.theatlantic.com/technology/archive/2021/10/ facebook-metaverse-name-change/620449/.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Brown, Dalvin. 2021. "Big Tech Wants to Build the 'Metaverse.' What on Earth Does That Mean?" The Washington Post, September 1, https://www.washingtonpost.com/technology/2021/ 08/30/what-is-the-metaverse/.

Caulfield, Brian. 2021. "What Is the Metaverse?" The Official NVIDIA Blog, August 10, https://blogs.nvidia.com/blog/2021/08/ 10/what-is-the-metaverse/.

Cline, Ernest. 2011. Ready Player One. New York, NY: Ballantine Books.

Collins, Barry. 2021. "The Metaverse: How to Build a Massive Virtual World." Forbes Magazine, September 27, https://www. forbes.com/sites/barrycollins/2021/09/25/the-metaverse-how-to- build-a-massive-virtual-world/?sh=60735bad6d1c.

Cook, Allan V., Mike Bechtel, Siri Anderson, David R. Novak, Nicole Nodi, and Jay Parekh. 2020. "The Spatial Web and Web 3.0: What business leaders should know about the next era of computing." Deloitte Insights, https://www2.deloitte.com/content/ dam/insights/us/articles/6645_Spatial-web-strategy/DI_Spatial-web- strategy.pdf

Dahlen, Micael, and Sara Rosengren. 2016. "If Advertising Won't Die, What Will It Be? Toward a Working Definition of Advertising." Journal of Advertising 45 (3): 334–345.

Eisend, Martin, and Franziska Ku€ster. 2011. "The Effectiveness of Publicity versus Advertising: A Meta-Analytic Investigation of Its Moderators." Journal of the Academy of Marketing Science. 39(6): 906–921. https://doi.org/10.1007/s11747-010-0224-3

Herrman, John, and Kellen Browning. 2021. "Are We in the Metaverse Yet?" The New York Times, July 10, https://www.nytimes.com/2021/07/10/style/metaverse-virtual-worlds.html?.% 3Fmc=aud_dev&ad-keywords=auddevgate&gclid=CjwKCAjwzaSLBhBJEiwAJSRoksQC2o3eU9nurJhxNMp1dNXKX6QywHqa-Fyot3sCemL1fkhEWekNDehoC0ZAQAvD_BwE&gclsrc=aw.ds. Kelly, Samantha M. 2021. "Facebook Changes Its Company Name to Meta." CNN Business, October 28, https://www.cnn.com/2021/10/28/tech/facebook-mark-zuckerberg-keynote-announce-ments/index.html

Kerr, Gayle, and Jef Richards. 2021. "Redefining Advertising in Research and Practice." International Journal of Advertising 40 (2): 175–198.

Leckenby, John D., and Hairong Li. 2000. "From the Editors: Why We Need the Journal of Interactive Advertising." Journal of Interactive Advertising 1 (1): 1–3.

Lee, Alexander. 2021. "With the Metaverse Hype Cycle at Full Blast, Experts Take the Long View." Digiday, August 4,https://digiday. com/marketing/with-the-metaverse-hype-cycle-at-full-blast-exper ts-take-the-long-view/.

Newzoo. 2021. "Metaverse Ecosystem Infographic." Newzoo, June 25, https://newzoo.com/insights/infographics/metaverse-ecosystem- infographic/.

Open Metaverse Interoperability Group. 2021. "Open Metaverse Interoperability Group." Open Collective.https://opencollective. com/omigroup. Accessed 27 October 2021.

Richards, Jef I., and Catharine M. Curran. 2002. "Oracles on 'Advertising': Searching for a Definition." Journal of Advertising 31 (2): 63–77.

Rodgers, Shelly, and Esther Thorson. 2000. "The Interactive Advertising Model." Journal of Interactive Advertising, 1 (1): 41–60.

Rodgers, Shelly, Sifan Ouyang, and Esther Thorson. 2017. "Revisiting the Interactive Advertising Model (IAM) after 15 Years: An Analysis of Impact and Implications." In Digital Advertising: Theory and Research, edited by Shelly Rogers and Esther Thorson. New York: Routledge.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Shapiro, Eben. 2021. “Artificial Intelligence Will Change World, Says Nvidia CEO.” Time, April 18, https://time.com/5955412/ artificial-intelligence-nvidia-jensen-huang/Smart, John, Jamais Cascio, and Jerry Paffendorf. 2007. “Pathways to the 3D Web: A Cross-Industry Public Foresight Project.” Metaverse Roadmap. https://www.metaverseroadmap.org/ MetaverseRoadmapOverview.pdf

Srushti IMX. 2021. “Does the Virtual World Advertising Work in Metaverse.” Srushti IMX, https://srushtiimx.com/blog/virtual- world-advertising-work-in-metaverse/

Terdiman, Daniel. 2007. “Meet the Metaverse, Your New Digital Home.” CNET. https://www.cnet.com/news/meet-the-metaverse- your-new-digital-home/WORT 89.9FM Madison. 2021. “Enter the Metaverse.” SoundCloud audio, October 18, https://soundcloud.com/wort-fm/enter-the- metaverse

Kube Development (Joint Business Group) in Jatiluwih Village, Bali Through Digital Marketing in the New Normal Era

I Dewa Ayu Putri Wirantari [1], Putu Nomy Yasintha[2], Richard Togaranta Ginting [3]
[1,2,3]*Udayana University, Bali, Indonesia*
e-mail: putriwirantari@unud.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

The KUBE development program as an innovation strategy in the form of empowerment for poor families is regulated in Tabanan Regent Regulation Number 26 of 2017 concerning Strengthening the Local Economy through KUBE Smart Shops which were established and managed by KUBE PKH and regular KUBE. However, this program still has its main obstacle regarding the marketing of the products produced by KUBE members. This obstacle is caused by the fact that KUBE in Jatiluwih Village does not have wide enough access to market products so that the development of KUBE products has not been maximized, especially during the Covid-19 period. One solution that can be offered in this situation is the marketing of KUBE products through digital marketing. Through digital marketing, the marketing reach will be wider, the domino effect of wider marketing can certainly improve the economy in Jatiluwih Village. The Method of Strengthening Local Economic Activities in Jatiluwih Village in the Development of KUBE (Joint Business Groups) Through Digital Marketing in the New Normal Era. namely direct action in the field in showing real community service activities in overcoming existing problems, the method of action is expected to raise awareness to the public in the use of public information through digital marketing which is mapped based on marketing through online media, as a form of strengthening the local economy in Jatiluwih Village.

***Keywords**: Digital marketing, KUBE Jatiluwih, Strengthening the local economy*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

The Covid-19 Pandemic has caused many losses that have an impact on the community, including the emergence of an economic contraction due to a slowdown in investment, thus causing the poverty rate and unemployment rate to increase due to many layoffs. To overcome the conditions mentioned above, the regional government has intensified programs to provide livelihoods for people affected by COVID-19, or poor families and people who have been laid off. In Jatiluwih village, Tabanan Regency, for example, implementing a program to strengthen the local economy by empowering the poor, communities affected by COVID-19, and people who are victims of layoffs to increase productivity as part of efforts to strengthen the local economy through Joint Business Groups (KUBE).

At the beginning of its formation, the Joint Business Group (KUBE) was a forum for empowerment for groups of poor families. However, with the COVID-19 pandemic, KUBE is encouraged to embrace the affected community in community empowerment activities as a means to improve Productive Economic Enterprises (UEP) and in order to improve social welfare. Through this KUBE, social relationships, self-development and exchanging experiences between business groups in Jatiluwih can be built. Joint Business Groups (KUBE) consist of 5 to 20 heads of families as a basic requirement.

To support KUBE productivity, the local government not only provides assistance in the form of funds, but also provides training and assistance in carrying out efforts to improve the local economy in Jatiluwih village. The main program of KUBE is to market superior products from KUBE members and the local community through the KUBE smart shop. KUBE Smart Warung is managed by KUBE members and fostered directly by the District Social ServiceTabanan.

Members of the Warung Cerdas KUBE received direct training from the Social Service of Tabanan Regency, especially on how to market and product packaging, labeling, and environmentally friendly products. To facilitate marketing, KUBE synergizes with tourism village managers in Tabanan Regency so that the marketing of products at KUBE Smart Shops can reach a wider market. The products marketed at Warung Cerdas KUBE are superior products produced by the Joint Business Group (KUBE) and the local community. After the Covid-19 pandemic, which had a huge impact on the tourism sector, the marketing of KUBE products became constrained. Based on the above conditions, marketing solutions are needed to be able to overcome poverty and empower citizens as the initial KUBE program was formed.

METHODOLOGY

The method of developing KUBE (Joint Business Groups) in the Context of Strengthening the Local Economy in Jatiluwih Village through Digital Marketing in the New Normal Era is direct action in the field. This action method was deliberately chosen to show real community service activities. In addition to going directly to overcome existing problems, this action method is expected to raise awareness of the use of product marketing through digital marketing. The stages that can be designed include: Observation and coordination were carried out with the jatiluwih village government, Tabanan regency related to product marketing through digital marketing. Digital marketing must be done by redesigning mapping out what products you want to marketing. Mapping the condition of the Jatiluwih Village community, especially people who are still in the development stage

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

of strengthening the local economy considering Jatiluwih as a tourist village affected by Covid-19, product marketing through Digital Marketing can be conveyed to the general public, especially people who are the object of KUBE marketing

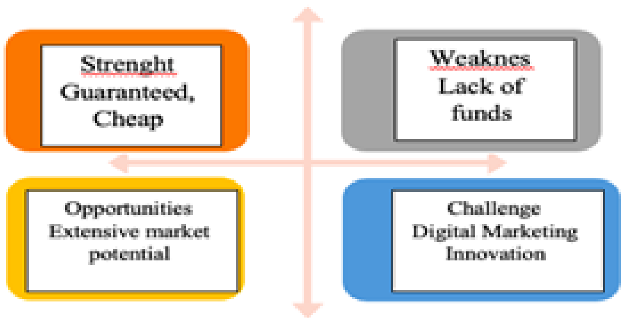
RESULTS AND DISCUSSION

KUBE Digital Development

The Development of product marketing through digital marketing, especially in the current era of globalization, can provide more effective and efficient understanding and benefits compared to conventional product marketing. Even though they already have social media accounts, KUBE has not used them optimally as a marketing medium that is quite effective in today's digital society. This can be seen from the KUBE smart shop facebook social media which does not upload the activities that have been carried out or the products offered. This is due to the lack of knowledge of KUBE group members regarding effective ways to use social media as a marketing medium. Utilizing social media as a marketing medium at this time is actually very effective considering that human mobilization is limited as a result of the COVID-19 pandemic.

Even though it has entered the new normal era, the COVID-19 pandemic still limits human movement. This restriction causes the consumption of digital information to become more massive, this situation can be an opportunity for KUBE to fill the void of information about products by utilizing social media. If not, this will certainly have an impact on the less than optimal marketing of KUBE products to the wider community and information about KUBE Smart Shops has not been fully conveyed through social media. Marketing strategy through digital marketing requires a combination of information technology, local genius, and human resources as users in marketing village products to reach a wider "market". In the development of digital marketing, of course, there are challenges, obstacles and readiness in implementing digital marketing, including (1) Strenght, (2) Weaknes, (3) Opportunities, (4) Challenge.

Challenges, Obstacles and Marketing Reading Through Digital Marketing



The concept of marketing 4.0 or digital marketing does not mean replacing conventional marketing. On the other hand, both modern and traditional marketing processes can be carried out together and complement each other. Marketing through digital marketing has a concept of approaching consumers with the AIDA Concept, namely Awareness (attention), Interest (interest), Desire (desire), and Action (action). consumer.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

By using the 4C concept, namely: (a) Cocreation, (b) Cost, (c) Communication, (d) Convenience. Product marketing with the 4 C concept is able to provide an understanding related to the wishes of the community as consumers. In addition, marketing using the 4 C concept through social media or digital marketing must also be able to treat the community as consumers to find out what consumers really want so that product marketing targets are right for people in need. As explained by Mujiyana et al. (2012) that advertising programs on the internet and marketing through digital marketing have a significant positive effect on the information process and purchasing decisions. the use of technology for online sales can be used to increase profits.

Digital Marketing Improvement Solution

The use of online media as a means of promoting and selling KUBE products provides significant benefits. The use of online media can increase the number of product sales at KUBE in Jatiluwih village and the income received by the KUBE Warung in Jatiluwih Village which has increased almost three times compared to before using online media, The use of social media (facebook and twitter, instagram, website) used by the KUBE stall manager, Jatiluwih Village, Tabanan Regency, contributes more to increasing sales and increasing market share compared to conventional sales. Thus, increasing the use of online media, especially social media other than Facebook and Twitter, will increase the value of product sales for KUBE, Jatiluwih Village, Tabanan Regency. Through this method, outsiders have the opportunity to buy directly through first hand so that the costs incurred are not too expensive because the marketing chain can be shortened from consumers directly to producers. Marketing through digital marketing is expected to be able to improve the local economy and empower the Jatiluwih village community, especially the poor, communities affected by Covid-19 or people who are victims of layoffs. Marketing through digital marketing is the most appropriate strategy that is feasible to implement.

Identify Digital Marketing

Measurement of marketing success through digital marketing can be identified through six success indicators including: (a) System quality can be measured by focusing on interactions between KUBE and local communities or outside communities who are the target of product sales, (b). Information quality, which is used to measure the quality of information used to measure the output of the established digital marketing, (c) Service quality, where in measuring service quality requires personnel or human resources from KUBE who are active in the use of social media (d)) The User Indicator (Use) in the usage indicator can be explained that the characteristics of the level and method of use, or in the utilization of the capabilities of a digital marketing called access frequency, or how often people use and open social media (e) User Satisfaction (User Satisfaction)) usage satisfaction indicator is the user response in digital marketing there is a level of satisfaction with the applied social media pages.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

CONCLUSION

KUBE has not used them optimally as a marketing medium that is quite effective in today's digital society. This can be seen from the KUBE smart shop facebook social media which does not upload the activities that have been carried out or the products offered. This is due to the lack of knowledge of KUBE group members regarding effective ways to use social media as a marketing medium. Utilizing social media as a marketing medium at this time is actually very effective considering that human mobilization is limited as a result of the COVID-19 pandemic. KUBE Smart Shops has not been fully conveyed through social media. Marketing strategy through digital marketing requires a combination of information technology.

The use of online media as a means of promoting and selling KUBE products provides significant benefits. The use of online media can increase the number of product sales at KUBE in Jatiluwih village and the income received by the KUBE Warung in Jatiluwih Village which has increased almost three times compared to before using online media, The use of social media (facebook and twitter, instagram, website) used by the KUBE stall manager, Jatiluwih Village, Tabanan Regency, contributes more to increasing sales and increasing market share compared to conventional sales. Thus, increasing the use of online media, especially social media other than Facebook and Twitter, will increase the value of product sales for KUBE, Jatiluwih Village, Tabanan Regency.

ACKNOWLEDGEMENTS

The author would like to thank the writing team who have helped during the writing process. In addition, thanks are also conveyed to all the speakers

REFERENCES

Agung, Kurniawan. 2005. *Transformasi Pelayanan Publik*. Yogyakarta: Pembaharuan.

Agung, Siagian. 2008. *Efektivitas Organisasi*. Jakarta: Erlangga

Agustino, Leo. 2008. *Dasar-dasar Kebijakan Publik*. Bandung: Alfabeta

Badan Pusat Statistik. 2020. Pertumbuhan Ekonomi Bali Triwulan I-2020. BPS Provinsi Bali, Dirujuk darihttps://bali.bps.go.id/pressrelease/2020/05/05/717411/pertumbuhanekonomi-bali-triwulan-i-----2020.html pada tanggal 1 Juli 2022

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Bintoro Tjokroamidjojo. 1984. *Pengantar Administrasi Pembangunan*. Jakarta : LP3ES

Budiani, Ni Wayan. 2007. *Efektivitas Program Penanggulangan Pengangguran*. Bali: Departemen Ilmu Ekonomi Universitas Udayana.

Cascio, Wayne F. 1995. *Managing Human Resource : Productivity, Quality of Life, and Profit.* McGraw: Hill Inc

Dunn, William N. 2003. *Pengantar Analisis Kebijakan Publik*. Yogyakarta: Gadjah Mada University Press

Handayaningrat, S. 2006. *Pengantar studi administrasi*. Jakarta: Gunung Agung.

Hardiansyah. 2011. *Kualitas Pelayanan Publik*. Yogyakarta : Gava Media

Ibrahim, Amin. 2008. *Teori dan Konsep Pelayanan Publik serta Implementasinya*. Bandung : CV. Bandar Maju

Storytelling Marketing in the Digital Economy: Utilizing Burke's Dramatic Pentad on Product's Stories

Natalia Widiasari
Communication Department, Faculty of Business and Communication Science, Atma Jaya Catholic University of Indonesia
Email: nataliaw@atmajaya.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

The digital economy is generally interpreted as going online for whatsoever people trades on hand. The cyber world gives access for company to identify and reach out its target market and audience in very personal way thanks to the advance technology such as cookies, pop-up banner and algorithms. However, this personal treatment somehow felt intrusive and annoying. When company's product craves for attention, the audience impatiently clicks skip-ads and hits clear cache. This tendency leads to the invention of a new way to reach out to the audiences as well as target market, which answer is storytelling marketing. Product's feature is crafted into stories. It is a human nature to be attracted to stories where heritage goes down by legend, myth, and history. Stories are also lessening the machinic sense of digital world. This study describes stories that featuring a product or product's benefit using Kenneth Burke's Pentad. The Pentad is consisted of Act, Agent, Agency, Scene, and Purpose. Act refers to the action or issue. Agent refers to the main character, while agency refers on how the main character proceed on his or her action. Scene is the place or space where it happened, and purpose is the main character's goal. The cases are product and services that rely on online stores or marketplace platforms to distribute its products or are initiated online before it has a bricked store.

***Keywords**: Story, Storytelling, Digital Marketing, Burke's Dramatic Pentad*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

Cyberspace is gateway to digital world that is inevitably in nowadays social interactions. Digital world expands human life to an extent that could not imagine two decades ago. The digital world is also expanding human's identity, and to some extent substitute human existences and roles. This article focuses on the economics' role of human that continuously demands transactions to fulfil life necessities intersects the need to satisfy social needs. The digital marketing that is a clicked-stores is suspected losing its human touch because its tendency of impersonality and one-way-communication. However, storytelling strategy is created to provide human's gestures online.

The today society is depended on digital world, as it is benefiting from maximizing urban farming into critical medical treatment. The droids are invented to substitute human in high risks jobs or when high radiation is involved. Does the interaction that involves droids counted as social interactions? Or is it an interpersonal interaction when human interacts with its replicate and his/her own mind. The reality is that human interacts with technology or machine programmed to act and respond similarly to human -the creator-.

The inter-personal interaction needs to involve individuals' totality as a shelf consist of individuals' identity socially, related to genealogy and personal memories. The individual is his/her-self when he/she owns his/her narrations of life. The narrations of individual's history from the first person's perspective as the owner of the story need to be interlinked with second person's perspective that involves in the story as well as third person's perspective as the witness who validates that his or her stories are nothing but the truth.

The importance of narrative in the individual memories is projected by a movie titled "Blade Runner 2049". In the movie, a bioengineered human or replicant (a human replication) is slave for real human. The memories owned by replicants are designed and planted in their brains. Their childhood memories, biographies, touching moments, unforgettable memories, all of them are created to give a meaning to humanize the replicants (Goldberg, 2017). Without an awareness of his/her life story, individual is merely a shell without contents. Without the memories of narrative about individual and social identity, the humanity of a human need to be questioned.

The fact is that human life is full of stories. In 24 hours of a day, from awakening in the morning until shutting the eyes in the evening could be told in different genres. A learning as a process in formal context as well as social lesson is delivered by stories. The story is experienced first-hand by individual and gained from various channels offered such as books, films, songs, and games.

This article uses term "story" to refer narrative and story without simplifying the connotative meaning in each term. The story though tends to lead to fiction, still could be referred as reality. It goes too for narrative that is referred as authentic description; in other context it could be used to tell a fantasy. That's why the term "story" could represent both meanings.

The ultimate usage of story could be observed in various world's phenomena, whether it is right or wrong, within or outside morality corridors recognized by society. The story about superior race - the Arian, which is believed to be stronger that all races in the world- delivered Hitler into his throne and realizing fascism ideology with Nazi as the vehicle. Hitler and Nazi's

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

as party as far as construct the story of "Positive Christianity" that its doctrine states that Jesus is an Arian knight who fights the corrupted Pharisees and the materialists Jews (Baynes, 1969).

The political upheavals in Indonesia are always painted with hoax or fake news. Hoax is a story contains deceitful messages to gain material benefits either traffic in social media or supports (HCC Libraries, 2002). Hoax is easy to be recognized as an appealing story related to various issues, dominantly political issues. Such that, readers without hesitation spread it even showing alignment. Since August 2018 until April 2019 there is identified about 1,731 hoaxes. About 620 is categorized political issues, 210 is about governmental issues, 200 is related to health, 159 is about blasphemy and the rest 113 is about criminal, religion, natural disaster, and others (Kominfo, 2019).

Story as testimonial is used long ago in religious context. In the business context, testimonial is implemented effectively in multi-level marketing (MLM), as adopted by cosmetic brand. The brand states that Indonesia contributes the highest profit growth by 46% in Asia Pacific region. Asosiasi Penjualan Langsung Indonesia (APLI – Association of Indonesia Direct Selling) mentions that transactions value of MLM in Indonesia by 2016 reaches 15.75 trillion rupiah (about 1.05 billion USD) (Pebrianto & Cahyani, 2018). The testimonials talk about products and how the product relates to individuals, what the product's meaning for individuals and their life. Story becomes life force in MLM venture. The power of testimonial in marketing could be observed on Table 1.

Table 1. The Credibility of Testimonial and Product Features

Percentage	Descriptions
92%	Customer reads online product features before purchasing.
72%	Customer states positive reviews increase product's credibility.
70%	People trust reviews and recommendations from strangers.
88%	Customer states product features influence their purchases.
88%	Customer trust online reviews and recommendations in harmony with recommendations with their acquaintances.
92%	In the B-to-B transaction testimonial and recommendation from colleagues are credible or trustful.

Source: Nielsen, 2015

Literature Review

a. Story

The individual interest and desires toward story are as natural as biological needs like foods and breaths. It is reflected in human development cycle. In the early life, children like to play role-playing or creating impromptu stories. Children are naming their toys, talking to them, creating short plot in regards what happened to their toys (Santrock, 2008). Does "Baba the Bear" wonder around with "Dompu the Lamb"? Or maybe, Baba the Bear is fighting with Dompu the Lamb over a spot under a shady tree. When they fought, in instant Dompu the Lamb has a laser sword (of Star Wars) and Baba uses Harry Potter's magic wand. This naturality is also reflected in the people's interest on rumours and gossips. In the context of organization communication there is a formal communication that facilitates job-related and delivers via formal channels. However, there is also informal networks where information exchanges not only involving job-related which considers to be objective and cold, but also rumours and other

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

humanly information such as characters, personal conflicts, adultery among colleagues and other dramatic interactions typically for human (Gibson & Hodgett, 1991). Why do such stories lull and appealing for individuals? Because instinctively story creates happiness, at the same level as biological satisfaction achieved from eating and having sex (Gottschall, 2012).

If story creates happiness, does the story contain something beautiful, warm, and fun? Unfortunately, it is not. Story in general comprises a set of endless problems. Story is part of human life, thus story touches every aspect of human life, in the context of intrapersonal, interpersonal, and social, where problem plays an existential part. The story is always contained chaos, calamity, misfortune, and suffering (Gottschall, 2012). Of course, a story without problems is a boring routine. Individual is restlessly guessing for "what next" and wondering if the story will continue as they wanted it.

In general, a story has a conflict pattern, followed by crisis and a resolution as the closing. This pattern could be identified when the protagonist confronts the problem and fights to overcome all challenges and obstacles.

The story also describes individuals' characters involved in the story. Further, it can be judged which behaviour is in harmony with social norms or not. A story is rich of feeling, erotic love, platonic love, hatred, guilty, anger, anxiety, happiness, sadness, and all feelings that make individual feeling in rage when consuming stories. Why individual torturing themselves by consuming things that make their emotions and thought loss a sense of peace? Because story becomes a part of an individual's life that makes the individual learn things related to social life. History recorded that history and human's values are passed down through generations via myths and fables. The story becomes the training sessions where individuals experience various feelings and social norms indirectly and freed from any available consequences of doing things (Simmons, 2007). Individual recognizes friends and foes through stories. Stories make individuals experience life challenges and suffering with special facility which is a safety strap (Gottshall, 2012).

b. Storytelling

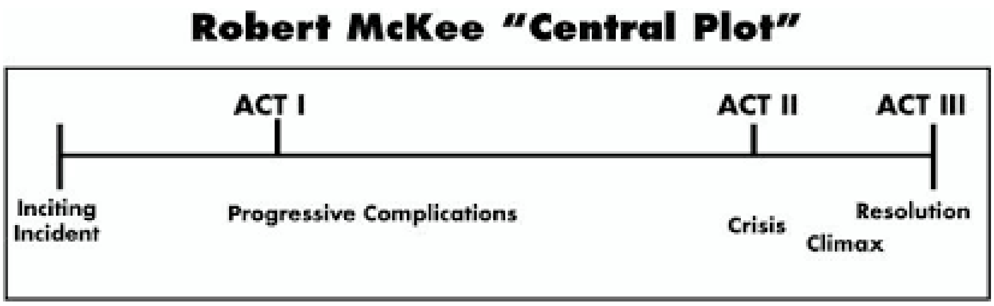
"Story fulfils a deep human needs to understand life pattern not only as an intellectual reflection but also a private emotional experience" (McKee in Fryer, 2003). Storytelling is individual best communication mode that is connecting the brains' hemisphere, wrapped a rational message with emotional message, thus conveys with stories (McKee & Gerace, 2019). Individual demands himself/herself to think rationally grounding into objectivity. For various decisions, individuals seek to carry out rational profit and loss calculations based on the available data, undermining emotions, thus they could have right decisions. As matter of fact, perfect complete data is rarely available, and individuals don't have enough capacity and power to review those data in different perspectives (Simmons, 2007). Moreover, when individuals face different cultures and background where objectivity becomes relative. Thus, decisions over options would define by subjective interpretation.

The individual perspective or subjectivity could swift the understanding, make people visiting diverse meaning than unthinkable beforehand. This situation is projected by debate over right and wrong that merely occurs out of different perspectives. The subjective thought is connected to specific time and place that must be digested wisely (Hopkins, 2015).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

The rational message is identified with data. The data describes what has happened while story tells how and why it happened. The data compiles fact based on number and frequency while story represents causality behind the facts. A story progressively reveals relevancy, any dynamic transformations, and creates the content into new set of causality (McKee & Gerace, 2019). A story is a tool, when it is reactivated will brings individual into new perspectives, new behaviour even brings different future (Simmons, 2007). Such process could be discerned in the evangelization process where individuals are enlightening and empowered to change their fates. A storytelling facilitates individual to feel emotion that come up at the same time when a decision is made. In the storytelling, individuals free to have their own interpretation. A meaning is the ending part which becomes the virtue in storytelling. The individual who consumes story actively participate in creating the final value and its final meaning. The structure of story could be observed on Diagram 1. A Story is started by inciting incident followed by progressive complications, crises, climax and closed by a resolution.

Diagram 1. The Structure of Story by McKee



Digital Marketing and Storytelling Marketing

The internet is unique in its capacity to both broaden the scope of marketing reach and at the same time narrow its focus. Digital technology allows marketer to hone marketing message with a laser-like precision to target very specific niche segments within wider market, debunk any geographical constraints and time zones. The notion of user-generated content that transfers control into customer's hand is indeed going on in the digital era. However, internet also provides an unprecedented mosaic of tools, techniques, and tactic that allow marketer to reach out and engage with various consumers (Ryan & Jones, 2019).

Digital marketing is defined as the marketing of goods and services using digital channels that generally done via internet or online. Digital marketing is an umbrella term for the marketing of product and services using digital technology which ultimately on the internet includes mobile phone, display advertising and any other digital medium. Digital marketing comprises search engine optimization (SEO), search engine marketing (SEM), content marketing, influencer marketing, content automation, campaign marketing, and e-commerce marketing, social media marketing, social media optimization, e-mail direct marketing, display advertising, e-books, optical disks, and games. It also extends to other channel that provide digital media or as an interface to internet channel, such as SMS, MMS, call back and on-hold mobile ring tones (Rihan, NA).

The omnipresent of the channel must be filled with persuasive selling point that leads consumers to engage with the messages and act accordingly. Since hard sell is easy to avoid online. Just a simple click and marketer lost his or her opportunity to engage (Bertram, 2021).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

METHODS

Performance and practices constitute texture of our everyday communications. A performance means communication which quality of skills, expressiveness, and immediacy compel us to view it as more that message or transparent vehicle of information. Performances are creative, local and collaboratives. While practice is more standardized. A practice is consistent with a socially known gestures that are attributed by social actors and perceived as motive by others. Both elements make a social construction of meaning virtually depart from communications (Lindolf & Taylor, 2011). A story is part of performance where the digital marketing as the stage and the motive is to persuade.

This study is a qualitative study that use rhetoric framework to approach the case in hand. The rhetoric framework used is Burke's Dramatic Pentad. Burke states language is a strategic human response to a specific situation. The verbal symbols are meaningful acts from which motives can be derived where cluster of words dance with attitudes. Kenneth Burke introduced dramatism that view life is the drama itself. Burke considered words are intertwined with attitudes. Further, Burke figures out why a writer or speaker selected the words into a theatrical of meaning (Burke in Griffin, 2012)

Burke's dramatistic posits three perspectives to analyse rhetoric and other forms of symbolic action in public which are identification, dramatistic pentad and guilt-redemption cycle. The identification is a common ground between speaker and audience which is termed as substance. The substance comprises of physical characteristics, talents, occupation, experiences, personality, belief, and attitude. The higher similarities -or termed as homophily, a perceived similarity between speaker and listeners-, the higher the identification. The identification is consubstantiation, where signs of languages and deliverance of speaker's property are the same as the listeners. The second perspective is dramatistic pentad which is a tool to analyse how a speaker persuade audience to accept the speaker's view of reality as true. The pentad could be considered as a static photograph of a single scene in human drama which is explained by five elements i.e. act, scene, agent, agency and purpose. Act refers to what has happened or done. Scene is the description of a context when and where the act has performed, could be a background and situation in which it occurs. Agent is the person who performed the act, while Agency is the means or tools used. Lastly purpose refers to implied or stated goals, or why the act is performed. The third is guilt-redemption cycle. The guilt is explained as tension, anxiety, embarrassment, shame, disgust, and other awful feeling related to human. Burke believed that away from guilt is the basic plot of human drama, where rhetoric is the public search for a scapegoat (Burke in Griffin, 2012).

The main point in Burke's Dramatistic Pentad is that kind of language people use, and the way people express themselves are strategic to convince or persuade others to the speaker's point of view. Further, utilizing the Dramatistic Pentad, reader is led to realize the motivation or the cause of the story. In this study the pentad will be used to understand a text related to product and services online.

RESULT AND DISCUSSION

a. Brand: Pala Nusantara

Pala Nusantara (PN) is a local brand which produces watches as a fashion item. Pala means nutmeg, a spice that endemic in Indonesia and Nusantara refers to Indonesian's

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

archipelago. The term Nusantara exist as old as Majapahit Kingdom in 8th century in Java. The brand is a small and medium enterprise product. The special thing is the brand is mainstreaming the local stories through the product itself (Persiana, NA). The watches that usually are made of steel, here it comes from endemic woods around the regions such as ebony, rosewood and maples (KumparanBisnis, 2021). PN claims as the first vegan watch in the world. The case of the watch is made of woods, but the strap comes from several different material. Few straps are made of leather and some others are made of synthetic leather, which comes from fungi or mushroom called mycelium. Moreover, the colour also comes from organic colour that provides by natures (Setya, 2019). PN markets its product mostly online and through many exhibitions and events, locally and internationally.

The digital channel of PN is anchored on palanusantara.com. The website becomes the upstream for the social media channels as well as the e-commerce platforms. The social media platform used are Facebook and Instagram. However, the Instagram account of @palanusantara is more active than the Facebook account. While for the e-commerce platforms, PN uses Shopee, Tokopedia and Blibli.

b. Stories and Burke's Dramatic Pentad

PN is mainstreaming Indonesian cultures and resources in its products. As discussed above, the overall material is locally planted and created. The culture is attached to PN's brands and product in terms of brand line series such as Cemani (a chicken species that endemic in Indonesia) and Mini Merak (a peacock or green peafowl that is also endemic in Indonesia). Further, PN attaches its marketing content to diverse stories in Nusantara. For the study, the story discussed is limited into five stories. The story chosen describes not only about local wisdom and custom but also explicitly related to the brand line.

Table 2. Stories Analyse by Dramatic Pentad

No	Stories	Dramatic Pentad
1	"Cemani Chicken Going Global" Cemani chicken is a unique species in Nusantara. Morphologically it takes shape like a common chicken but its colour is totally black, including its beak, its blood, its meat, and its inner limbs all are blacks. The Cemani chicken commonly becomes mediator between our world and the astral world. In some part of Nusantara, the existence of Cemani chicken is sacred. Thus, the price of Cemani chicken could be very high. The Cemani chicken could be found only in Java Island, precisely Kedu village, Central Java. This is the greatness of Nusantara, a powerful country whose prosperity is eyed by others in the old days. Is there any other story that gauges Nusantara as the greatest country in the world?	Act: going global Scene: black darkness color. Agent: Cemani chicken Agency: by showing its uniqueness and its magical power Purpose: becoming powerful, a domineering brand with a local content.
2	"PALA Raya Es Pisang Ijo" (PALA Raya Banana Green Ice) Ramadhan (fasting month for moslems) is identical with special sweetness. It comes through togetherness, tradition	Act: Fill up people's thirst with special sweetness.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

	and festivity food that serve in the dawn for Sahur (before fasting) and after dusk for Buka (fast breaking). Like Takjil (sweet appetizer for fast breaking) that becomes the ultimate dish in every fast breaking, PALA Raya Es Pisang Ijo is created to take a role in every other day to fill up the thirst. Es Pisang Ijo altogether grants you a memorable sweetness that you crave every month of Ramadhan.	Scene: The month of Ramadhan Agent: PALA Raya Agency: by attaching Es Pisang Ijo into the design and name. Purpose: creates memorable experience into the brand.
3	"DEMIT" Due to modernization and shifting of thinking, "demit", ghosts from Nusantara realm are slowly disappearing from children's fairy tales. PALA Demit is born to celebrate these ghost stories. PALA Demit remind all Nusantara's children that they are existed, under the table, behind the cupboard's door that moves slowly by itself or at the corner of the bedroom before we fall asleep. DEMIT is limited edition that is only available at 25 pieces to celebrate the dark stories of Nusantara.	Act: celebrating the ghost culture of Nusantara Scene: ghost culture of Nusantara Agent: PALA Demit Agency: creating a brand that is attached by the ghost culture Purpose: reminding the young generation of the ghost culture of Nusantara.
4	"We are always delighted to wander around" Finding someone who shares heartbeat giving and creating something together, tells stories about a beautiful country wide stretch called Nusantara. Inspired by a vision to share, to better know, to accommodate, to facilitate, to open any opportunities for anyone. PALA Nusantara and @euckofficial present Kelana as the interpretation for you, the pandemic generations. Let's celebrate freedom that we eyed. We bring Kelana to accompany you who learn to be come back free. Living in the nature, interact with the serenity of green leaves, fresh cool dews in the dawn and the dimmed beauty radiated from campfire that you light up together, with friends, family and a beloved one.	Act: free to wander around with beloved people, specifically in the wilderness Scene: post pandemic situation Agent: Pala Kelana Agency: creating a brand feature and story that represents freedom and back to nature Purpose: encourage people to go outside.
5	"PALA x Mylea Obligat, to bring the future into today" As generation we are responsible for the future. To be more responsible for the choices we make, to continuously improving quality product, and to participate in reducing our carbon footprint in any way possible. PALA X MYKEA delivers Obligat, eco-friendly mushroom leather strap for smart watches, to watch the future starts today and to bring today's watches into the future.	Act: responsible for the environment Scene: eco-friendly means future oriented Agent: PALA Agency: innovation of mushroom as synthetic leather strap

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

		Purpose: participate reducing carbon footprint

Source: Data Analysis

Three of the stories above are related to culture and customs represent by Cemani (Story 1), Es Pisang Ijo (Story 2) and Demit (Story 3). While last two stories bring relevance to contemporary situation that is still engaging the local conditions which themes are back to nature (Story 4) and responsible product (Story 5). All stories are fished from social media Instagram @palanusantara.

The identification that is stated by Burke could be observer explicitly on the use of Nusantara in each of the story. Identification defines as how the choice of words and expressions by a speaker is intertwined with audience's background to ensure persuasiveness. Further, Nusantara is used in the Story 1 and 3. The custom as identification is used in story 2 that makes readers recall the custom of drinks sweet "takjil" in Ramadhan which is celebrated annually. The identification in the Story 4 is built through the pandemic situation that experienced by everybody in the world. The two years locked up grow a sense to fight for freedom by claiming the time to wander around. In the story 5, the identification is built through a reminder to be more responsible by choosing responsible consumption. The issue of waste and environment has already a global concern, and all readers are assumed to be aware of it. The choice of context and story is parallel with McKee's statement that the individual who consumes story actively participate in creating the final value and its final meaning. Here, readers as consumers participate actively in its final meaning.

Meanwhile, the guilt that refers to tension, anxiety, embarrassment, shame, disgust, and other awful feeling related to human reveals in every story. The guilt redemption cycle without trying to simplify is a scapegoat that victimize as the cause or motive of people's behaviour. The 1st story brings a message to be a prominent and powerful brand globally. What is the reason? It is intrinsic in colonized nation -despite its intensity- of insecurity. That others -specifically the colony nation- are more powerful, thus an endeavour to win the competitions is a goal. In a reflection, an innovative mind is usually competing against it-shelf not others. The 2nd story surfaces the thirst during fasting month as things to overcome, a condition that is uncomfortable for individuals. The 3rd story underlines the disappearance of local-ghost culture from the social construction of Indonesian children due to the flood of foreign contents. An interconnected worlds facilitates by the internet in turn creates a homogenous culture, including the homogenous ghost. Continue to the 4th story, the pandemic situation becomes the source of anxiety. The pandemic limits people space and existence. Some people get depressed due to locked in for long periods of time. As a reflection, it is funny though. When people cannot be divorced from their gadgets and electronical appliances, the availability of and interaction with such thing in a long period of time still cannot make people at peace. They still need the nature that degraded by themselves. The 5th story overviews that a synthetic thing could be a solution to environmental problems. Though the material is made of organic substances, the term of synthetic still rings the uncomfortable in the audiences' side.

CONCLUSION

The story indeed a vehicle to get through people's mind and heart. The beauty of words and phrases easily diffuse into personal's sphere of the audience. The inhuman feature of digital

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

realm becomes humanly by attaching stories, which stories must be harmonized and parallel with people's biography, people concerns and people's mundane everyday life.

The PN brand is inspired by stories which takes shape in its product's development. Later, PN is also amplifying its marketing communications strategies by stories. The selling activities of PN is dominantly online via website, social media ie. Instagram and Facebook, and e-commerce i.e. Tokopedia, Shopee and Blibli. However, PN starts to collaborate with prominent store as marketing channels such as Ikea (Swedish' furniture manufacture) and Vivere Home Living (local furniture manufacture and interior design consultant). Moreover, PN is also a regular participant in the Indonesian tradeshow locally and abroad. Thus, the design and the stories which are uniquely Indonesian (Nusantara) becomes the point-of-difference that easily to separate from other brands that have also similar concept that are made from woods. For example, the brand Bobo Bird that is made of bamboo and its host country is China.

The digital economy as it stated is opening opportunities to go global meaning reaching global market, departs the distance and language obstacles behind. Nevertheless, all people around the world are voicing their thought, ideas, and product. Being unique for foreigner and easily identify for local is the main source to be heard amid of worldwide commotions.

REFERENCE

Baynes, Norman H. (1969). The Speeches of Adolf Hitler: April 1922-August 1939. New York: Horward Fertig.

Bertram, Matt (2021). How to Use Storytelling in Digital Marketing to Transform your Business. *Forbes.* Retrieved from forbes.com

Burke, Kenneth (2012). Rhetoric. In Griffin, Em. *A First Look at Communication Theory 8th edition.* New York, USA: McGraw-Hill International Editions

Gibson, Jane W. dan Hodgetts, Richard (1991). *Organizational Communication: A Managerial Perspective.* New York: Harper Collins Publisher.

Goldberg, Matt (2017). 'Blade Runner 2049': Let's Talk about That Ending. Diakses dari https://collider.com/blade-runner-2049-ending-explained/

Gottschall, Jonathan (2012). *The Storytelling Animal: How Stories Make Us Human*. New York: Houghton Mifflin.

HCC Library (2019). Fake News, Misleading News, Biased News: Terms and Definition. Diakses dari https://libguides.hccfl.edu/fakenews/terms

Hopkins, Phil (2015). *Mass Moralizing: Marketing and Moral Storytelling*. London: Lexington Book

Kominfo (2019). Temuan Kominfo: Hoax Paling Banyak Beredar di April 2019. Diakses dari https://kominfo.go.id/content/detail/18440/temuan-kominfo-hoax-paling-banyak-beredar-di-april-2019/0/sorotan_media

KumparanBisnis (2021). Siasat Pala Nusantara, Produk Jam Tangan Kayu Asal Bandung Bertahan dari Pandemi. Retrieved from https://kumparan.com/kumparanbisnis/siasat-

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

pala-nusantara-produk-jam-tangan-kayu-asal-bandung-bertahan-dari-pandemi-1wulZDywG2w

Lindolf, Thomas R. & Taylor, Bryan C. (2011). *Qualitative Communication Research Methods 3rd edition.* USA: Sage Publications.

McKee, Robert & Gerace, Thomas (2018). *Storynomics: Story-Driven Marketing in the Post-Advertising World.* New York: Hacchette Book Group, Inc.

Nielsen (2015). The Word-of-Mouth Recommendations Remain the Most Credible. Diakses dari https://www.nielsen.com/id/en/press-releases/2015/word-of-mouth-recommendations-remain-the-most-credible/

Pebrianto, Fajar & Cahyani, Dewi Rina (2018). Transaksi Bisnis MLM Tembus Rp15,75 Triliun. Diakses dari https://www.google.com/amp/s/bisnis.tempo.co/amp/1050063/transaksi-bisnis-mlm-tembus-rp-1575-triliun

Persiana, Galih (NA). PALA Nusantara: Jam Memikat yang Angkat Riwayat Rakyat. Retrieved from https://jabar.idntimes.com/news/indonesia/galih/pala-nusantara-jam-memikat-yang-angkat-riwayat-rakyat

Rihan, Ibrahim (NA). Digital Marketing: Definition, History, Strategies, Development, Advantages and Limitations. Retrieved from Digital Marketing: Definition , History, Strategies, Developments, Advantages and Limitaions | Ibrahim Rihan, MBA | PDDM - Academia.edu

Ryan, Damian & Jones, Calvin (2009). *Understanding Digital Marketing: Marketing strategies for engaging the digital generation*. London & Philadelphia: Kogan Page

Santrock, John W. (2008). *Life-Span Development 11th Edition.* New York: McGraw-Hill International Edition.

Setya, Devi (2019). Jam Tangan Vegan Buatan Anak Negeri Ini Terinspirasi dari Tempe. Retrieved from https://food.detik.com/info-kuliner/d-4794941/jam-tangan-vegan-buatan-anak-negeri-ini-terinspirasi-dari-tempe

Simmons, Annette (2007). *Whoever Tells the Best Story Wins: How to Use Your Own Stories to Communicate with Power and Impact.* USA: Amacom

Students' Ability in Assessing Translation Quality and Translating Figurative Language in English

Afriani
FHISIP, Universitas Terbuka
e-mail: afriani@ecampus.ut.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

The aims of the research are to know students' ability in assessing translation quality and translating figurative language in English. The students are from English study program in the field of translation interest of Universitas Terbuka. The activity of assessing translation quality is considered important because it is part of the translation skills that students must have acquired during the translation process. The methodology used was the content analysis based on three criteria that must be met to assess a given target text for assessing translation quality and a given source text for translating figurative language in English. The three criteria are accuracy, naturalness, and readable translation. The findings are the ability to assess translation quality is good which can be seen from the majority of students' assessments in accordance with the three criteria. The students' ability to translate the given source text is not very accuracy, naturalness, and readable. It was influenced by the lack of students' practice in translating.

***Keywords**: Assessing Translation, Figurative Language, Translating, Translation Theory*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

The activity of assessing translation is considered important because it is part of the translation skills that students must have in completing lecture assignments. There are three criteria that must be met to assess a given translation, namely accuracy (accurate), acceptability (natural), and readability of the translation (readable), and as a prospective translator, these three criteria are certainly inseparable from the process of producing a quality translation.

The researcher intends to see how the ability of students of the English Literature Study Program in the Field of Translation Interests in assessing translation and their ability to translate figurative languages. In this regard, the element to be studied is figurative language. This element is considered difficult to identify its existence and difficult to translate from English into Indonesian.

METHODOLOGY

This research involves students of the English Literature Study Program in the area of translation interest who have taken one of the online tutorials (tuton) for the Translation courses. The research instrument used was a set of target texts (TT) in Indo nesian to determine students' ability in assessing translation. A set of source texts (ST) in English to see students' ability in translating. Then, a set of interview questions was asked to respondents to find out more about their ability in assessing translation and translating TT. The research tool used for analyzing the data collection is a content analysis and the research method is descriptive research.

The followings are how the data was analyzed.

1. TT was analyzed to see students' ability to assess translation by referring to the three aspects of translation quality assessment from Nababan et. al. (2012).
2. ST was analyzed to see the students' ability in translating by referring to the three aspects of the translation quality assessment from Nababan et. al. (2012).
3. The results of assessing the translation are compared with the results of translating so that a comparison of the ability to assess translation and the ability to translate is obtained.
4. Interview data was recorded and transcribed. Then the data processing and analysis was carried out. Furthermore, the interpretation of the results of the analysis is carried out to find out what things are related to the ability to assess translation and the ability to translate. Prior to further analysis, a sample interview transcript was tested to ensure that the coding process was correct. The procedure was carried out by asking other researchers to analyze the interview transcript draft and provide a code which is then compared with the results of the research team's analysis.

Furthermore, the procedures used to analyze the data as follows. There are 15 TT as data of students' ability in assessing translation and 15 ST students' ability in translating used a content analysis related to figurative language. The data collected from the students’ interview was analyzed using some steps. First, interview transcripts were collected and grouped according to their category. Second, the information from each transcript is coded or tagged. Third, categorization of the data is based on the theme. Fourth, the themes were analyzed and investigated their interrelationships. Fifth, the results of the analysis and investigation of linkages are interpreted to be meaningful. The last is to conclude the meaning so that a finding is obtained based on the focus or problem to be answered.

RESULTS AND DISCUSSION

Analysis of the Ability to Assess the Translation of Figurative Language

There were three figurative languages found from the TT given to the students.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

1. Hyperbole

ST	TT
'My mind keeps going back, 'I said. 'What about your presentation? **Michel will kill you**. ' I know. He won't get promoted unless he impresses his boss.' My wife looked at me. My face was argument enough. She knew I would not talk sense until I had met the boy.	Aku terus memikirkannya," kataku. 'Bagaimana dengan presentasimu? **Michel akan membunuhmu**. ' "Aku tahu. Ia tidak akan dipromosikan kecuali ia dapat memberi kesan positif pada bosnya. Istriku memandangku. Wajahku menggambarkan berbagai alasan. Ia tahu aku akan terus memberikan alasan- alasan yang tidak masuk di akal sampai aku dapat menemui pemuda itu.
TT (Alternative) "Bagaimana dengan presentasimu? **Michel akan marah sekali padamu**". "Aku tahu. Ia tidak akan dipromosikan kecuali ia dapat memberi kesan positif pada bosnya. Istriku memandangku. Wajahku menggambarkan berbagai alasan. Ia tahu aku akan terus memberikan alasan- alasan yang tidak masuk di akal sampai aku dapat menemui pemuda itu.	

The use of *will kill you* phrase as hyperbole in ST's context is Michael's wife. The wife tried to prevent her husband from going to his friend and leaving his job. *Will kill you* literally means *akan membunuhmu* while the contextual meaning is *kemarahan yang sangat mendalam*. The students must be aware of the contextual meaning. Almost all students can not assess the hyperbole accurately, reasonably, and acceptably as follows.

- *Maksud yang disampaikan dalam TSa sudah dapat dipahami.*
- *TSa sudah pas dengan TSu.*
- *TSa di atas sudah sangat baik dan dapat diterima serta terjemahannya wajar*
- *Terjemahan ini baik karena tidak kata per kata dan lebih fleksibel sehingga hasil terjemahan lebih organic dan natural.*
- *Terjemahan sudah baik dan benar, juga akurat.*
- *Terjemahan sudah cukup baik.*

Only one students realized that it was hyperbole in the ST as follow.

- *Pengertian "will kill you" tidak harus langsung diartikan dengan "membunuh" karena itu hanya arti kiasan lebih tepat diganti dengan makna memberi ancaman/mengancam/memberi tekanan.*

From the student's assessment, it can be said that most of the students cannot identify the hyperbole elements in the ST. Students did not have the ability to assess the hyperbole element.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

2. Simile
She fish-smiled so widely that she looked like a giant flounder:: senyum buayanya sangat lebar.

ST	TT
She **fish-smiled** so widely that she looked **like a giant flounder**. She told the young ladies she would be right back. Feeling very generous at the thought of receiving such a large check, she even told the students that they could start eating. They would finish singing to Sara when she returned.	Dia **ikan-tersenyum** begitu lebar sehingga dia tampak seperti **flounder raksasa**. Dia mengatakan kepada para gadis berumur muda itu akan segera kembali. Miss Minchin menjadi sangat murah hati karena akan menerima cek besar. Dia bahkan mengatakan kepada murid-murid itu bahwa mereka boleh mulai makan. Mereka akan melanjutkan bernyanyi untuk Sara ketika dia kembali.
TT (Alternative) **Senyum buayanya sangat lebar**. Dia mengatakan kepada para gadis muda itu akan segera kembali. Miss Minchin menjadi sangat murah hati karena akan menerima cek besar. Dia bahkan mengatakan kepada murid-murid itu bahwa mereka boleh mulai makan. Mereka akan melanjutkan bernyanyi untuk Sara ketika dia kembali.	

The second element found was simile. The sentence was *she fish-smiled so widely that she looked like a giant flounder*. Explicitly the simile showed two things that are compared, *senyum seseorang* (yang lebar) with *mulut ikan flounder* (yang juga lebar).

According to ST, a smile like that in source language (SL) is used to describe a sly smile. In target language (TL) culture, a sly smile is the same as a fake smile or an insincere smile. That kind of smile is also called *senyum buaya* karena *senyum buaya* not only wide but also malicious fake smile (*KBBI*, 2008, hlm. 1277). The equivalent is considered accurate, reasonable, and acceptable in the culture of the target reader.

She fish-smiled so widely that she looked like a giant flounder is equivalent to *Dia **ikan-tersenyum** begitu lebar sehingga dia tampak seperti **flounder raksasa***, as seen in the above table. The followings were students' assessment to the simile.

- *Seluruh idiom di TSu diterjemahkan secara literal sehingga membuat teks kurang nyaman dibaca.*
- *TSa tidak akurat karena secara harfiah.*
- *Seharusnya diartikan sebagai "senyuman yang mmencurigakan".*
- *Penerjemahan dilakukan kata per kata jadi tidak akurat.*
- *Maknanya membingungkan/aneh.*
- *Terjemahan kaku sebaiknya "ia tersenyum lebar".*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Some students thought that the translation provided is inaccurate, unreasonable, and not acceptable because it is done literally or word for word translation. It means that students are aware of the existence of figurative language in the ST, so they suggest a translation according to the context of the ST sentence.

In addition, some students are not aware of the existence of figurative language. It can be seen from the opinion of those who defend the word Flounder and thought the translation is quite acceptable. From that assessment, it can be said that students were able to assess the translation by saying that it was accurate, reasonable, and acceptable translation. The followings are student assessments.

- *Flounder atau giant flounder adalah sejenis ikan jadi jangan hanya ditulis "Flounder raksasa saja tapi tuliskan "ikan Flounder berukuran besar".*
- *Jangan diterjemahkan ikan, ini akan membuat terjemahan rancu, cukup flounder saja.*
- *Cukup berterima.*

3. Simile

ST	TT
Lottie sat up and looked around. The thought that her mama might be somewhere nearby, watching, made her want to act more like a girl who might be related to an angel. "Tell me more!" Lottie ordered. **Sara's stories were as good as candy.**	Lottie bangkit dan melihat sekelilingnya. Bahwa mamanya mungkin berada di suatu tempat di dekatnya, mengawasi, membuatnya ingin bersikap seperti anak perempuan yang mungkin berkerabat dengan malaikat. "Ceritakan lagi!" perintah Lottie. **Cerita Sara terasa semanis permen bagi Lottie.**
TT (Alternative) Lottie bangkit dan melihat sekelilingnya. Bahwa mamanya mungkin berada di suatu tempat di dekatnya, mengawasi, membuatnya ingin bersikap seperti anak perempuan yang mungkin berkerabat dengan malaikat. "Ceritakan lagi!" perintah Lottie. **Cerita Sara terasa semanis permen bagi Lottie.**	

There are some students' assessments regarding the second simile.

- TSa sudah bagus dan maksud TSu sudah tersampaikan dengan baik.
- Cukup baik bahkan lumayan baik.
- Terjemahan sudah tepat, baik, dan mudah dimengerti.
- Struktur sudah cukup baik.
- Terjemahan cukup luwes dan dapat menyampaikan pesan dari TSu.

The ability of students to assess the translation of simile is very good. Students realized that figurative elements should be translated with elements that have the same meaning as those in ST.

Analysis of the Ability to Translate the Figurative Language

There are three figurative languages translated by students.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

1. Personification

ST	TT
To my maths tutor/ passion guide/ sort-of-friend, 1 cannot fully understand your loss, but 1 can try. Sometimes **life throws curve balls** and you question why.	Untuk pembimbing matematika saya/ pemandu/ semacam teman, saya tidak mengerti sepenuhnya mengenai kehilangan Abang, tapi saya akan mencoba. Terkadang **kehidupan penuh dengan teka-teki** dan kita menanyakan mengapa.

Life throws curve balls is a personification figure of speech used by the writer of ST. The figure of speech is an informal expression that is often used by Americans and British which means, "*Throw (somebody) a curve (ball); to surprise someone with something that is difficult or unpleasant to deal with.* Ex. The weather threw a curve at their barbecue, and they had to eat indoors" (*thefreedictionary.com*).

There were some translations as follows.

- *Masukan yang tak terduga.*
- *Kesialan datang dalam hidup tanpa diduga.*
- *Hidup memberi sesuatu yang tak terduga*
- *Hidup itu seperti tidak sesuai dengan harapan*

From the translation above, it can be seen that the resulting meaning is similar to the meaning of the ST given. Some students seem to be able to translate the figurative elements of ST into ST accurately, reasonably, and acceptably. While some students can not translate well. Here are student translations.

- *Seringkali hidup memberikan kita masalah yang amat berat.*
- *Kehidupan memberi kita cobaan*
- *Terkadang hidup seperti melempar bola melengkung*
- *Hidup bergulir seperti bola*
- *Hidup melemparmu bola melengkung*
- *Hidup seperti bola yang terus berputar*

From the translation above, it can be seen that the students did not correctly translate figurative language.

2. Metaphor

TSu	TSa
"Oh miss," Becky said. "Might I come in? Is there anything I can do for you? Please, will you still let me wait on you?" Sara looked up. She had intended to smile, but when she saw the love and sadness in Becky's face**, something broke inside of her**. Finally, the tears came.	"Oh, Nona," katanya. "Boleh aku masuk? Apa yang bisa aku lakukan untukmu? Tolong katakan, apa aku masih boleh melayanimu?" Sara mendongak. Ia bermaksud untuk tersenyum tetapi **hatinya hancur** ketika ia melihat cinta dan kesedihan di wajah Becky. Ia akhirnya menangis.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

The TS metaphor given to students is something broke inside of her. The phrase is called by the dead metaphor because there is no direct comparison and the metaphor is only concerned with the meaning intended by the metaphor itself (Larson, 1984) or is also called an idiom.

There are some students' translation as follow.

- *Ia terlihat sangat rapuh*
- *Seperti merasa hancur*
- *Luluh*
- *Sesuatu terasa pedih pada dirinya*
- *Hatinya tersentuh/hancur*

The above translations have similar meanings to the ST's metaphorical meaning, so it can say that some students can produce quality translations, namely accurate, reasonable, and acceptable in the culture of their readers.

In ST, what is used to express the deepest sadness is that his heart is broken (KBBI, 2008, p. 479). The ST metaphor is suitable as an equivalent to the TT metaphor that the TT metaphor is natural and acceptable in TL culture so that it can be understood by TT readers. Of the five methods suggested by Larson (1984), the translation of the metaphors used one technique, namely the ST metaphor can be matched with the TT metaphor which has the same meaning.

The followings are some students' translations

- *Sesuatu pecah/patah dalam dirinya*
- *Sesuatu dalam dirinya runtuh*
- *Tiba-tiba sesuatu dalam dirinya pecah*
- *Ada rasa yang muncul di dalam dirinya*
- *Terkadang rusak di dalam dirinya*

Some of the translations produced by students as seen above are far from the metaphorical meaning of the ST element so that it can be said that some students cannot translate figurative elements accurately, naturally, and acceptably in the culture of their readers.

3. Simile

TSu	TSa
"Well," Sara began, "for starters, I am lucky to live in an attic that has windows. Not all attics do, you know. And you can see all sorts of things out these windows that you can't see from down-stairs." "What sorts of things?" Lottie asked. **And the rain's big fat drops falling from the sky and going pitter-patter upon the slate roof like gumdrops**.	"Yah," Sara mulai, "sebagai permulaan, aku beruntung tinggal di loteng yang berjendela ini. Kamu tahu tidak? Tidak semua loteng punya jendela. Dan kamu dapat melihat banyak hal dari jendela ini yang tidak dapat kamu lihat dari bawah. "Apa saja?" tanya Lottie. **Dan titik-titik air hujan yang lebat jatuh dari langit dan berbunyi getak-getuk di atas atap bagaikan permen jeli**.

The third figurative element given is the simile *and the rain's big fat drop falling from the sky and going pitter-patter upon the slate roof like gumdrops*. The ST simile is a closed simile which does not directly show the similarity of the two things being compared, namely *the rain's big fat drops* and *gumdrops*. The similarity between the two is size, namely the *raindrops* that fall on the roof as big as gumdrops. *Gumdrops* are sort of candy. They are usually brightly colored gelatin- or pectin-based pieces, shaped like a truncated cone and coated in granulated sugar, this makes them very sweet" (Wikipedia).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

In BSu, the rain's big fat drop is big raindrops. The raindrops are depicted with gumdrops. In ST culture, raindrops like that are usually a picture of heavy rain or heavy rain (KBBI). The heavy rain that sounded over the roof was unusual compared to the candy. This method can be done, according to Larson (1984), as long as it does not eliminate the meaning of the SL simile.

Finally, the simile was translated into *dan titik-titik air hujan yang lebat jatuh dari langit dan berbunyi getak-getuk di atas atap bagaikan permen jeli* the element was translated in the way suggested by Larson (1984), namely that ST similes can be matched with ST similes which have the same meaning.

The followings are the students' translations.

- *Dan hujan yang begitu deras berjatuhan dari langit serta mulai terdengar ketipak-ketipuk di atas genting seperti gula-gula permen karet/permen bundar/permen jeli/gula-gula kenyal*
- *Dan tetesan air hujan jatuh dari langit dan cipratannya jatuh pada atap batu seperti gula-gula permen karet.*
- *Tetesan besar air hujan jatuh dari langit dan mengalir di atas atap seperti permen karet*
- *Kemudian hujan besar turun dan membasahi atap*
- *Dan rintik hujan turun berderai menimpa atap*
- *Hujan turun dengan sangat lebat dan menimbulkan suara di atas genteng rumah.*

In short, it can be said that students are able to translate figurative elements.

Analysis of Interview Transcript

Analysis of interview data is very necessary to support the analysis of students' abilities in assessing translation and translating figurative elements. There are four important points related to those, as follows.

1. Quality translations

There are three points related to quality translations, namely having studied how to assess translations, what needs to be seen in assessing translations, and judging your own translations. Here are student opinions.

terjemahan dikatakan berkualitas jika makna tidak berubah itu yg pertama, kemudian bahasa terdengar wajar jd sesuai dgn sasaran pembaca. Saya pernah mempelajarinya, poin2 yg dinilaipun seperti yang saya katakan tadi.
belum sih, selama perkuliahan
pernah dari kuliah.
sebuah terjemahan yg berkualias itu selain idiom, kalimat harus mudah terbaca dan mudah dipahami. Saya belajar dari kuliah doang.
terjemahan yg berkualitas itu yg sesuai padanannya, tdk merubah maknanya, wajar dan berterima. Saya belajar dari kuliah.
yg berkualitas mudah dipahami oleh target pembaca, sudah masuk ke budaya pembacanya. Sudah pernah menilai, spti apakah terjemahan itu dipahami pembaca
yg berkualitas itu pasti definisi ya, terjemahan yg tidak terlihat sbg terjemahan. Pembaca memahami.
terjemahan berkualitas jika terasa organik tidak terasa seperti terjemahan, ya harus alami tanpa memaksakan pada terjemahan.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

belum pernah belajar khusus menilai. Menurut saya selagi terjemahan itu mudah dipahami ya baik terjemahannya. kalo berkualitas sesuai dgn tujuan, ya misalnya ekonomi ya harus sesuai dgn ekonomi. Ada kata2 yg khusus yg sesuai dgn bidangnya.

From the results of the interview above, it can be seen that all students understand how to assess a translation. They consider that a quality translation must not change the meaning of the ST or be accurate. Then, the translation must be easily understood by the reader and acceptable in the culture of the target reader. From all the student comments, it can be said that students have studied during the lecture how to see whether a translation is of high quality or not.

2. Students actively carry out translation activities

Some students are not very active in translating. They just translate the exercises given in the module. Translating the exercises given in the module is a must for students. Here are student opinions.

kalo aktif sih nggak ya bu. Jadi saya kurang aktif krn pekerjaan saya lebih ke menulis, biasanya kalo saya nerjemahan lebih ke literal gak ada idiom atau yg lain. Dulu saya pernah menerjemahkan setahun dapat 2 novel. Waktu itu projek yang saya juga tdk tahu apakah diterbitkan. saya hanya menerjemahkan dari penerbit itu. saya hanya dapat feedback terjemahan sudah cukup wajar sesuai BSa, dari segi ketepatan tata bahasa lebih dipahami sama editornya.
aktif sih. Kalo tahun ini agak kurang aktif karena pekerjaan lain. Dulu 2006 itu aktif setiap hari. Waktu kuliah saya sudah jarang.
belum terlalu aktif, Cuma dari modul.
tidak terlalu aktif. Dulu sih sblum pandemi saya lebih dominan speaking dgn bahasa tdk baku.
tidak aktif, ya paling 3 bulan sekali.

Some other students are also active in translating from ST such as letters from and short articles from the office where they are working at. The following ares student comments regarding the activeness of translating.

untuk bekerja sih tidak, tapi kuliah sih iya. Seminggu bisa dua atau 3 kali nerjemahin teks singkat.
sekarang ini tdk terlalu aktif. Saya kan karyawan ya nerjemahin surat. Setiap hari ada terjemahan.
semenjak pandemi sudah berkurang. Sebulan minimal 1 dokumen perjanjian atau legal. Tahun ini belum lagi

3. Having trouble in translating

Some of the difficulties experienced by students are translating certain cultural elements, idioms, and special terminology. Here are student comments.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

menurut saya kesulitan terbesar itu padanannya secara budaya, seperti ekspresi yang harus dilihat secara budaya.
sering kesulitan. Aspek idiom yang kaitannya dgn budaya, kebiasaan karena saya belum pernah keluar.
pernah, pilihan kata yang baik, ada kata2 asing spt politik, berita, kedokteran jika tdk pake kamus.
banyak kalimat2 baru yang saya temui karena kurang paham.
pasti ada. Ada budaya. Ada anotasi. Ada idiom
pernah, yg jadi kendala terutama pada tema yg tdk saya kuasai. Spt politik.
tiruan bunyi, ini kan harus tau juga padanannya kayak bunyi hujan, langkah kaki
dari budaya kentara sekali jd harus dipahami masalah budaya dibanding kata2, seperti kata alhamdulilah kan tdk selalu bermakna religius.
sering sih karena terkait kultur ini kan melekat dgn budaya tertentu. Saya sendiri lebih enak baca teks asli daripada baca terjemahan yg tdk memahami budaya.

To overcome the difficulties in translating, students said that they had to look at the ST context, look for equivalents for idioms, look at printed and digital dictionaries, search for similar articles on Google, and most importantly know the culture behind the ST. Here are student comments.

saya harus banyak baca ya bu. Dan mencari padanan yang sedekat mungkin.
saya liat konteks, trus kalo skrg lebih gampang ya tinggal liat google. Ini memang sulit.
jd harus dicari2 dulu maknanya spt idiom ya harus sesuai konteks
dibantu dgn media cetak atau digital. Saya coba pahami bahasa atau istilah asing, saya jd sadar banyak hal yg saya tdk paham.
kadang saya pada yg pengalaman. Saya cari juga dari artikel dan google.
diksi2 yg terkait dgn politik. Sy mencari lebih dalam makna unsur Tsu
tau konteksnya dulu, kayak td bunyi hujan ya cari sesuai budayanya
ya harus dipahami budayanya
harus dipahami kultur budayanya supaya paham konteks.

4. Knowing the steps in translation process

There are stages carried out by the translator in the translation process. The first is the preparation stage. The second stage is the process of translating. The last stage is post-translating or after translating. The following are student comments related to the steps that they took in the translation process.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

langkah2 step by step dulu pernah belajar tp saya lupa. Tapi waktu nerjemahin saya tdk mengikuti step2 itu. Hanya saya baca secara keseluruhan dulu, kemudian liat konteks teks secara garis besar, apakah dia butuh secara budaya atau gmn. Trus saya pahami secara kalimat.
baca sekilas dulu
analisis teks, baca cepat dulu, teks tentang apa, kata2nya saya pahami dulu.
baca dulu, saya awalnya menggunakan metode bebas dulu.
belum tau sih. Prosesnya saya pahami dulu. Kata2nya saya pahami dulu.
pernah. Pertama membaca secara keseluruhan. Kedua mencari kata2 sulit.
kalo legal saya cari padanan kata2 dulu karena itu kan sifatnya memutuskan nasib seseorang
alur cerita harus dipahami ini kan komik. Ada istilah sulit

From the comments above, it can be seen that students were doing the pre-translation stage. Before translating the ST, the students stated that they read the text first to look for difficult words. In addition, they also understood the culture behind the source text. Then, students enter into the process of translating, as the following student comments.

ya itu setelah paham budaya dan konteks saya terjemahkan.
baru mulai terjemahkan
mencari padanan yang sesuai, diliat sasarannya siapa.
saya terjemahkan aja secara bebas, nanti baru saya liat lagi kalo nggak ya tanya teman.
Jika tdk ada yg sulit katanya langsung saya terjemahkan
mencari arti kata2 sulit trus saya menerjemahkan per kalimat dgn metode yg tepat
saya terjemahkan draf dulu
menerjemahkan lebih mudah karena sudah dipahami maknanya.

Students translated freely or made translation drafts by translating per sentence in the right way. They considered the pre-translation process very helpful in the process of translating because translating becomes easier because they already understood the meaning of the ST words or sentences. The last stage is also carried out by students, namely post-translation. Here are student comments.

biasanya saya baca ulang, apakah ada yg kurang tepat, jd kalo sudah sampai ke editor tdk terlalu menyulitkan.
baca ulang, diperiksa kesalahan ketik. Kadang2 kita membaca pertama kali gak ketahuan, tapi baca lagi baru tau.
sangat perlu diliat lagi krn dikuatirkan ada kata2 yg terlewat sehingga terjemahan tdk terasa spt terjemahan

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

saya baca lagi biasanya akan banyak koreksi krn terbatasnya wawasan saya.
saya baca lagi.
sy baca kembali terjemahan apakah sudah sesuai. Dan mengecek apakah masih ada yg direvisi atau yg kurang.
ya saya baca kembali.
saya baca kembali untuk revisi
ya baca kembali.

The Ability to Assess the Translation of Figurative Language

The three elements of figurative language that have been assessed by students are (1) *will kill you*, (2) *she fish-smiled so widely that she looked like a giant flounder*, and (3) *Sara's stories were as good as candy*. The first element cannot be assessed by students as figurative language because only one out of 15 students can give the correct assessment. For the second element, students can judge well by providing two translation options, namely the equivalent of figurative language elements with figurative language as well and figurative language with non-figurative language by paraphrasing technique. The last element can also be assessed by students. The ability of students to assess the translation was very good. Students realized that figurative elements should be translated with elements that have the same meaning as those in ST.

From the results of assessing the translation, it can be said that students have the ability to assess translations well. They were able to identify elements of figurative language and knew the aspects that must be considered in order to produce an accurate, acceptable, and high level of readability translation.

The Ability to Translate the Figurative Language

Three elements were translated by the students, namely (1) *Life throws curve balls*, (2) *something broke inside of her*, and (3) *and the rain's big fat drop falling from the sky and going pitter-patter upon the slate roof like gumdrops*. Elements 1 and 2 can only be translated by some students accurately, reasonably, and acceptably. Only one last element can be translated by all students.

It can be said that students' translations are not accurate, reasonable, and acceptable. It can be assumed that students lacked practicing in translating. Students only practiced from the exercises given in the module. While working students only practiced translating from work as part of their work.

CONCLUSION

There are three important points that can be concluded, as follows.

1. The ability to assess figurative language translation is good which can be seen from the majority of students who are able to assess translation because this skill has been acquired in lectures. These aspects in assessing translation are also understood by students so that it helps them to assess good and bad translations.
2. Most of students did not have the ability to translate accurately, reasonably, and acceptably. It was influenced by the lack practicing in translating.

REFERENCES

Baker, M. (2011). *In other words*, ed. ke-2. New York: Routledge.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Benny H. H. (2006). *Penerjemahan dan kebudayaan.* Jakarta: PT. Dunia Pustaka Jaya.

Habibullah, Mosleh. 2015. *Proses dan hasil penerjemahan mahasiswa (studi kasus pada mahasiswa translation theory and practice di STAIN Pamekasan).* http://www.ejournal.stainpamekasan.ac.id/nuansa/article/view/703

Harimurti, K. (2008) *Kamus linguistik*, ed. ke-4. Jakarta: Gramedia Pustaka Utama.

Larson, M. L. (1984). *Meaning-based translation: a guide to cross-language equivalence*. Lanham: University Press of America.

Nababan, Nuraeni dan Sumardiono. (2012). *Penilaian model penilaian kualitas terjemahan*. Surakarta: Universitas Sebelas Maret

Nisa, Khoirun dan Suyitno, Imam. 2017. *Kesalahan penggunaan bahasa indonesia dalam teks terjemahan mahasiswa.* http://journal2.um.ac.id/index.php/basindo/article/view/694

Newmark, P. (1988). *A Textbook of translation*. U.K.: Prentice Hall.

Nida, E.A dan Taber, C. (1982). *The theory and practice of translation*. Leiden: E.J Brill.

Sutantohadi, Alief. (2017). *Analisis Kualitas Terjemahan Artikel Media Oleh Mahasiswa Prodi D-3 Bahasa Inggris Politeknik*. Vol. 3 No.1. Februari 2017. Jurnal Bahasa Inggris Terapan

Sutopo, Anam. 2018. *Faktor-faktor dalam penilaian terjemahan karya sastra*. http://rumahpublikasi.com/index.php/prokaluni/article/view/220

Zafrialdi, M. (2010). *Kritik Terjemahan: Sebuah pengantar pendek*. Jurnal Humaniora: Vol.1 No.1 April 2010: 115-121. http://research.binus.ac.id/publication/C60D65B9-

Improving City Plan Certificate Services Electorally (e KRK) Based on Digital City Spatial Planning

Dwi Putranto Riau
Universitas Terbuka
e-mail: dwiputranto@ecampus.ut.ac.id

Article Info

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Article of OSC 2022

Abstract

As one of the requirements for the management of Building Approval (PBG), the City Plan Description (KRK) must be fulfilled by article 19 PP 16 of 2021 concerning Building Buildings. So far, the City Plan That contains the designation and intensity of the Building is based on the Detailed Plan of Urban Spatial Planning (RDTRK) or the Building and Environmental Planning Plan (RTBL). The public is still many who do not know about the City Spatial Plan because it has not been socialized by RDTRK and RTBL and is still limited through the Regency / City Government website. Spatial Planning products have not been digitally packaged through the WEB and Android applications. The purpose of this research is to analyze the readiness of organizational capacity and resources (HR, infrastructure, e-KRK and budget) in preparing e-KRK based on the Digital Spatial Plan and cultural readiness of the community in information technology for e-KRK licensing. This research uses the Qualitative Descriptive method. Primary data collection through in-depth interviews with staff who handle SKRK in districts/cities that have implemented KRK and secondary data through websites, media mas, journals, and others. Data analysis by performing data reduction steps, presentation, and conclusion or verification. The results of this study are expected to increase Krk service performance with the provision of electronic KRK (e-KRK) based on RDTRK and RTBL digital by Government Regulation 16 of 2021 concerning Building Buildings and Government Regulation 21 of 2021 on Spatial Planning. Resources (HR, infrastructure e KRK, organizational culture and budget) are available, and the culture of people who have received information technology permits.

Keywords: *City Plan Certificate (SKRK), Digital Urban Spatial Plan (RTRK), Improvement, Performance electronic services.*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

In building permits, namely law number 11 of 202 0 concerning Cipta Kerja (UUCK), law no. 28 of 2002 and government regulation no. 16 of 2021 concerning Building collateral regulates buildings' planning and design standards. In article 19, Each building, according to its function and classification, must meet the provisions of the designation and intensity of the building. This provision is contained in the City Plan Statement (KRK), which is based on the Detailed Spatial Plan (RDTR) and The Building and Environmental Plan (RTBL), and the district/city local government must provide KRK to the community electronically. (Anonymus, 2021).

The philosophy of the emergence of electronic services is the rapid development of information technology systems in supporting the interaction of government, private sector, and society which is carried out effectively, efficiently, and exposed. The government uses information technology as a means of communication, coordinating with public elements transparently. According to the World Bank, the electronic government is an effort by the government to use information technology as a means to transform the government's relationship with its citizens, business actors (business), and other government agencies.

Wordbank views that technology has multi-purposes, including public service facilities and interaction between the business world and industry. Community empowerment through access to general information and supporting the realization of more efficient government governance. Using information technology aims to minimize corruption, provide transparent government management, easy and cheap services, and increase income and cost reduction. (Nurmandi Achmad, 2018)

With the aim of ease of communication, konsep e-g government is an example of the implementation of e-business practices in the field of government (Ayu Sinta Dewi & Mujahideen, 2013) so that the implementation of e-government in the local government environment is expected to be a vehicle to accelerate the exchange of information, provide service facilities and transaction activities with community members (G2C), to business actors (G2B), and of course with the government itself (G2G). In this case, the concept of transformation is the main thing that must be applied, not just the use of technology, but the use of technology that can support the policymaking system and public services in a better direction. (Noveriyanto et al., 2018)

In implementing business licensing, all business stakeholders expect a clear legal basis. So far, many laws and regulations overlap and lock each other when evaluating each sector for granting permits. Moreover, one of the indications that are an obstacle to granting permits is the spatial plan as a reference in the suitability of space allocation.

In the Magazine Bulletin of Spatial Planning, the article Acceleration and Digitization of Spatial Plans and Ease of Business Activities After UUCK (Reny W at all, 2021:29) states b Based on ease of doing business (EODB) data released by the World Bank in 2020, Indonesia is still ranked 73 out of 190 countries, with a value of 69.6, far behind our two neighboring countries, Singapore and Malaysia which are ranked 2nd and 12th respectively. It is even still below Vietnam, which is ranked 70th. Of several methodologies for conducting an assessment, Indonesia's lowest value is in the "Starting a Business" element. Some of the indicators seen include procedures, time, and costs to start a business or investment in Indonesia.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Law No. 11 of 2020 concerning Job Creation (UUCK) was prepared as an effort to improve the investment system and business activities through simplification of the basic requirements for business licensing. Based on article 13 of the UUCK, there are only three basic requirements for business licensing, namely (1) Suitability of Space Utilization Activities (KKPR); (2) Environmental Approvals; and (3) Building Approvals. KKPR is a form of permit given as suitability of activities and or businesses with spatial plans. Suppose the region has provided a Detailed Spatial Plan (RDTR) integrated with the Online Single Submission (OSS) system at the requested location. In that case, the KKPR is given directly through the KKPR Confirmation. However, suppose there is no RDTR at the desired location. In that case, the KKPR is given through the KKPR Approval based on the applicable spatial plan, either the Regency/City Spatial Plan (RTRWK), provincial spatial plan (RTRWP), or national strategic area spatial plan (RTR KSN) with tiered and complementary principles. This shows that spatial planning is the spearhead of references in licensing through the KKPR mechanism, and future demands after this UUCK region must complete its spatial plan, especially RDTR with good quality. (Ruang, 2021)

Interms of infrastructure and laws that regulate activities on the internet, Indonesia is ready to live in the digital era. The readiness of the Indonesian people in internet connections which are currently getting better in the 4G era with Electronic Information and Transactions (ITE). Indonesian people in general are enthusiastic about adopting a digital life, mainly triggered by internet penetration and the use of smart phones which continues to increase every year.(Setiawan, 2017)

Due to uneven infrastructure factors, the public's readiness to receive online and digital-based licensing services is still diverse. The ability of diverse community human resources to use information technology and community participation is still lacking in receiving e-government services from the government. One of the elements of smart government is the implementation of a digital-based bureaucracy that places substantial community participation in it.(Sarni, W., & Koch, 2018).

The licensing mechanism in the future is also required to be faster and more transparent so that the implementation of licensing will be carried out online. Based on PP No. 24 of 2018 concerning Electronically Integrated Business Licensing services updated with PP No. 5 of 2021 concerning the Implementation of Risk-Based Business Licensing, the provision of legality to business actors to start and run their businesses must be by the detailed spatial plan. As a basis for granting permits through an online system, it requires adequate database standards so that digitizing spatial plans is prepared according to the licensing platform, primarily through the OSS system. In addition, support for the use of information technology in the settlement process, both the preparation process and the process of determining spatial plans, is a necessity.

The reasons for developing the KKPR and or e KRK spatial information system application in building permits include: 1) The available data is minimal and not the needed data. In order to accelerate the process of collecting data and information for the preparation of RDTR, by data source e KRK. 2) Information system-based analysis. Another stage of preparation that can be intervened with advances in information technology is the process of data processing and analysis. At the data processing and analysis stage, not all analyses can be generated using applications/software. Of course, there are qualitative analyses that require the intuition of a planner in assessing and evaluating existing conditions, including socio-cultural

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

analysis and site-specific characteristics. However, with the help of software, quantitative analysis and spatial modeling can be done faster, more precisely, and more accurately because it is carried out based on formulas and algorithms that have been previously inputted into the system. The use of the application can also avoid miscalculations and prediction/ projection errors caused by 'human error' or the presence of an element of subjectivity planner. 3). Inclusive involvement of the role of the community, public consultation, and stakeholder involvement in the preparation of detailed spatial plans are critical factors in producing an acceptable spatial plan (acceptable to the broader community). Database standard p there is a formulation stage. Law Cipta Kerja provides a significant challenge in the implementation of spatial planning. As a reference in the basic licensing requirements, it certainly requires efforts and strategies so that an adequate spatial plan is available with good quality and easily accessible to development actors. Digital transformation is now an essential part of providing public services. (Ruang, 2021)

Providing good public services requires an adequate budget and human resources accompanied by the commitment of all parties and public support to continue to encourage innovation and transformation (Riau & Yuswadi, 2014), course with a predetermined direction of goals and prioritization. With the collaboration of various parties, RDTR's digital transformation can be realized more quickly to increase investment in Indonesia. A web-based electronic system is used to carry out the service description of the city plan (KRK) and information on the implementation of spatial planning. As a condition of PBG in the commitment to fulfill the primary business licensing requirements.

Policy performance is influenced by four factors, namely: (I) The policy itself is related to the quality and typology of the policies implemented; (ii) the capacity of the organization given the mandate to implement the policy; (iii) the quality of human resources of the apparatus in charge of implementing policies; and (iv) the conditions of the social, economic, and political environment in which the policy is implemented. (O'toole, 1986)

The vagueness of policy objectives is conveyed by Pressman and Wildavsky (1973) and Van horn and van Meter (1976), cited in Hill (2003:267). This expert says that a policy implementer often has to work in a complex situation and is full of uncertainty due to unclear formulations about the goals they must achieve (Erwan AP, 2012:165).

In the building permit service, namely, the KRK service, a levy accompanies this service, namely the map printing levy, which has a significant value depending on the respective district/city. By Law no. 28 of 2009 concerning Regional Taxes and Regional Levies and strengthened by the implementing regulations, namely PP no. 10 of 2021.

The implementation of the City Plan Information (KRK) service policy is influenced by the organization's capacity, namely the Spatial Planning Office. According to Amstrong (2009:226), " *Organizational capacity is the capacity of an organization to function effectively. It is about its ability to guarantee a high level of performance, achieve its purpose (a sustained competitive advantage in a commercial business), deliver results, and, importantly, meet the needs of stakeholders".*(Armstrong Michael, 2009) Another expert, Goggin et al. (1990:120), define as a unity of the element of organization involving (a) Structure; (b) the mechanism of work or coordination between member units involved in implementation; (c) existing organizational resources; and (d) the financial support and resources needed to work. (Malcolm Goggin. Ann O'M Bowman, 1990)

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

The quality of human resources bureaucrats who implement KRK in the Spatial Planning Office still does not fully understand the policies or regulations and the interpretation of the designation of the City Spatial Planning Detail Plan (RDTRK) and the Building and Environmental Planning Plan (RTBL), due to the limited competence of local government officials and local government budgets in improving the competence of knowledge and skills of officers. Improving the competence of officers is only included in webinar events held by the Ministry of ATR / BPN and the Ministry of PUPR. Under certain conditions at the time of understanding, the interpretation of the allocation of spatial planning locations requires superior policies and the timing of permits in issuing KRK, mainly until it is discussed at the Regional Spatial Planning Coordinating Board (BKPRD).

The condition of the social, economic and political environment in supporting the implementation of e KRK in districts/cities in Indonesia has not fully understood the management of the licensing of City Plan Information. Klijn & Koppenjan (2016) states that networks or *Networks* are characterized by solving the complexity of policy problems that cannot be solved by one actor alone, but require collective action from several actors (Koppenjan and Klijn 2004). Interactions in networks have durability and faster problem solving over time (efficiency) in problem-solving (Klijn & Koppenjan, 2016). Public sector innovation is one of the important agendas for improving the performance of public services, organizational policy innovation, organizational environment, and labor (Damanpour et al., 2009). Public bureaucratic structuring and innovation need to pay attention to three main components: individuals (actors), organizational culture, strategies and policy environment conditions in public policymaking, implementation of public policy programs, and the implementation of effective, efficient, and democratic public services.

Licensing performance of City Plan Information to Regency/City Governments in Indonesia after Law no. 11 of 2020 concerning Cipta Kerja, PP no. 16 of 2021 concerning Building Buildings, and PP No. 15 of 2021 concerning Buildings. Implementation of Spatial Planning is still a lot of District / City Governments have not implemented e KRK. From the data on the Implementation of KRK at the National level (514 districts/cities) of the Ministry of PUPR in 2022, many regions have not implemented it. Meanwhile, at the East Java Provincial level, of the 38 districts/cities that issue KRK, many have not manually implemented e KRK based on digital RDTRK.

Problem Formulation

The existing problems based on the description above can be put forward in research questions as follows: The City Plan Certificate Service in improving the performance of the Electoral-based Spatial Planning Office?

Research Objectives

In accordance with the formulation of the problem above, the objectives of this study are: We are reviewing and analyzing the services of the City Plan Certificate in improving the performance of electronic-based spatial planning permits.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Research Benefits

The benefits of this study are as follows:

1. This research is expected to contribute to the development of public policy implementation for the development of public administration.
2. This research is expected to add academic insight and thinking horizons about electronic-based services and valuable experiences for researchers.

METHODS

The method used is descriptive qualitative/Quasi Qualitative (Bungin, 2017). The qualitative descriptive method is a research method aimed at systematically, factually, and accurately descriptive of a social phenomenon or natural phenomenon. Data that is in the form of words and not a series of numbers is obtained in various ways, namely observation, interviews, digestibility of documents, or in other ways that can be processed first before they are ready for use, but the qualitative analysis still uses words, which are usually compiled into an expanded text. (Miles, 1992: 15-16). Primary data study through data collection techniques with in-depth interviews (In-depth Interviews) with staff who handle city plan certificates and secondary data studies through data collection through websites, journals, presentation materials, and others. The phenomenon to be studied is the problem of implementing the City Plan Information (KRK) for the transition period of the latest regulations for the application of e KRK based on a digital Spatial Plan in improving the performance of spatial planning permits. . Analisis of data problems using SWOT Analysis and produced strategies and programs of activities.

RESULTS AND DISCUSSION

The development of building permits by law no. 11 of 2020 concerning Cipta Kerja and Government Regulation no. 16 of 2021 concerning Building Buildings is carried out online with all licensing service processes digitally. His process is thorough Sistem Building Management Information (SIMBG).

The management information system (SIMBG) isa WEB-based information system used to process the activities of building management. IMBG services include Approval of Building (PBG), Certificate of Proper Function of Buildings (SLF), Proof of Building Ownership (SBKBG), Technical Plan for Building Construction (RTB), Data collection of buildings that are built or that have not been built.

Meanwhile, the licensing process that supports building approval. Namely, the City Plan Statement (KRK) must be elected by article 19 Government Regulation number 16 years 2021. fthe Regency/City does not yet have an e-KRK based on the digital RDTRK, the Ministry of ATR/BPN has prepared a KKPR application in business licensing.

In Indonesia's current status of spatial planning progress, there are still eight districts that do not have a Regional Regulation on RTRWK (source: tataruang. atrbpn. or.id/protaru). F course, this will make it challenging to implement the use of space because there is no reference

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

in granting more detailed permits. After all, permits are given based on the Regional Spatial Plan (RTRW) with more macro content. Moreover, there is an exciting but ironic fact is that the RDTR available throughout Indonesia to date has only been 122 RDTR (source: tataruang.atrbpn.go.id/protaru), in the form of regional regulations and regional head regulations, from the target of completing +2000 RDTR according to the mandate of the Strategic Plan of the Ministry of Agrarian and Spatial Planning / National Land Agency. The gap between the needs and provision of RDTR is a challenge in itself that requires commitment from various parties not only the Central Government but also local governments, academics, practitioners and other stakeholders. He encourages various innovation initiations and breakthroughs in accelerating the completion of RTRW and RDTR by the mandate of UU Cipta Kerja. With the demands of the need to provide quality spatial plans with standards by various online platforms as the basis for granting permits, various breakthroughs have been initiated to accelerate the completion of spatial plans. He is regulated in UUCK and Government Regulation No. 21 of 2021 concerning the Implementation of Spatial Planning and Regulation of the Minister of ATR / BPN No. 11 of 2021 concerning Procedures for The Preparation, Review, Revision, and Issuance of Approval for the Substance of Provincial, Regency, City, and Detailed Spatial Planning Plans and Ministerial Regulation of ATR / BPN No. 14 of 2021 concerning Guidelines for Compiling Databases and Presenting Maps of Provincial Spatial Plans, Districts, and Cities, as well as Detailed District/City Spatial Plan Maps. Some fundamental changes in accelerating the completion of spatial plans mandated in UUCK and its derivative regulations include breakthrough digitization of spatial plans of the Ministry of ATR / BPN c.q. Directorate General of Spatial Planning since 2018 until now continues to innovate and transform towards digital, not only to answer the demands for ease of licensing carried out online but also to provide transparency and ease of access to stakeholders to spatial information. Currently, a portal has been developed *gistaru.atrbpn.go.id* as a provider of spatial information systems that include online RTR applications and interactive RDTR where users can access maps of the structure and spatial patterns of provincial / regency/city RTRW and RDTR as well as simulate rules in locations where the RDTR is already available. N addition to gistaru, the Directorate General of Spatial Planning also has an information system on the status of the preparation and determination of spatial planning bylaws (Protaru), the National Spatial Information System (sitarunas), the Spatial Utilization Information System (sifataru), as well as online public consultations, all of which are integrated on *the tataruang.atrbpn.go.id* portal. To support the acceleration of the completion of spatial plans, the Directorate General of Spatial Planning has also begun to develop spatial information system applications that will assist in preparing and determining spatial plans online. Some of the applications that are being developed include RTR Builder, RTR online, gagas Ruang, RDTR interactive, and real-time RTR. Application development is expected to facilitate the implementation of the preparation and determination of spatial plans, but to use the application optimally requires budget support, human resources, and adequate data/information. (Ruang, 2021)

The challenge of keeping in public service is how to use public services as an arena for dynamic interaction between the Government, private sector, and civil society *(civil society organization, SCO*). Wiranto (2006) even stated that public service is vital for realizing *good governance.* (Dwiyanto A (ED.), 2006) (Agus Pramusinto, 2009)

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

The implementation of e-government can create public services online or computerized-based. Providing services without the intervention of employees of public institutions cuts the antrian system that Panjang to obtain a simple service and e-government to support good government governance. The use of information technology makes it easier for the public to access information and reduces corruption by increasing the transparency and accountability of public institutions. (Deddy Mulyadi, 2016)

In the theory of public policy regarding the shifting of the paradigm of public service from Old Public Administration (OPA) to New Public Management (NPM) and finally New Public Service (NPS), the presence or participation of the public in the government bureaucracy is increasingly important. The NPS paradigm, which is compiled based on democratic theory (democratic theory) is increasingly directed or focused on the interests of the community (citizens), and does not view the community as only consumers like the paradigms used previously. (Setiyono, 2016)

In the New Public Service (NPS), the existence of a digital bureaucracy itself can actually support the realization of the NPS paradigm to prioritize the interests of the community in service. This is because the digital bureaucracy (ideally) opens vast opportunities for the public to be able to participate and have an active dialogue in services organized by the bureaucracy.(Dhevina, 2020) This opens up opportunities for the community to exercise control over online licensing services by local governments.

Public information services freeist e-government can expand public participation where the public can be actively involved in decision-making and policies oleh government, improve productivity and bureaucratic efficiency, and improve economic growth. There are two models of public information services that can be used by any public body to provide information services, namely manual and electronic models. The principle that must still be prioritized is the quality of information and services. the Government's electronic model is not in the form of a CMC (communication mediated computer) but can be in the form of familiar technologies such as HP, TAB, etc.(Deddy Mulyadi, 2016)

Some of the challenges that need to be considered in the development of the provision of Detailed City Spatial Plan (RDTRK) digital and the application of information systems e Description of city plans include:

1. The data available is very limited. In order to accelerate the process of collecting data and information for the preparation of digital RDTR, a one-data and map portal is needed that applies the principle of one reference, one standard, one database/metadata, and one data portal accompanied by interoperability rules between systems. His portal will be a kind of online marketplace, where users can buy or obtain/download data or maps just by clicking on the required data, of course, after the user's data is verified and the system automates the data request.
2. System-based analysis information of other stages that can be intervened with advances in information technology is the process of data processing and analysis. In the data processing and analysis stage, not all analyses can be generated using applications/software. of course, there are qualitative analyses that require the intuition of a planner in assessing and evaluating existing conditions, including socio-cultural analysis and site-specific characteristics.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

3. The inclusive involvement of the role of the community in public consultations and stakeholder involvement in the preparation of RDTR is one of the critical factors in producing an acceptable spatial plan (acceptable to the broader community). For this reason, the implementation of public consultations must be effective and efficient, with limited time but able to bring in as much input as possible from all stakeholders. His can quickly be answered by the use of information technology. Community participation in e-government is aimed at how the community can take a role or participate in implementing the digital bureaucracy. This is important to be realized and optimized because it is one of the success factors of the implementation of the digital bureaucracy itself. (Rozikin, M., Hesty, W., n.d.)
4. Database standards at the concept formulation stage, especially the making of spatial structure and pattern plan maps, the Directorate General of Spatial Planning 2020 has encouraged the uniformization of the spatial plan digital map database through guidelines for compiling databases and presenting spatial plan maps which are currently regulated in the Minister of ATR / BPN No. 14 of 2021. The structural plan map and spatial pattern of spatial plans throughout Indonesia are expected to have the same data structure (attribute table/information content and geometric shapes), nomenclature and classification of derived elements, and uniform appearance/presentation. his makes it easier for the OSS system to read and process data and maps in the RDTR to confirm KKPR. https://tataruang.atrbpn.go.id/Berita/Detail/4135)

The challenge in e KRK's online licensing services is the provision of digital RDTRK. Meanwhile, a few districts/cities in Indonesia still compile RDTRK, especially those that have provided and implemented digital RDTRK. Data from the Ministry of Agrarian Affairs and Spatial Planning, it can be seen in Table 1 below:

Table 1. Development of the Number of Districts/Cities that have RTRW and RDTRK

No	Number of Districts/Cities in Indonesia	Number of districts/cities that do not yet have an RTRWK	The number of districts/cities already has RDRK	Information
1	514	8	122	Target 2000 RDTRK on Renstra Ministry ATR/BPN

source: tataruang.atrbpn. go.id/protaru

Digital transformation is now an essential part of providing public services. To provide good public services, of course, the organizational capacity of the Government Work Unit in implementing e-KRK Services following the digital RDTRK is indeed strengthened, namely adequate budget and human resources accompanied by the commitment of all parties to continue to encourage innovation and transformation, of course with a predetermined direction of goals and prioritization. Acceleration of the process of preparing and determining a spatial plan and city plan description (KRK) is needed in order to meet service targets in the context of providing essential permits. With the collaboration of various parties, digital transformation can be realized faster. The acceleration of the preparation and determination of spatial plans,

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

especially RDTR, is not only a dream and hope but can make a real contribution to efforts to increase investment in Indonesia.

The implementation of e-government, especially e KRK in Indonesia, is still dominated by metro and big cities in Indonesia. In contrast, cities/districts still do not implement e-government much because the basis of digital RDTRK is still few that have been existing.(Putri et al., 2022) This can be seen in Table 2 below:

Table 2. District/City Governments that have Implemented E-KRK

No	Districts/Cities in Indonesia	Legal Basis	Link e KRK	Information
1	Surabaya	Perwali SBY No 28 Tahun 2013 ttg Tata Cara Pelayanan Perijinan dan Non Perijinan Scr Elektronik	Surabaya Single Windows (SSW)	Service 90 Licensing/Non-Licensing
2	Jakarta	DPMPTSP DKI Jakarta no 64 Th 2021	https://jakevo.jakarta.go.id	1 hari kerja
3	Bandung	Perwali 1455 th 2018 ttg information system Spatial Planning Services	e-Readness	website distaru.bdg.go.id, on the site is named "Si Petruk": SOP 6 working days
4	Yogyakarta City	Kep. Kadis Pertanahan dan Tata Ruang Kota Yogyakarta no: 188/3488/KEP/DPTR/2019 ttg Penetapan Standar Pelayanan Publik Penyelenggaraan Pelayanan	website perzinanonline.jogjakota.go.id atau jss.jogjakota.go.id	Surat Keterangan Rencana Kota (SKRK) Bangunan Gedung

Source : Journal dan Websit, 2022

One of the elements in increasing public participation in e-government is the community's readiness for digital licensing services. This is actually by the government's strategy for implementing digital bureaucratic innovation. Presidential Instruction Number 3 of 2003 states that developing human resources (HR) for both government and community organizations is one of the strategies for developing digital bureaucracy (e-government).

Currently, both central and regional governments are intensively initiating and implementing the digital bureaucracy itself. **(**Rahman, F., & Tarigan, 2020**).**

Aspects of society and human resources (HR), according to Presidential Instruction No. 3 of 2003, are related to the diffusion of information technology in community activities, both individuals and organizations, as well as the extent to which information technology is socialized to the public through the educational process. According to Susanto (2011), community readiness in implementing e-government is influenced by cultural factors of information technology adoption, human resource capacity, technology infrastructure owned or reached by the community, and the business climate and income that affect public spending (per capita income) (Susanto, 2011).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

They saw aspects of technology adoption and cultural factors. According to Susanto (2011), it looks at ICT's actual usage. According to current data, most Indonesian people are internet and social media users (Laoly, 2019), which automatically means they have realized ICT in their daily lives. Based on the average usage time, from the data released by We Are Social (in Kumparan, 2020), internet users in Indonesia have a reasonable internet access time of 7 hours 59 minutes per day. This exceeds the global average of only 6 hours and 43 minutes per day.

Meanwhile, when viewed based on the number of users, according to We Are Social (2020), the number of internet users in Indonesia reaches 64% of the total population of Indonesia, and there are 160 million active users of social media (Haryanto, 2019). Based on these data, from a cultural perspective, Indonesian people have been able to adapt to information technology. Many internet and social media users can show information that the culture in the community has supported the community's readiness to access matters related to the digital bureaucracy, which are generally carried out using website media or application software. It is also explained that the data shows that most internet and social media users are only in certain circles, so it can be said that it is not evenly distributed throughout the community. For example, from the data on the internet and social media users mentioned, it turns out that the majority are dominated by young people (millennials). For other age range users, the number is minimal compared to the number of users among millennials (Association of Indonesian Internet Service Providers (APJII) in Haryanto, 2019). (Bachtiar et al., 2020)

The readiness of human resources in the implementation of city plan information services in each district/city in Indonesia, in general, is still not ready because, in quantity, it is still not available with the number of staff handling only one person. At the same time, in terms of quality, there is still no special training related to the technical substance of the Detailed Urban Spatial Plan (RDTRK) and Environmental Building Plan (RTBL) and the digitization of RDTRK and RTBL.

Table 3. Human Resources e KRK Services in Several Districts / Cities in Indonesia

No	**District/City**	**KRK Service**	**Number of KRK Human Resources (Spatial Planning)**	**Information**
1	Bandung	Online integration with KKPR	16	Online integration with KKPR
2	Kebumen Regency	Online integration with KKPR	11	Civil Servants and Contract Staff
3	Probolinggo City	Online integration with KKPR	11	Online integration with KKPR

Source: Jurnal and Kab/Kota respectively.

One example of an area that has implemented e KRK is the city of Surabaya. As stated on the website *up.Surabaya.go.id* stated that this integrated Online Licensing Surabaya Single Window could shorten the time and check data and requirements can be done more carefully. In addition, the entire SSW licensing process uses an integrated electronic system that can be

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

accessed online, thereby reducing the possibility of face-to-face meetings between applicants and officers in several SKPDs. There is no chance of scalpers with this SSW license because everything is done online. (https://www.suarasurabaya.net/kelanakota/2014/SSW-Urus-Perizinan-Lebih-Cepat-dan-Transparan/)

Unlike manual licensing, which takes a very long time, SSW licensing is faster and more accessible; the completion of SSW permits varies from 14 to 30 days, depending on the type of permit carried out. Some permissions that can be taken care of through SSW are :1. City Plan Certificate (SKRK); 2. Amdal Lalin, UKL-UPL;3. Nuisance Permit (HO);4. Building Permit (IMB);5. Tourism Business Registration Mark (TDUP). Licensing services in the city of Surabaya already have applications that can be downloaded via the SSW MOBILE For Licensing @Playstore: ● License - TDP (package) ● , TDUP - TDP (package) ● , SKRK - IMB - TDG (package) ● , TDP ● IUTS ● TDUP ● Birth certificate ● Death certificate with examples for SKRK services as shown in figure 1 below:

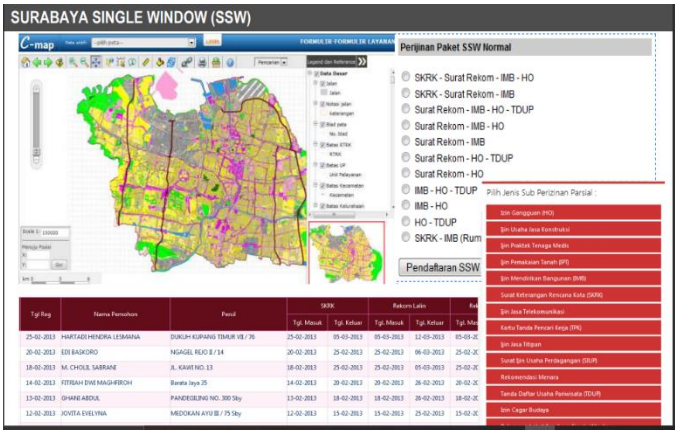


Figure 1. Surabaya Single Windows (SSW) Surabaya City

City Spatial Plans packaged digitally can be seen on the Surabaya Single Windows (SSW) City of Surabaya with a map of designations. The community can check the designation of spatial arrangements that can and cannot be built in Surabaya. This can be seen in figure 2 below:

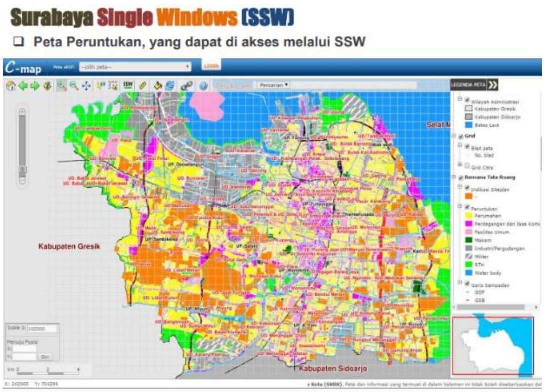


Figure 2. Appropriation Map on Surabaya city digital money governance plan

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

In licensing services, it is necessary to innovate so that SMART (specific) services are needed so that SMART (specific; measurable; Achievable; Relevant; Time-bound) can be realized. Without innovation in public policy, implementation, and governance of public organizations in public services, innovations characterized by technological support will be a challenge for the leadership of public organizations to adopt innovations in policy, implementation, and public services.(Sarni, W., & Koch, 2018)

Policy capacity is defined as competence and ability that is important in policy making and implementation. Competencies are categorized into three essential skills that support policy success: analytical, operational, and political capacities. Policy capabilities can be measured by the organization's resource capability consisting of individuals, organizations, and systems.(Wu, X., Ramesh, M., & Howlett, 2015)

Wu et al. cited the opinion of Moore (1995), which states that capacity is closely related to critical skills or competencies reserved in the development of public policy, including analytical, operational, and systematic capacities. Each of these components needs to be owned by individuals, organizations, and systems.

In the perspective of the complexity of public policy implementation, experts in public administration and public management view that the complexity in the implementation of public policies can be analyzed using a *dynamic system* perspective which means that to design a public policy implementation strategy requires the involvement of all components of public policy, including policy stakeholders who have a scientific background and capacity, professionals, and those with qualified resource capabilities (Bianchi et al., 2017; Dawson & Dargie, 2001; Osborne, 2010).(Moh. Thahir Haning, Mashuri H. Tahili, 2021)

According to Moh Taher Haning et al. l (2021: 12), the conceptual framework for public policy implementation strategies is:

1. *Smart Policy Design.* Smart (*careful)* policy design includes policies that are by logic (*reason*), have a theoretical and empirical basis on applicable laws and regulations (justification), and have ease of application (*feasibility*). Policy law no. 11 of 2020 concerning Job Creation, Government Regulation Number 16 of 2021 concerning Buildings, and Government Regulation No. 21 of 2021 concerning Spatial Planning.
2. *Engagement Policy Target Groups.* The policy implementation strategy involves the participation of all individuals or groups internally and externally, namely the Structural and Functional Officers of the Spatial Planning Service and the Staff involved.
3. *They are creating a conducive policy environment (Creating Conducive Policy Implementation).* Conducive policy environment conditions have an essential role in policy implementation. Support from the internal environment from the Head of the Spatial Planning Office, staff, attitudes, and behaviors of policy actors, policy target groups, and analysis of developing issues and anticipatory techniques are prerequisites in the policy implementation process.
4. *Strengthening policy implementer capacity.* This strategy is related to the ability of organizations to participate in the activities of the Spatial Planning Service to strengthen the capacity of policy implementers (policy actors), which includes: Increasing knowledge, skills, and expertise by participating in Spatial Planning activities carried out by the Ministry of Agrarian and Spatial Planning / BPN and the Ministry of Public Works and Public Housing offline and online Webinar)

One aspect that needs to be improved in e-government is the organizational culture by organizational culture theory. According to Schein(Schein, 1988), culture is the most complex organizational element to change. Corporate culture is a basic assumption that is explored,

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

discovered, and developed by a group of people when they overcome problems of external adaptation and internal integrity, which are proven to work well.(Schein, 1992) To Murniati's research at (2015), there is a relationship between organizational culture and the successful implementation of E-Monev. To achieve success in implementing E-Monev, it is necessary to take concrete and comprehensive steps to instill an excellent corporate culture within the SKPD so that interest and use of E-Monev increase so that SKPD can understand the importance of E-Monev. The leadership's exemplary attitude, appreciation for the performance of the apparatus, regular meetings to discuss the achievement of activity targets and their obstacles, and the availability of adequate facilities, especially bandwidth and training, are organizational cultures that must be carried out to achieve the objectives of implementing E-Monev.(Murniati et al., 2015)

Based on the identification of internal and external factors of the Spatial Planning Office and the Investment and One-Stop Licensing Service (DPMPTSP) in improving the performance of the e KRK Service and the results of in-depth interviews with crucial implementation actors, it can be proposed that strategies will be implemented to improve performance according to the matrix *strengths, weaknesses, opportunities,* and *threats* (SWOT) through a qualitative approach according to Table 4 SWOT Strategy for Improving Services Description of Urban Plans Electronically (e KRK) Based on Digital Urban Spatial Planning as follows:(Kusumah & Suryana, 2018)

Table 4. SWOT Strategy for Improving Services Electronic city plan description (e KRK)

Internal Factors External Factors	**STRENGHTS** 1. There is already Law no . 11 of 2020 on Job Creation and PP 16 of 2021 concerning BG and PP 21 of 2021 concerning Spatial Planning 2. OSS and KKPR applications available	**WEAKNESS** 1. The competence of Spatial Planning Human Resources is still lacking. 2. There are still not many areas where there are digital RDTRK By laws and Map Printing Levy / Non-Tax State Revenue (PNBP)
THREATS 1. Public/Private understanding in using the KKPR application is still limited	**ST STRATEGY** 1. Conducting intens socialization of KRK / KKPR to the Public and	**WT STRATEGY** 1. Improving the competence of Spatial Planning Human Resources on KKPR Imformation Technology, Spatial Planning Technical and organizational culture through Workshops.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

2. Large number of KRK applications	improvement of Community culture in e-licensing. 2. Increase the intensity of work to complete the KRK / KKPR application	2. Acceleration of Digital RDTRK Settlement in KRK/KKPR Issuance Services.
OPPORTUNITY	**SO STRATEGY**	**WO STRATEGY**
1. Public Demands in the Rapid Issuance of KRK/KKPR 2. Increasingly sophisticated Information Technology	1. Issuance of KRK/KKPR in accordance with SOP and laws and regulations 2. Fixing the weaknesses of e KRK / KKPR according to the latest technology.	1. Utilizing additional Spatial Planning Human Resources in completing KRK / KKPR 2. Completion of the Map Printing Levy Regulation / PNBP and Perkada as well as the mplementation of e KRK / KKPR by utilizing the latest information technology.

Source: Analysis results, 2022.

From Table 4, strategies using the SWOT the analysis above, strategies can be formulated as follows:

1. Conducting intensive socialization of e KRK/KKPR to the public, namely the public and private elements and improvement of Community culture in e-licensing
2. Increase the intensity of work to complete the application for e KRK / KKPR
3. We are improving the competence of Spatial Planning Human Resources on Technology Information of e KRK / KKPR, Spatial Planning Technical and organizational culture through Workshops.
4. Acceleration of The Completion of the RDTRK digital Regional Regulation and the Map Printing Levy Regulation and Regional Head Regulations on the Implementation of e KRK/KKPR by PP 21 of 2021 concerning the Implementation of Spatial Planning and PP 16 of 2021 concerning Buildings.
5. Issuance of e KRK/KKPR by SOP and laws and regulations.
6. I am fixing the weaknesses of the KRK / KKPR Application according to the latest technology.
7. We utilize Spatial Planning Human Resources (P3K) to complete KRK / KKPR.
8. Completion of the Map Printing Bylaws and implementing e KRK / KKPR by utilizing the latest information technology.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

The above strategy can be prepared programs for Improving the Performance of service e KRK/KKPR according to Table 5 below:

Table 5. Strategies and Programs for Improving Services e KRK /KKPR

No (Priority)	Strategy	Program
1.	Strengthening the commitment of the Head of the Spatial Planning Office and DPMPTSP in improving knowsledge / skills in the field of Spatial Planning	Training on information technology and technical spatial planning to coordinators and staff formally and informally
2.	Acceleration of digital RDTRK Issuance and Map Printing Levy Bylaws / BNPB and Improving the performance of Spatial Planning implementation in accordance with laws and regulations	Increasing the authority of implementers in making decisions on the issuance of digital RDTRK and Map printing levy in accordance with peer-to-invite regulatory policies
3.	Increasing Socialization and Improving the implementation of e KRK / KKPR and improvement of Community culture in e-licensing	· Socialization of e KRK/KKPR to the public and the business world. · Familiarize the community to take care of permits with e-licensing via smartphones • Implementation of KISS (coordination, integration, synchronization and synergy) with DPMPTSP and Spatial Planning Forum.
4.	Improving internal communication of the Ruang Arrangement Service from the head of the Satker, Coordinator and Spatial Planning Staff and external with DPMPTSP and the Spatial Planning Forum (FPR)	Increasing the authority of the Spatial Planning Sector in the implementation of e KRK / KKPR
5.	Increasing resources (HR, budget, facilities and infrastructure as well as e-government), organizational culture gradually and improving financial performance	a. Improving the quality and quantity of technical human resources spatial planning b. Increase in Spatial Planning Budget per year c. Improved computer equipment that fits smart specifications. d. Organizational culture enhancement
6.	Summarizing coordination between coordinators and staff in peservices e KRK.KKPR.	Improvementof SOPs for the implementation of e KRK / KKPR services.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

No (Priority)	Strategy	Program
1.	Strengthening the commitment of the Head of the Spatial Planning Office and DPMPTSP in improving knowsledge / skills in the field of Spatial Planning	Training on information technology and technical spatial planning to coordinators and staff formally and informally
7.	Strengthening tasks and functions (Tupoksi) in the field of Spatial Planning in Improving Service Performance e KRK / KKPR	Implementation of intense coordination between spatial and external planning offices
8.	Conducting a Reference Study to the Satker of the Spatial Planning Office which implies e KRK / KKPR.	Increased socialization through dissemination of e KRK / KKPR.

Source : analyst results, year 2022

CONCLUSION

Based on the results and discussion above, the following conclusions can be drawn:

1. E KRK / KKPR services that are still not optimal by increasing organizational capacity are increasing human resources, budgets, and information technology infrastructure.
2. Prioritas strategy in improving budget performance, namely: (1) Strengthening the commitment of the Head of the Spatial Planning Office and DPMPTSP in improving knowledge/skills in the field of Spatial Planning (2) Acceleration of digital RDTRK Issuance and Map Printing Levy Regulation / BNPB and Improvement of spatial planning implementation performance by the implementation of Spatial Planning Legislation. (3) Increasing Socialization and Improving the implementation of e KRK /KKPR and improvement of Community culture in e-licensing (4) Improving internal communication of the Spatial Planning Office from the head of the Satker, Coordinator and Spatial Planning Staff and external affairs with DPMPTSP and Spatial Planning Forum (FPR) (5) Gradual increase in resources (HR, Budget, facilities, and infrastructure and e-government), organizational culture and improving financial performance (6) Summing up coordination between coordinators and Staff in service e KRK/KKPR. (7) Strengthening the duties and functions (Tupoksi) in the field of Spatial Planning in Improving Service Performance e KRK / KKPR (8) Conducting a Reference Study to the Task Force of the Spatial Planning Office, which implies e KRK / KKPR.

REFERENCES

Agus Pramusinto, E. A. P. at all. (2009). *Reformasi Birokrasi, Kepemimpinan dan Pelayanan Publik* (kesatu). Gava Media.

Anonymus. (2021). Peraturan Pemerintah Nomor 16 Tahun 2021 Tentang Peraturan Pelaksanaan Undang-Undang Nomor 28 Tahun 2002 Tentang Bangunan Gedung. *Peraturan Pemerintah, 087169*, 406.

Armstrong Michael. (2009). *Amstrong's handbook of perfomance management : an evidence-based quide to delivering high perfomance (4 th ed)*. Kogan Page.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Bachtiar, R., Dwi P., D. L., Pratiwi, H. E., & Saniyyah, N. (2020). Birokrasi Digital: Studi Tentang Partisipasi dan Kesiapan Masyarakat. *Journal of Governance and Social Policy*, *1*(2), 104–129. https://doi.org/10.24815/gaspol.v1i2.18585

Deddy Mulyadi. (2016). *Studi Kebijakan Publik dan Pelayanan Publik Konsep Aplikasi Proses Kebijakan Publik bebasis Analisis Bukti untuk Pelayanan Publik* (kedua).

Dhevina. (2020). E-Government: Inovasi dalam Strategi Komunikasi. *Kementerian Sekretariat Republik Indonesia*.

Dwiyanto A (ED.). (2006). *Mewujudkan Good Governance Melalui Pelayanan Publik*. Gadjah Mada University Press.

Haryanto, A. T. (2019). *Pengguna Internet Indonesia Didominasi Milenial.*

Kusumah, R. T., & Suryana, H. (2018). Model Analisis Swot Dan Qspm Dalam Pemilihan Strategi Pemasaran Distro. *Seminar Nasional IENACO 2018*, *6*(6), 433–440.

Laoly, Y. H. (2019). *Birokrasi Digital*. Pustaka Alvabet.

Malcolm Goggin. Ann O'M Bowman, james P. L. and L. J. O. Jr. (1990). *Implementation theory and practice : toward a third generation.* Glenview. Setott, Foresman/Litte.

Moh. Thahir Haning, Mashuri H. Tahili, R. H. (2021). *Implementasi Kebijakan Publik* (BMP Modul). Universitas Terbuka.

Murniati, L. S., Santosa, P. I., & Nugroho, L. E. (2015). *IDENTIFIKASI FAKTOR BUDAYA ORGANISAS DALAM KESUKSESAN PENERAPAN E-MONEV KOTA SURAKARTA*. *Snik*, 89–94.

Noveriyanto, B., Nisa, L. C., Bahtiar, A. S., Sahri, S., & Irwansyah, I. (2018). E-GOVERNMENT SEBAGAI LAYANAN KOMUNIKASI PEMERINTAH KOTA SURABAYA (Studi Kematangan e-government Sebagai Layanan Komunikasi Government to Government, Government to Citizen, Government to Business). *Profetik: Jurnal Komunikasi*, *11*(1), 37. https://doi.org/10.14421/pjk.v11i1.1371

Nurmandi Achmad, K. M. S. (2018). *Pelayanan Sektor Publik* (cetaka I).

O'toole, L. (1986). Policy Recommendations for Multi Actor Implementation: An Assessment of the Field. *Journal of Public Policy*, *Vo 6*, 181–201.

Putri, M. R. R., Sukarno, D., & Halim, H. A. (2022). E-Readiness Dinas Penataan Ruang Kota Bandung Dalam Penyelenggaraan Pelayanan Keterangan Rencana Kota (KRK) Online. *JANE (Jurnal Administrasi Negara)*, *13*(2), 217–224.

Rahman, F., & Tarigan, J. S. (2020). *Inovasi Pemerintahan: Menuju Tata Kelola Pemerintahan Daerah Ideal.* Intrans Publishing.

Riau, D. P., & Yuswadi, H. (2014). Improvement Strategy Policy Implementation The Certificate of Building Operability in Probolinggo City. *International Journal of Management and Administrative Sciences*, *3*(09), 37–47. www.ijmas.orgwww.ijmas.org

Rozikin, M., Hesty, W., & S. (n.d.). Kolaborasi dan E-Literacy: Kunci Keberhasilan Inovasi EGovernment Pemerintah Daerah. *Jurnal Borneo Administrator, 16(I),* 61-80.

Ruang, B. P. (2021). *Buletin penataan ruang*. 1–64.

Sarni, W., & Koch, G. (2018). *Creating 21st Century Abundance through Public Policy Innovation: Moving Beyond Business as Usual*. Routledge, Taylor and Francis, Inc.

Schein, E. H. (1988). *Organizational Culture, Sloan School of Management Working Papers*. *2088 (88)*, 1–30.

Schein, E. H. (1992). *Organizational Culture and Leadership*. Josssey Bass.

Setiawan, W. (2017). Era Digital dan Tantangannya. *Seminar Nasional Pendidikan*, 1–9.

Setiyono, Budi. (2016). *Birokrasi dalam Perspektif Politik dan Administrasi* (edisi keti). Nuansa Cendekia.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Susanto, A. (2011). Analisis Citizen ERediness Dalam Pengembangan Desa Berbasis Teknologi Informasi. *Jurnal Masyarakat Telematika Dan Informasi*, 61–274.

Wu, X., Ramesh, M., & Howlett, M. (2015). Policy capacity: A conceptual framework for understanding policy competences and capabilities. *Policy and Society*, *34(3-4)*, 165–171.

Analysis of Tranparency Information In The Procurement Of Goods/Services Through The Media Website (e-Procurement) In Realizing Goods Governance In Polewali Mandar Regency

Miswar[1], Sudirman Karnay[2], Jeanny Maria Fatimah[3]
[1]Post Graduate, Faculty of Social and Political Sciences, Hasanuddin University, Makassar
[2,3]Department of Communication, Faculty of Social and Political Sciences, Hasanuddin University, Makassar
e-mail: [1]miswarpascasarjana1@gmail.com, [2]sudirmankarnay@yahoo.com, [3]jenny.palinggi@yahoo.com

Article Info

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Article of OSC 2022

Abstract

Procurement of goods/services the government has an important role in the implementation of national development to improvement public services and development of the national and regional economy. E-Procurement is a very good approach in an effort to realize a governance that is free from corruption, collusion and nepotism. The study was conducted to analyze: (1) How is the quality of information procuremnet of goods/services through the media website (e-procurement) in Polewali Mandar Regency; (2) How is the transparency of the procurement of goods/services through the media website (e-procurement) in Polewali Mandar Regency. Descriptive qualitative research method, conducted using data from various selected informants using purposive sampling technique with the number of informants as many as 5 (five) people. The results showed that the quality of information on the procurement of goods/services through the media website (e-procurement) in Polewali Mandar Regency was seen from four indicators, namely accurat;, timel line; relevant; and complete, including quality. The transparency of the procurement of goods/services through the media website (e-procurment) in Polewali Mandar Regency was seen from four indicators namely ease of acces, feedback mechanism, update infornation, and ease of site including being transparent.

***Keywords**: Analysis, Information Quality, Information Transparency, E-Procurement, Polewali Mandar*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

Information has become an essensial human need (very importan) to achieve goals. Through information, humans can know the events that occur around them and expand their knowledge. Described by Shannon and Weaper (Vardiansyah, 2004), information is a patterned energy, which influences individuals in making decisions from the possible choices that exist, information is the result of one's intellectual processes. Meanwhile, according to Arifin (2002) exlplained that information is the collection, storage, dissemination of news, data, images, facts, opinions and comments that are needed so that people can understand and react clearly to enviromental conditions (local, national, international) and other people. Others to make the rights decisions. Therefore, a quality information is determined by accuracy, timliness, relevance and compliteness.

Decentralization of government or regional autonomy is a form of central government to local goverenments to organize good and systematic governance. Public organizations in this case the government bureaucracy as stakeholders should have a sense of sensitivity to the interests and problems of the community that must be solved. The bureaucracy is also required to be responsible for carrying out its duties and not carrying out any form of abuse of authority and exceeding the limits of its authority in orde to achieve good governance as stated in law number 14 of 2008 concerning public information disclosure, where one of the objectives of public information disclosure is to realizing good state administration, namely transparent, effective and efficient, accountable and accountable.

The procurement of goods/services whose financing is partly or wholly sourced from the state revenue and expenditure budget (APBN/APBD) is the procurement of goods/services within the government that aims to provide public goods/ services. In the administration of government, the government also needs goods/services, for that it is necessary to procure goods/services. A good goods and service procurement system is a goods and service procurement system that is able to establish the principles of good governance (good governance) encouraging efficiency and effectiveness of public spending, as well as structuring the behavior of the three pillars (government, private, and community) in the administration of good governance. Good governance. Asmawi (Achmadi, 2015) views that governances is more of a series of social-political interaction processes between the government and citizens in various fields related to the interests of the community and government intervention in the interests of these communities. Sadarmayanti (Rossita et al., 2007)reveals that the main elements of governance, namely: accountability, transparency, openness, and the rule of law are supplemented by management competence and human rights. Agus Dwiyanto (Nurdiansyah, 2016) defines transparency as the provision of information about government to the public and guarantees the ease of obtaining accurate and adequate information.

Currently, the government has implemented an electronic procurement of government goods/services called e-procurement which is carried out electronically (web/internet based). This is like the research conducted by Dwi Novitarini (2020) where the result of his research show that the implementation of the procurement of goods/services is in accordance with the principles. The obstacles that occur are server distrubances, the number of certified ASNs for procurement of goods/services is limited, business actors have difuculty meeting the requirements, and business actors do not master the system. Another study was cinducted by Ayu Rosan Wina (2019) where the result of his research show the implementation of electronic procurement of goods/services for procurement of goods, construction works, consulting services and other services in accordance with the principles of good governance

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

and the principles of procurement of goods/services according to presidential regulation No. 16 of 2018. Obstacles encountered are electricity networks problem which affect server connections, system disturbances, and infrastucture problems.

Polewali Mandar Regency is one of the areas that uses e-procurement where all goods and services procurement activities in e-procurement are carried out through the media website, namely through the website (www.lpse.polmankab.go.id). The objectives of this e-procurement include creating transparency; increasing market access and fair business competition; improve the efficiency level of the procurement process; support the process of monitoring and auditing; meet the need for real-time access to information.e-procurement offers the widest opportunity for improvement in productivity costs. Therefore, e-procurement is the most effective way to improve management, either directly of indirectly, in disbursing purchasing sources. So that e-procurement will increase the key to success in increasing competitiveness in the future.

That to realize the procurement of government goods/services as mentioned above, it is necessary to regulate the procedures for the procurement of goods/services that are clear, comprehensive and clear accordance with good governance so that it can become an effective arrangement for parties related to the procurement of government goods/services. Where it is hoped that the implementation of goods/services with the e-procurement system can provide quality and transparent services to the community towards the implementation of a clean government and free from corruption, collusion and nepotism.

Based on this, e-procurement in Polewali Mandar Regency Can be declared effective or not, so the authors are encouraged to conduct research according to the according to the background of the problem described, the researchers formulated the following problems: (1) How is the quality of information on the procurement of goods/services through the media website (e-procurement) in Polewali Mandar Regency; (2) How is the transparency of the procurement of goods/services through the media website (e-procurement) in Polewali Mandar Regency. To provide a clear direction on the purpose of this research are formulated as follows: (1) to analyze the quality of information on the procurement of goods/services through the media website (e-procurement) in Polewali Mandar Regency; (2) to analyze the transparency of the procurement of goods/services through the media website (e-procurement) in Polewali Mandar Regency.

METHOD

The location of this research was carried out at the UKPBJ Office (Unit For Procurement of Goods and Services) of the Polewali Mandar Regency Government. The research approach used in this study is a qualitative approach. According to Moleong (2017) said that research using a qualitative approach intends to understand the phenomenon of what is experienced by research subjects such as behavior, perception, motivation, action and others holistically and by way of description in the form of words and language, a special context that is natural and by utilizing various natural methods.

The informants in this study were 5 (five) people consisting of the Head of UKPBJ Polewali Mandar Regency, Head of LPSE Sub-Section, LPSE Selection Working Group, and Goods and Service Providers of Polewali Mandar Regency Government.

Data collection techniques used in this study are: (1) Observation technique by observing, listening and recording all inputs by collecting the required data and participating in the activities carried out by the informants; (2) an interview technique where the interviewer is involved in a relatively long social life with the aim of getting real information about the

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

attitudes and behavior of the informant, and (3) a literature study is carried out to obtain data through the documentation carried out by the informant. The data analysis technique in this study was preceded by efforts to reveal the truth of the research subject by testing the answers to questions related to their experience and knowledge (Komunikasi et al., 2016). Then it is carried out interactively and takes place continuously until it is complete so that the data is saturated. Furthermore, the researchers conducted a triangulation analysis, namely analyzing the answers of the research subjects by examining their authenticity based on existing empirical data. The next stage is that all views, opinions or data from a research subject are anologized with opinions, views, or data from other subjects.

RESULTS AND DISCUSSION

Result

Quality of information on Procurement of Goods/Services Through Media Website Polewali Mandar

In carryng out the procurement of goods/services, the role of information on the procurement of goods/services plays an important role because if the actor in the procurement of goods/services and/or obtains or has information on the procurement of goods/services which is wrong, irrelevant and already not up to date, it will be difficult for him to complete the. Process of procuring the goods/services properly and perfectly. It can even cause state/regional finance losses. Information must be owned and understood by stakeholders.

The success of a policy product can be seen from the delivery of precise and clear information in accordance with the targets to be achieved. Quality date is very necessary in providing information. With quality data, the resulting information will be of higher quality as well. The information produced is said to be of high quality, if the information obtained is accurate, timely, relevant and complete. Information is the key to success in carrying out an activity for decision making, because information is an important factor in carrying out activities. Information accuracy. In a tender through LPSE, when interested in a job, you can download the document and in the document it appears the KAK, administrative requirements, technical requirements, equipment, as well as drawings and specifications of the type of goods needed. Through LPSE the results are know faster the value of the offer will appear so that it is known by other registrants/providers.

Time Line , in presenting information, it must be presented in a timely manner because if there is no time limit, the provider will be disadvantaged because he cannot prepare himself to conduct the auction. Through LPSE, tender announcments are delivered according to schedule. Each stage in the procurement process through this website has a time limit, for example to enter bid documents, if partners are late in knowing the information, they must wait until further procurement is carried out so that the provider must always monitor the site and email of the provider company.

Relevant information. In carrying out the work, the provider certainly needs information at each stage of the work or during the process of implementing the procurement of goods/ services. Through LPSE Service they can see directly what information is needed without having to ome to the office, just open the Polewali Mandar Regency LPSE Service, information on the implementation of government procurement of goods and services starting from procurement planning, how much in the budget, bidding, annoucment of winners until the completion of the procurement process.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Complete information. Compliteness of information in the procurement of goods/service is of course very much needed by the provider. The presentation of information must be presented in a complete manner where the work plan documents that the OPD input in SIRUP are in accordance with the OPD KAK with the MDP that the Election Working Group made before being announced at the LPSE. With the complete information on the requirements presented, it is hope that the provider can download the document, study the requirements and prepare to register for the work package being auctioned off. Apart from this, in the process of procuring goods/services, the price guide for the catalog of goods made by UKPBJ Polewali Mandar Regency is closed/unavailable so sometimes providers complain about bids that cannot approach the HPS value (Self Estimated Price) for the work auctioned by UKPBJ.

Transparancy of Procurement of Goods/Services through website media (e-procurement) in Polewali Mandar Regency

Transparency indicates a situation where all aspects of the services delivery process are open and can be easily identified by user or stakeholders in need. If all aspects of the service delivery process are published openly so that they are easily accessible and easily understood by the public, than the practice of providing services can be assessed as having high transparency. The information submitted in the SIRUP must be avaible, that is, any information submitted has been compilled and inputted in accordance with the implementation of the procurement.all information provided on the Polewali Mandar Regency LPSE website is ready to be presented to service users and to be known without suspicion.

Transparency in the process of procuring goods and services through website media can be seen from the availability of information on the procurement process for goods/services, where the information must be easily accessible and obtain information, there is information updating, provides opportunities for user to respond, and there is ease in understanding information displayed. (a) ease of acces and obtaining information. Information is open to anyone, the general public can see through the Polewali Mandar Regency LPSE website, just clicking on search for packages will display all work packages in the system, as well as how much budget is used for procurement, everything will be clearly visible trhough the application. (b) provide an opportunity for users to respond. In the implementation of the procurement of goods/services electronically, the explanation stage is called aanwajizing. At this stage explanations, questions and answers are done online. The LPSE Selection Working Group and all registrants at the auction can exchange explanations, questions and answers. Questions and answers are carried out until the aanwijzing time limit is complete. (c) information updates. The provision of information is carried out on an ongoing basis so that parnerts can find out developments regarding the ouction of goods and services. Each stage is always informed through LPSE so that providers are no expected to be late in participating in any procurement process activities. (d) ease of information to read and understand. In the initial view, it can be seen that the arrangement of sub menus such as e-procurement, announcements, news and others is very organized and above so that the web can be easily read. The search menu can be found when we open the sub menu for example “auction winner”.when we hover over certain menus or link, the letters will change color or the cursor will change. This is so users can know that if the link is clicked it will provide complete information. Overall, the lpse.polmankab.go.id site is good and informative. It’s that there are still some shortcomings, for example tha lack of animation that can attract users to read. In

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

accessing this site users will not be confused because the layout and layout design is quite effective.

Discussion

This research shows that the quality of information on the procurements of goods/services through the media website at the Polewali Mandar Regency Government can be said to be accurate, timely, relevant, complete and the level of transperancy of the procurement of goods/services through the media website at the Polewali Mandar Regency Government is quite high seen from several indicators.

The internet is a technology that clearly describes properties such as convergence, digital networking, global reach, convergent, interactivity, many-to-many communication, as well as a form that allows users to become creators or users of content of messages (Flew, 2014). New media or online media is a communication technology device that shares tha same characteristics which, apart from being new, were made possible by digitization and its wide availability for personal users as a means of communication (Denis McQuail, 2011). Online media is a general term for a form of media based on telecommunications and multimedia with information that is update (latest), actual and reaches the whole world with internet access, and can be used as a means of producing and disseminating information. There are several general characteristics possessed by online media, namely:speed of information, updating (updating), interactivity, personalization, load capacity can be enlarged, connected to other sources (hyperlinks).

Information speed. Through electronic procurement (e-procurement), the entire procurement process from the procurement plan to the completion of the work/activies for the procurement of goods/services will be carried out more quickly. Because e-prosurement is a technological tool, organizational procedures and steps that allow the purchese of goods/services online so that all stages of work will be completed more quickly, no need to wait long, in a matter of hours and even minutes information can be obtained immediately. Thus accelerating the distribution of information to the market (accessors).

Information updates. Information provide through electronic procurement service in Polewali Mandar Regency includes updates, because every change in information the Polewali Mandar Regency LPSE immediately updates the news. The information is provided continuously because in procurement through online media there are activities that have a time limit, so that if this information is late, it can hamper other work processes, for example, there is a delay in the auction schedule. Vice versa, the provider (partner) must always monitor the update of information. For example, to ensure the bidding documents, if th partner is late in knowing the information, he must wait until there is a further procurement.

Interactivity. In the implementation of the procurement process for electronic goods/services, there is an explanation stage commonly referred to as aanwijzing. At this stage there is no face-to-face meeting, each party is enough to be in front of their computer. Explanatons, questions and answers are done online. The committee and all registrants at the auction can exchange explanations, questions, and answers. In this way, no physical contact occurs, questions and answers are carried out until the aanwijzing time limit is over.

Personalization. In the procurement of good/services, it means that the identification of information needs is carried out in planning the implementation of both internally and externally. Identification of this information need is what is needed in every step of the procurement of goods/services activities. Through the Polewali Mandar Regency LPSE service, providers can see and find out the information they need at each stage of the activity

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

and to get that information they only open the Polewali Mandar Regency LPSE service because all information is about the procurement of goods/service because all information is about the procurement of goods/services because all information is about goods/services procurement activities. Implemented using information technology and electronic transactions.

Payload capacity can be stored and enlarged. The results of the documentation of information on the procurement of goods/services must be stored and organized in an orderly, complete, accurate, safe, and easy to track manner or retrieved when the information on the procurement of goods/services is needed. The purpose of this stage is to organize the information that has been collected, processed, previously analyzed. Furthermore, it can also avoid duplication or redundancy of work, and of course this stage is useful so that the information is said to be traceable when needed in the future. For providers, submitting bids will be more effective, where the availability of files will be stored because when they have participated in an auction, the provider's data will still be stored in the system.

Connect with other sources. In the e-procurement system, the entire auction process from the announcement, bidding, selection, to the announcement of the winner will be carried out ounline through the internet site, any information presented regarding the procurement of the information. Records of activities or events in various forms and media in accordance with the development of information and communication technology made and will be accepted by state institutions, local governments, educational institutions, companies, political organizations, community organizations, and individuals.

CONCLUSION

Based on the results of research and discussion, it can be concluded that the quality of information on the procurement of goods/services throught the media website in Polewali Mandar Regency can be said to accurate, timely, relevant and complete. Apart from this, there are still problems between providers, such us the price offered by the provider is difficult to approach the UKPBJ HPS (Self Estimated Price) price due to the absence of a price guideline/goods catalog provided/closed on the lpse.polmankab.go.id website. By UKPBJ Polewali Mandar Regency. The transparency of the procurement of goods/services through the media website in Polewali Mandar Regency is seen from the indicators: the ease of accessing, and obtaining information, and the ease of information to be read/understood can be said to have a high level of transparency. It's just that the OPD is sometimes late in submitting activity plans, but this does not hinder the process of procuring goods/services electronically in Polewali Mandar Regency. Therefore, the Goods/Services Procurement Policy Institute makes rules regarding price guidelines/goods catalog in the Polewali Mandar Regency area and price guidelines/goods catalogs are displayed in the lpse.polmankab.go.id website feature. In addition, the UKPBJ (Goods/Services Procurement Work Unit) should increase the provision of motivation to the OPD to include timely activity plans so as not to hinder other work processes.

ACKNOWLEDGEMENTS

The During the writing process, the author has received guidance, advice, prayers and encouragement from various parties. So the authors would like to thank:

Mr. DR. H. Muhammad Farid, M.Si, as the Head of the Postgraduate Communication Sciences Program at Hasanuddin University who has given the author the oppotunity to participate in and complete studies in the Communication Masters Study Program.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Mr. DR. Sudirman Karnay, M.Si as supervisor 1 and Mrs. DR. Jeanny Maria Fatimah, M.Si, as the author's Advisor 2 who has been patient and sincere in guiding and teaching the author from the preparation to the completion of this writing.

Mr. Prof. DR. Hafied Cangara, M.Sc, Mr. Prof. DR. Andi Alimuddin Unde, M.Si (Dean of the Faculty of Social and Political Sciences, Hasanuddin University) and Mr. DR. Iqbal Sultan, M.Si, Mr. DR. Arianto, M.Si and Mr. DR. Muhammad Farid, M.Si, AS the Examiner Team who has provided suggestions, criticism and corrections in improving this writing.

All parties UKPBJ where the author conducts research along with the informants who have assited the authors in data collection.

REFERENCES

Achmadi. (2015). *Kewajiban Pelayanan Publik Oleh Pemerintah Daerah Di Era Otomi*. *14*, 221–227.

Arifin, Anwar. (2002). Ilmu Komunikasi. Jakarta: Raja Grafindo Persada.

Dwi Novitarini. (2020). Pelaksanaan Pengadaan Barang/Jasa Melalui E-Procurement Di LPSE Kota Salatiga. Skripsi. UNNES.

Hamad, Ibnu. (2013). Komunikasi Dan Perilaku Manusia Edisi Kelima. Jakarta: PT Raja Grafindo Persada.

Hidayat, Rahmat. (2015). Penerapan E-Procurement Dalam Pengadan Barang/Jasa Pemerintah Guna Mendukung Ketahanan Dan Tata Pemerintah Daerah (Studi Pada Unit Layanan Pengadaan Barang/Jasa Pemerintah Kabupaten Penajam Paser Utara Provinsi Kalimantan Timur). Yogyakarta. Pascasarjan UGM. C., Tan, B., Xiao, X., Tan, F. T. C., & Sun, Y. (2017). Nurturing a FinTech ecosystem: The case of a youth microloan startup in China. *International Journal of Information Management*, *37*(2), 92–97. https://doi.org/10.1016/j.ijinfomgt.2016.11.006.

Karnay, Sudirman. (2020). Penerapan Electronic Government pada Dinas Komunikasi, Informatika, Statistik, dan Persandian Provinsi Sulawesi Selatan. Disertasi. Program S3 Administrasi Publik. Fakultas Ilmu Sosial dan Ilmu Politik. Universitas Hasanuddin.

Komunikasi, I., Ilmu, F., Dan, S., Politik, I., Riau, U., Ready, O. A., Sos, S., & Sc, M. (2016). *Rumyeni, S.Sos, M.Sc*. *3*(1), 3.

Krina L.P.L. (2003). Indikator Dan Alat Ukur Prinsip Akuntabilitas, Transparansi, dan Partisipasi. Jakarta: Badan Perencanaan Pembangunan Nasional.

Moleong L,J. (2017). Metode Penelitian Kualitatif. PT Remaja Rosda Karya: Bandung.

Nurdiansyah, E. (2016). Keterbukaan Informasi Publik Sebagai Upaya Mewujudkan Transparansi Bagi Masyarakat. *Jurnal Bhinneka Tunggal Ika*, *3*(2), 147–151. https://ejournal.unsri.ac.id/index.php/jbti/article/view/4593/pdf

Oktarina, Yetty dan Abdulla, Yudi. (2017). Komunikasi Dalam Perspektif Teori Dan Praktik. Jakarta: Deepublish.

Rossita, A., Nurchana, A., Haryono, B. S., Adiono, R., Publik, J. A., Administrasi, F. I., & Brawijaya, U. (2007). *EFEKTIVITAS E-PROCUREMENT DALAM PENGADAAN BARANG / JASA (Studi terhadap Penerapan E-Procurement dalam Pengadaan Barang / Jasa di Kabupaten Bojonegoro)*. *2*(2), 2007–2011.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

West Richard, Lynn H Turner. (2018). Pengantar Teori Komunikasi (Analisis Dan Aplikasi Edisi 5). Jakarta: Salemba Humanika.

Wina, Ayu Rosan. (2019). Mekanisme Pengadaan Barang/Jasa Secara Elektornik (E-Procurement) Di Pemerintahan Daerah Kabupaten Bandung Dikaitkan Dengan Prinsip Good Governance Sesuai Peraturan Presiden No. 16 Tahun 2018 Tentang Pengadaan Barang/Jasa Pemerintath. Thesis 171000351. Unpas.

Vardiansyah, Dani. (2004). Pengantar Ilmu Komunikasi. Bogor: Ghalia Indonesia.

The Future of Cities in the Metaverse Era: Are Indonesian Cities Ready?

Bani Pamungkas
Center for Policy and Government Studies Bakrie University
e-mail: bani.pamungkas@bakrie.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

Before Covid-19, the metaverse was viewed as merely an entertainment experience for the community, such as a place to spend time and play games. However, following the pandemic, a future second world for society emerged in the Metaverse. The metaverse is quickly becoming a part of our physical and digital life, including city life. Cities can use the metaverse in a variety of ways, ranging from simple to advanced applications of the technology. Cities in Asian, such as Seoul and Shanghai, are quickly moving to be the first to capitalize on the emerging metaverse. They also chose to develop a strategic plan and begin investing in the metaverse, believing that the virtual world will provide benefits such as increased information sharing, more accessible city services, stronger connections with and among community members, and a new virtual economy. Then, how are Indonesian cities dealing with the metaverse's rapid expansion. As a preliminary qualitative study, this research provides an overview by reviewing various relevant literature published in the last 5 years, explaining the concept of the metaverse and how it affects city life during IoT and the virtual world's rapid development. Taking lessons from two major Asian cities in responding to the development of the metaverse, it is hoped that this will deliver like a reflection and policy framework for Indonesian cities in the future.

***Keywords**: Pandemic, Metaverse, Global Cities, Virtual World, and Indonesia Cities*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

The Metaverse has evolved into a part of the future reality depicted in various books and films, since its first appear (J. E. Jeon, 2021; M. Damar, 2021; Ramesh et al., 2022). The term, derived from the prefix "meta" (implying transcendence or beyond) and the word "universe," refers to a 3D virtual shared world in which all activities can be carried out using augmented and virtual reality services (Abdel-Moneim Gaffar & Abdel, 2021; Akour, Al-Maroof, Alfaisal, & Salloum, 2022).

At first glance, the metaverse is defined as a vast virtual environment parallel to the physical world in which users interact via digital avatars. Following that, the concept of the metaverse evolved further as a computer-generated universe has been defined through vastly diverse concepts such as lifelogging, collective space in virtuality, embodied internet/spatial Internet, a mirror world, and an omniverse: a venue of simulation and collaboration (J. E. Jeon, 2021; Lee et al., 2021). Hence the metaverse is a three-dimensional virtual world in which avatars act on behalf of real-world users. It is a visual world that combines the physical and digital realms (Suzuki et al., 2020).

According to its history, Metaverse is an advanced form of online gaming. Wolfenstien 3-D, Duke Nukem 3-D, and doom are examples of video games that have transformed gaming into a 3-D experience (Kemec, 2022). These video games were widely popular, and they helped to establish the popular computer gaming first-person shooting genre (Cammack, 2010). The combination of 3-D graphic developments from first person shooter games with role playing and character communication from Massive Multiplayer Online Role Racing Game (MMORRG) genres became the groundwork for realizing the metaverse world (Mystakidis, 2022).

Avatars, content creation, virtual economies, social acceptance, security, and privacy are all user-centric aspects of the metaverse system (Lee et al., 2021). It also includes video conferencing, email, virtual reality, augmented reality, social media, and live streaming as metaverse elements (Abdel-Moneim Gaffar & Abdel, 2021). In short, the metaverse is a virtual environment that combines physical and digital elements, made possible by the convergence of Internet and Web technologies, as well as Extended Reality (XR).

As part of the Fourth Industrial Revolution, the metaverse is fostering convergence between the virtual and real worlds (H. Jeon, Youn, And, & Kim, 2021). The Metaverse represents an alternate world that cannot be adequately represented in the real world. The emergence of metaverse occurs in three stages: (I) digital twins, (II) digital natives, and (III) physical-virtual reality coexistence, or surreality (Lee et al., 2021). Digital twins are large-scale, high-fidelity digital models and entities that have been duplicated in virtual environments (Park & Kim, 2022). They mirror the properties of their physical counterparts, such as object motion, temperature, and even function (Mohammadi & Taylor, 2018). Using a computer-aided design (CAD) application, the data between the virtual and physical twins binds them together (Bauer, Oliveira Antonino, & Kuhn, 2019; Pokhrel, Katta, & Colomo-Palacios, 2020).

The second stage focuses on native content creation after establishing a digital copy of the physical reality. Content creators work on digital creations that are linked to their physical counterparts or only exist in the digital world (J. E. Jeon, 2021). They must connect to ecosystems to support their digital creations. However, research into such applications is still in its infant stages (Lee et al., 2021). The progress made on the first point of contact with users, such as input techniques and content creation authoring systems.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

In the third stage, the metaverse could evolve into a self-sustaining and persistent virtual world that coexists and interacts with the physical world with a high level of autonomy (Lee et al., 2021). Interestingly, the metaverse enables interoperability between platforms representing various virtual worlds (J. E. Jeon, 2021).

Although it is still in its early stages, it is undeniable that the metaverse will have an impact on business, and human society (Fernandez & Hui, 2022). Acceptably, Metaverse is rapidly expanding, as evidenced by Geppetto having 200 million subscribers and Roblox having 150 million monthly active users (MAU) (Park & Kim, 2022). The market is expected to reach 280 billion US dollars by 2025, and the global market for Metaverses-related VR (virtual reality) is expected to grow from 33 billion dollars in 2020 to 338.1 billion dollars in 2025, and 1.92.4 trillion dollars in 2030 (J. E. Jeon, 2021). Microsoft and Meta (Facebook's parent company) have also invested heavily in developing the next big service that can be integrated into the metaverse (Chukwunonso, Njoku, Lee, & Kim, 2021; Fernandez & Hui, 2022). According to Mark Zuckerberg, the founder of Facebook, the metaverse will be the next major computing platform after smartphones and the mobile web (Fernandez & Hui, 2022; M. Damar, 2021).

In the context of society, the Metaverse seems to have the prospects to be the leading social technology of the future (A.S. Hovan George et al., 2021). They would provide new avenues for us to express ourselves and interact with others without limitations (location, time, race, gender) (Fernandez & Hui, 2022). Metaverses would improve communication and interaction among members of society for collaborative activities in a virtual world such as playing games, working, meeting, shopping, watching movies, attending concerts, and doing almost anything else they could do in the real world (Davis, Murphy, Owens, Khazanchi, & Zigurs, 2009).

Since the spread of COVID-19 around the world, there has been an increase in demand for virtual reality, and the Metaverse industry has grown (A.S. Hovan George et al., 2021). The pandemic has caused changes in one's work life and interpersonal communications due to health and safety concerns, resulting in a distance and remoteness from one another (Binson, 2020). In the midst of a pandemic, the public is paying close attention to the metaverse, as evidenced by the Google Trends report on searches for the term "metaverse," which has increased from the beginning of October 2021 to the end of January 2022 (Sudah, Petrov, & Gupta, 2022).

Cities have now entered the next stage of human evolution, with people migrating from farms to cities and then to the Internet as technology advances (Hemmati, 2022). Hence, cities such as Santa Monica, Seoul, and Shanghai provide early indicators of where city metaverse use is positioned. City life in a virtual world will certainly be smarter and more interactive, with the assistance of IoT-based infrastructure, sensors, video cameras, social media, and other information sources to gather information about their citizens' needs (Babajide, 2021).

With the facts described above, how prepared are Indonesian cities to respond to the innovation of the metaverse. This study is a preliminary view at how cities in Indonesia are preparing for and responding to the metaverse's progression. What infrastructure and ecosystems should be prepared, and how is the city government working to adapt to and mitigate risks throughout the virtual world?

METHODOLOGY

In this study, we decided to conduct qualitative research using a review of relevant literature from the last five years to understand the comprehensive landscape of existing

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

studies related to the metaverse in the urban context. A literature search was conducted to identify studies that explain the concept of the metaverse in depth and how it relates to the future life of the city as a necessary consequence of IoT emergence.

To search the relevant literature, two strategies were used (Kurniasari, David, Cempaka, & Ardiansyah, 2022). To begin, searches were conducted on international electronic databases with a high-medium reputation, such as Sciencedirect, ResearchGate, DOAJ (Directory of Open Access Journals), and Google Scholar. The following keywords were used in the search: metaverse, city, and urban governance. Second, a manual search (i.e. snowball searching) was conducted to maximize the results by checking the references cited by the retrieved articles. Then we choose and discard papers that are relevant to the research context. Following that, create cluster-related papers and a framework for analysis (Park & Kim, 2022). In addition, this study expands on related documents and reports to provide an overview of how global cities respond to the metaverse.

The part of this study is organized as follows. We describe and elaborate on the essential components for responding to the metaverse in a city context: metaverse architecture, which includes technology, ecosystem, and infrastructure. Then lessons from global cities and the ability of Indonesian cities to respond to the metaverse are also discussed in the results and discussion section.

RESULTS AND DISCUSSION

a. Architecture, Technology and Ecosystem of Metaverse

The Metaverse is built on technologies that enable multisensory interactions with virtual environments, digital objects, and people (Mystakidis, 2022). The technology in the metaverse must be supported by emerging technologies such as 5G, augmented reality (AR) and virtual reality (VR), high-speed networks and edge computing, artificial intelligence, and Hyperledgera, in addition to the internet, social networks, gaming, and virtual environments (or blockchain) (Lee et al., 2021; Park & Kim, 2022). Hence a shared 3D environment, avatar, communication (interpersonal, group, audience), real-time interaction, creative expression (personal and environmental), and financial resources are required for a metaverse to meet real-world requirements (Cammack, 2010).

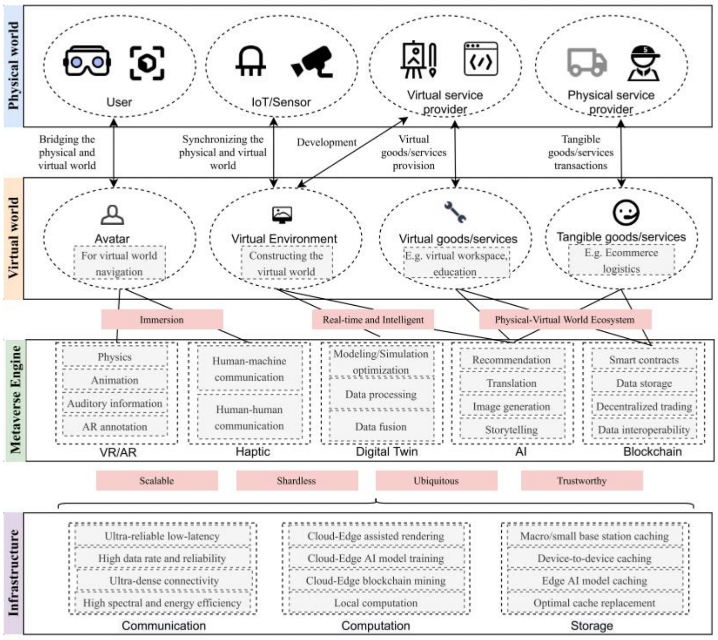
Physical-virtual world interaction/ecosystem, metaverse engine/technology, and infrastructure are the layers of the Metaverse architecture (Lim et al., 2022). The metaverse's virtual environment combines physical and digital elements and includes a variety of scenes, non-player characters (NPCs), and player characters (Avatars). There are two methods for creating a virtual scene in the metaverse: physical construction and design-based construction (Zhao et al., 2022). Physical-based construction, also known as 3D reconstruction, is one method of creating 3D models by using 3D measurement methods, primarily laser scanning and photogrammetry, to create digital twin models (Deng, Zhang, & Shen, 2021). Meanwhile, another method for creating 3D models is to use special 3D modeling software, which is based on the designers' ideas and designs for depicting futuristic objects and fantasy creatures (Zhao et al., 2022).

Physical-virtual world interaction is a component of the metaverse ecosystem that allows physical-world stakeholders to enter and interact with the virtual world via a variety of components such as Head Mounted Displays (HMDs) or AR googles; IoT and sensor networks; virtual service providers/VSPs; and physical service providers. Hence, the

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

metaverse ecosystem is defined as a self-contained, meta-sized virtual world that mirrors reality and allows human users to live and play in a self-sustaining, persistent, and shared realm. Avatar, Content Creation, Virtual Economy, Social Acceptability, Security and Privacy, and Trust and Accountability are the six components of the ecosystem (Lee et al., 2021).

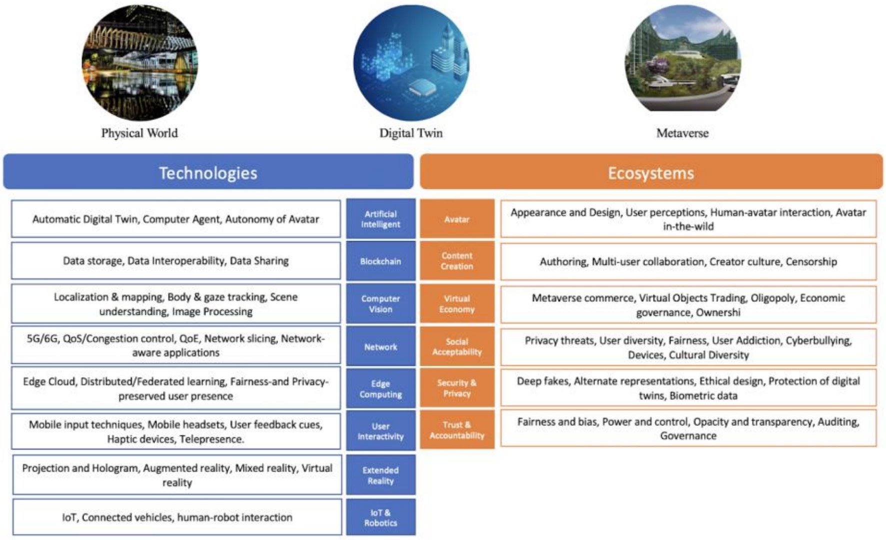
Meanwhile, the Metaverse Engine receives input such as data from components controlled by stakeholders and aided by metaverse support technology. With the assistance of progressively advanced tech, the virtual world is created, managed, and constructed based on such input. Technology is the first critical factor that supports the creation of the metaverse (Lee et al., 2021). Human users can access the metaverse via artificial intelligence (AI), blockchain, computer vision (CV), network, edge computing, user interactivity, extended reality (XR), and robotics/Internet-of-Things, which are the eight pillars for the metaverse (IoT) technology (Fernandez & Hui, 2022; Knox, 2022; Lee et al., 2021; Mystakidis, 2022; Owens, Mitchell, Khazanchi, & Zigurs, 2011; Park & Kim, 2022).



(Source: (Lim et al., 2022))

Figure 1. The Metaverse Architecture

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4



(Source: modify from (Lee et al., 2021))

Figure 2. Technology and Ecosystem Metaverse

In Metaverse, the infrastructure element is critical for allowing users to coexist in a shared digital space. Infrastructure support is required to supply data and information for the creation of virtual world platforms for data analysis and execution, as well as real-time feedback to the physical world (Deng et al., 2021). The above metaverse's infrastructure support is related to communication and network infrastructure, as well as computing and storage infrastructure (Lim et al., 2022). Support for communication and network infrastructure is provided by 5G or 6G internet technology, whereas support for computing and storage infrastructure requires powerful computers and adequate cloud-edge-end computation (Lim et al., 2022; Mozumder, Sheeraz, Athar, Aich, & Kim, 2022).

Furthermore, by understanding Metaverse architecture, technologies and ecosystem, governments and businesses will be able to discover new ways to enrich our society with virtual reality connectivity, potentially enriching our world and ensuring the viability of the digital economy. Through the strategic use of digital infrastructure and big data technologies, metaverse technology attempts to develop smart forms of living, mobility, environments, people, economy, and government (Lee et al., 2021). The Metaverse contends the preeminence in advanced technologies and solutions for achieving numerous benefits in various domains of urban life.

b. The Metaverse's Impact on Global Cities and Urban Life

The idea of the "Metaverse" has enabled technological change in all aspects of life. Away from the early 3D virtual world, the metaverse is about creating and sharing different experiences and values through the interaction between the virtual world and the real world through the intersection with reality (Song & Hong, 2021). Hence the Metaverse attempts to rebuild the world and affect the recent relationship between humans and their physical surroundings, including cities. The Metaverse tech would also transform the existing

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

relationship between the city and society, bringing about a dramatic change in human relations.

The metaverse has the potential to positively impact city governance in relation to economic, social, and environmental benefits (Duan et al., 2021). Hence, the Metaverse can also be viewed as a self-contained economic system, thorough with a digital item production and consumption chain (A, 2022). Metaverse commerce, as a new concept, refers to trading that occurs in the virtual world, including but not limited to user-to-user and business-to-user trade. Even though commerce is now conducted digitally, the trading system can draw heavily on the established e-commerce system. Moreover, as a new source of economic growth, the city's economy can gain from the metaverse commerce channel. The economic metaverse provides a potential opportunity for new professions in the urban field of work. The metaverse ecosystem will provide profitability for content creators, influencers, and city creatives (A.S. Hovan George et al., 2021). The metaverse's experience and contribution to the economy will grow, making it more attractive to city people. In short, the virtual economy will assist urban growth at same moment.

Metaverse also provides a new way to bring up urban citizens' knowledge about the importance of caring for the urban environment through more engaging, broad-reaching, and effective technology and virtual interactions (Rillig et al., 2022). Hence, the use of metaverse technology for learning and communication, as well as facilitating virtual viewing of environmentally sensitive sites when visited in person, enhances city residents' awareness of the urban environment. Furthermore, metaverse services enhance the creation of knowledge and access to information of the urban environment for urban dwellers to know and study.

In terms of visibility, variability, inclusion, and unity, social metaverse makes a positive contribution to urban society. The metaverse enables for more seamless interaction and collaboration. Able of interacting and making connections between city residents without due consideration for distance or geography. Furthermore, the digital world can make life simple to actively engage in to be a part of virtual global citizen activities (Lee et al., 2021). People can visualize the metaverse as a place where users can exhibit their artwork, socialize, play, and learn, among other things.

The metaverse also can be construed as an equalizer, as it eliminates gender, race, disability, and social status (Lee et al., 2021). Users can personalize their avatars, with only their imagination as a limit. This feature will enable the metaverse to create a more equitable and sustainable urban society in the virtual world.

The metaverse can be used to enhance cultural communication and protection. For example, the metaverse could be used to preserve and restore art, historical buildings, museums, and so on (Kaji, Kolivand, Madani, Salehinia, & Shafaie, 2018). The metaverse could also create an endless number of urban communities with various beliefs and thoughts, enabling anyone to interact.

However, the Metaverse also raises concerns about the risks and effects from its implicit technologies in the context of urban society's core values. Several challenges remain in the creation of a metaverse, including standards of conduct, data protection, and governance.

Metaverse technology nowadays can reshape our cities into forms that are seen in science fiction films. Through information-based smart city management, the functions and roles of urban spaces differ in the metaverse ecosystem (Yoo, Piscarac, & Kang, 2022). It appears that by digital twin in the Metaverse, the real city can elicit virtual-world experiences,

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

allowing for a life-like 3D experience of moving through the city (Babajide, 2021). To solve externalities such as traffic congestion, environmental emissions, and sea level rise, digital twin technology can modify condition of the city's environment (Geraghty, Lee, Glickman, & Rainwater, 2022). As a result, metaverse technology can manipulate viewers' notions of the city's actual problems and reshape people into a more suitable imagination digital twin (Abdel-Moneim Gaffar & Abdel, 2021). As a result, it appears that physical space is no longer important and has been replaced by the digital world. Despite the fact that we are still living in our city on the same planet, facing real challenges that still require immediate solutions (Noor, 2023). As a practical matter, the Metaverse is becoming an escape room for citizens to shift their contribution and responsibility to the city's real problems.

Another issue with metaverse technologies is that people address a wide range of privacy and security concerns for users and the general public (Chukwunonso et al., 2021). Sensors are commonly used in these technologies to scan and monitor the surroundings of the users (Lee et al., 2021). These scans can collect information that users and bystanders in the monitoring zone may find useful. HMDs, which are frequently used to view the metaverse, can collect non-obvious biometric data (head movement, eye tracking). The biometric data collected jeopardizes the most intimate aspects of our psyche.

Misbehavior among avatars is another instance of a moral violation which requires the establishment of clear rules and policies to govern the metaverse (Fernandez & Hui, 2022)**.** Hence, there's the potential of a value battle in the metaverse environment, which prioritizes freedom on the one hand while preempting behavior and attitude that distorts healthy interactions between peers' virtual citizens on the other. The governance of such virtual massive worlds creates challenges in regulating user behavior (Fernandez & Hui, 2022). As a result, the metaverse necessitates regulations and policies to govern the platform and its users.

Another public challenge concerns Metaverse technology consumption, which is linked to the hidden agendas of large tech companies, both political and economic in essence (Bibri & Allam, 2022). Urban services and urban operational governance are highly responsive to data-driven urbanism; systems, devices, things, and processes are much more tightly interconnected; and citizens are heavily monitored and constantly surveilled (Bibri & Allam, 2022). The latter results in massive amounts of personal data being collected, analyzed, repackaged, and manipulated in order to manage, control, and regulate urban lifestyles. This creates enormous opportunities for big tech companies to profit from data harvesting and exploitation. However, seeing as market share is concentrated in the hands of a few leading technology companies, the metaverse industry has the potential to become an oligopolistic market (Lee et al., 2021).

In the midst of arising pros and cons, the Metaverse is a requisite which will be present as part of the future evolution of technology and people's lives. The Metaverse appears to mimic the real world in political, economic, social, and cultural interactions (H. Jeon et al., 2021). This convergence of offline and online is being created in manufacturing, logistics, finance, automotive, sports, healthcare, education, food, and everyday life as an alternative world that cannot be achieved well in the real world. This opportunity would also influence several global cities to participate in the metaverse world.

The Seoul Metropolitan Government (SMG) will be the first major city government to enter the metaverse (Anugraha, 2021). The SMG announced the "basic plan for metaverse" on November 3, 2021 as a comprehensive scheme to build a metaverse for all administrative services related to the economy, culture, tourism, education, and civil complaints (Goverment,

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

2021). It seeks to transform Seoul into "a city of coexistence, a global leader, a safe city, and a future emotional city" (Gaubert, 2021). The government expects that by donning virtual reality goggles, Seoul residents will be able to do everything from touring a historic site to filing a civil complaint. The 3.9 billion won ($3.3 million) investment is part of the city's 10-year plan, which aims to improve social mobility among citizens while also increasing the city's global competitiveness (Anugraha, 2021). It also draws on South Korea's Digital New Deal, a nationwide plan to use digital and artificial intelligence tools to improve healthcare, central infrastructure, and the economy as the country recovers from the economic crisis caused by Covid-19.

The 'Metaverse Seoul' platform and ecosystem will be built in three stages: introduction (2022), expansion (2023-2024), and settlement (2025 to 2026) (Goverment, 2021). Seoul's transformation into a metaverse city marks a new stage in the evolution of smart cities (Gaubert, 2021). Beginning with a virtual New Year bell-ringing ceremony for Bosingak, the project's first stages will be to build a platform and introduce metaverse-new public services. Starting in January 2022, the platform will launch a bidding process to select a business operator to develop Seoul's various facilities and services on the metaverse platform, including the virtual Mayor's office, Seoul Fintech Lab, Invest Seoul, and Seoul Campus Town (Goverment, 2021).

The SMG also will strive to highlight metaverse emerging technologies for public services in the economy, education, cultural tourism, communication, urban elements, administration, and infrastructure (Goverment, 2021). In the economic sector, the SMG seeks to use the Metaverse to cultivate a commercial ecosystem. They will implement corporate support services that were previously performed offline through the metaverse to encourage the attractiveness of foreign investment and revive the industrial ecosystem that has been affected by Corona through presenting a platform and collaboration between companies (Team, 2021). The metaverse also gathers digital content production education for corporate coaching and campus city start-up networks. Hence to create a metaverse-based city economy, the SMG employs the metaverse-based "Seoul Fintech Lab Playground," metaverse invest Seoul, digital content creation playground, and the Seoul Campus Town metaverse.

Furthermore, the SMG brings a virtual campus of Seoul Citizens University and an education platform called Seoul Run to the education sector to provide young people who are familiar with the metaverse environment to lectures, mentoring, and career information sessions (Korea, 2021). Seoul Citizens University Metaverse Campus focuses on producing high-quality lectures as participatory metaverse learning contents such as workshops and discussions. And 'Seoul Run,' a realistic metaverse-based course, has lately been created in order for young people to create their ability to use new technologies and experience promising jobs in the future, as well as their learning history (Goverment, 2021). Besides that, it supports the various concerns of young people, such as academics, career paths, friendships, and school violence, through functioning an avatar, counselling room in connection with the mentoring business of 'Seoul Run.'

Hence, The SMG promotes cultural tourism in the metaverse through on-tact cultural marketing, which is confined by space and time. Major tourist attractions in Seoul, such as Gwanghwamun Square, Deoksugung Palace, and Namdaemun Market, would be designated as 'virtual tourism special zones,' and city tour buses will operate on the Metaverse as well (Gaubert, 2021). Virtual hot spots will also be revealed and formed in stages by replicating lost historical resources like Donuimun Gate and Jongmyo Ceremony. In the long run, real

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

shops such as famous restaurants would be located in Metaverse tourist attractions, virtual space group tours will be provided through travel agencies, and street performances will be performed in order to implement tourism services that connect the real and virtual worlds (Korea, 2021).

The SMG uses metaverse technology to strengthen open and citizen-centered communication channels. Metaverse would provide civil complaints, consultations, and reservations for public facilities through the development of a citizen platform to improve convenience and support the improvement of citizens' digital capabilities (Korea, 2021). The 'citizen platform' will provide venue and information for the public to arrange events such as exhibitions and markets. Through well as, the City enhances citizens' capacity learning about content creation and utilization, as well as developing and supporting new work in support of the Metaverse's development (Korea, 2021). Internally, the SMG presents Metaverse 120 Center operation, as a virtual general civil service room, and Metaverse Mayor's Office in serving and responding to citizens who have been connected in the metaverse world.

Moreover, XR-based urban innovation combining reality and virtuality was developed through utilizing the technological metaverse of the Urban element. By utilizing extended reality (XR) technology, XR-based intelligent city management, and XR Realistic City, city management is elevated to the next level, and services for safety and convenience are provided (Goverment, 2021). The SMG can create an intelligent city management system that monitors and analyses urban phenomena in real time using new technologies such as digital twin, AI, and XR, as well as real-time IoT sensor information, using XR-based intelligent city management. Meanwhile, efforts to improve safety and comfort for people with disabilities can be better served through the development of content that informs images, sounds, and sign language in the event of an emergency via XR Realistic City (VR-Nachrichten, 2022). A smart immersive experience space where residents can more easily see the history of cultural assets such as Gyeongbokgung Palace and Seo chon via their smartphone.

What's more, in the realm of public administration, the metaverse births a new idea which is more convenient than reality. The Seoul government is expected to be more efficient, responsive to environmental changes, and provide a new concept of virtual administration services that meet citizens' needs through the metaverse (Korea, 2021). Virtual world conferencing services will be introduced and used as a communication channel for holding various events, as well as the establishment of a metaverse-based non-face-to-face work environment related to various new technologies. It also affords big data services that allow users to easily access and share public and private big data.

Finally, the SMG creates a stable infrastructure for 'Metaverse Seoul' by developing a metaverse Seoul platform and metaverse Seoul guidelines (Korea, 2021). Metaverse Seoul's platform will feature a user-friendly interface that allows for easy and quick access to services by line of work. Seoul City Hall and Seoul Plaza will be created as the first access point for the homepage main screen and the gate to each service, and will be used as a communication space for various events and events. Meanwhile, Metaverse Seoul guidelines are arranged as guidelines and standard procedures for establishing and developing a 'Metaverse Seoul' in each city area through an organic relationship and systematic operation of Metaverse services. Furthermore, ethical guidelines and guidelines are used to create a safe metaverse environment and to prevent the misuse of harmful uses and functions.

Aside from Seoul, one more Asian city worth discussing in light of the metaverse's development is Shanghai. Shanghai is the first city in mainland China to include Metaverse

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

in its long-term plan (Zhu Shenshen, 2022). In the next five years, the metaverse will be one of four frontiers explored in the development of public services, business offices, social entertainment, industrial manufacturing, production safety, and electronic games (Geraghty et al., 2022). According to the Shanghai Municipal Commission of Economy and Information Technology, the city is embarking on a future-oriented adventure to find new sources of economic growth, and it intends to incentivize further use and study of metaverse technology, including its application in sensors and other real-time integrations (Yang, 2022). With ever-evolving technology, the metaverse can mean anything and be interpreted in a variety of ways depending on the needs of the City.

The addition of the metaverse into Shanghai's development strategy is consistent with the city's long-term goal of becoming a "globally influential digital hub" by 2035, with major information technology upgrades for a variety of industries (Wei, 2022). By 2025, the goal is to create a digitally advanced ecosystem that includes artificial intelligence, telecom network infrastructure, data usage and transaction policies, professional exchange, and an improved business environment. Goals include building faster 5G and broadband networks, intelligent factories, and digitized hospitals, developing AI and data-driven services, and enhancing applications for the elderly and people with disabilities.

The above Shanghai breakthrough is inextricably linked to the Chinese government's efforts to strengthen the share in the market digital economy (“Metaverse in China, The Official Stance From The Media,” 2022). To conform to global trends, China desires to develop a metaverse with the development orientation of "strengthening reality with virtuality," as well as a digital space governance rule with Chinese characteristics. Beijing will incorporate the metaverse as long as it serves the country's goals of economic development and social stability, while implementing strict measures to prevent any potential harm, such as fraud and 'excessive capital expansion (Wyk, 2022).

Hence, Shanghai initiated the project the metaverse city hall of Shanghai, the result of collaboration between the local government of Fengxian and Fengyuzhu, a Shanghai-based digital entertainment company that now refers to itself as "the metaverse contractor (Yang, 2022). They also concentrate on constructing the North Bund metaverse development and application demonstration zone in order to construct a batch of metaverse industrial-economic space (“Metaverse in China, The Official Stance From The Media,” 2022).

Following in the footsteps of Shanghai, the prosperous Zhejiang province would concentrate on future technologies ranging from the metaverse to advanced semiconductors (“Metaverse in China, The Official Stance From The Media,” 2022). Then, earlier this week, Chinese cities Anhui and Wuhan announced in their annual government work reports that they, too, would work on developing the metaverse.

Hence Chinese metaverse will have positive spill over effects on other local technology industries, boost economic development, and attract talent – all while ensuring that China builds a metaverse on its own terms, rather than allowing others to dominate. Given that China may want to construct its own version of the metaverse that is adapted to its own economic ambitions, policy directives, and the development of homegrown technical expertise, as well as the aspirations of its people, people can expect more concrete regulations to guide the development of the metaverse, similar to what has occurred in the fintech sector (Interesse, 2022).

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

c. Indonesian Cities' Reactions and Readiness for Metaverse

The emergence of the metaverse has also attracted the attentions of Indonesian policymakers at the central and regional levels. President Jokowi stated on several occasions that with technology evolving at that rapid pace, Indonesia should first rapidly adapt to various new technologies, including the metaverse (Editor CNN Indonesia, 2021). Jokowi's 2016 session with Mark Zuckerberg, which included table tennis in virtual reality (VR) and discussions about future technology projections and the concept of the metaverse, illustrated that all human activities, from offices to tourism, will shift to virtual space. Mark's explanation initially showed up in 2021, when the Metaverse project with Meta was launched.

Furthermore, according to Johnny G. Plate, Minister of Communications and Information Technology, Indonesia has an unique opportunity to create the metaverse because of the nation's moral virtues and local wisdom (Dirhantoro, 2022). Support and collaboration of resources, connectivity, and all elements of Indonesian informatics are required to develop one such metaverse.

Moreover, Minister Suharso Monoarfa also stated that Bappenas would 'build' a new National Capital City (IKN) in a metaverse version to accommodate the expectations of the moments (Primadhyta, 22AD). The initial form of the new capital will be digital rather than in the form of mock-up's and holograms.

Makassar City is now at the top of the list of conveying the ambition to create a Metaverse City. Makassar Mayor Moh Ramdhan Pomanto introduced the concept of 'Makassar Metaverse' as an innovation to transform Makassar City's information technology system into a metaverse (Tirta, 22AD). The concept of Makaverse or Makassar Metaverse is a continuation of Sombere and Smart City, that using technologies to support interaction and information solubility by the City Government in serving the public.

Seem like Semarang doesn't want to miss, Mayor Hendrar Prihadi is planning the construction of twin cities in the metaverse world. Given the necessity and data security of users who will use the platform, the idea of 'Semarang Metaverse City' is still being considered (Advertorial, 2022). Tools that are still costly pose a challenge in widening the range of services that can benefit from this metaverse technology. However, the purpose of this brainstorming session is to prove that the City of Semarang is ready to implement this technology in stimulate the development of the city's digital economy.

As part of the world's Global City, the Provincial Government of DKI Jakarta is going further in utilizing the metaverse to increase excellent public services. For first step, the DKI Provincial Government has entered into a strategic partnership with PT WIR Asia Tbk (WIR Group), a leading augmented reality-based technology company in Southeast Asia, to develop a metaverse platform (Dinisari, 22AD). The Jakarta Smart City Management and the President Director of PT WIR Asia Tbk, Michel Budi Wirjatmo, signed a memorandum of understanding for collaboration (Jakarta, 2022). Through this co - operation, public services are being developed digitally, including the presentation of a virtual reality metaverse.

In response to such policymakers' enthusiasm and efforts, observers are skeptical of the government's and local governments' readiness to embrace the metaverse concept. Metaverse Indonesia's optimism will be just another piece of hype on an already stagnant agenda (Fadhila, 2022). As a result, even today's government seems unable to address one of the digital revolution's national agenda items: a lack of technology and digital infrastructure. To find the ideal Metaverse digital experience, Indonesia needs 5G technology that could provide

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

a strong signal. Due to the obvious wide area coverage and high investment costs, the transition from 4G to 5G has not yet been fully implemented.

The Makassar Metaverse discourse contradicts the facts of the Ministry of Administration and Bureaucratic Reform's evaluation of the implementation of the Electronic-Based Government System (SPBE) in 2021. Makassar City has just received fair predicate from the assessment, which is under the Government of Pinrang Regency and Kab. North Luwu in the province of South Sulawesi. It appears that the new Makaverse discourse is shown at the level of new branding from the use of information technology in improving public services, which is still relatively limited (Jakarta, 2022).

In Semarang, the main need in a Smart City is actually how technology becomes a solution, as well as improving the quality and speed of service, rather than simply being sophisticated (Advertorial, 2022). In Jakarta, the metaverse is arranged as a progression continuum of smart city development. Successful city transformation to smart cities necessitates improving city performance through the integration of people, infrastructure, and technology (Mohammadi & Taylor, 2018). Infrastructure, ecosystems, and local government bureaucracies are growingly able to integrate information technology into their own facilities and work culture through better serve citizens. As users of information technology-based public services in Jakarta, citizens were able to detect an increase in service quality. That its metaverse seems to be a quantum leap that requires one's own knowledge and experience in improving public services. Collaboration with capable partners is a best choice for reaching these skill gaps (Jakarta, 2022).

The public response compiled by the Center for Digital Society, FISIP UGM, examines the capabilities of digital infrastructure in anticipating cases of widespread data leaks (Fadhila, 2022). So apart from data leakage, the public has also voiced concerns that digitized government services may not make bureaucracy accessible to the public and do not function properly. As a result, they believe that, given the current situation, developing and implementing Metaverse in Indonesia is an unrealistic goal that the government is attempting to achieve. Not only that, but one of the exciting responses expressed concern about the potential lack of safe space, particularly for women, when several sexual harassment cases occurred in the Metaverse experiment, as Horizon World did.

Externalities in the Metaverse, the same as smart cities, have the opportunity to generate a digital divide in society. Mental access, material access, skill access, and usage access are all examples of digital divides (Nugroho, 2020). Aside from inequity, metaverse ecosystems have the potential to deprive minorities and vulnerable communities of their rights from the beginning. People in groups may be mistreated in the virtual world in the same way that they would be in the real world (Lee et al., 2021).

As a result, why we want to use this virtual technology is a crucial question in the discourse surrounding the implementation of the metaverse for Indonesian cities. Is it simply a matter of political rivalry between city governments? or are there hidden intentions for reasonable government procurement of goods and services? (Alizadeh, 2018; Hollands, 2015)

Furthermore, the City Government faces the challenge of defining the essence of the utility of this virtual technology in improving city life (better quality life). A cost-benefit analysis must be performed to ensure that the time, money, and energy expended are proportionate to the benefits obtained from this metaverse.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

CONCLUSION

This article provides an overview of metaverse architecture, the main challenges of the metaverse in a city context, lessons learned from global cities, and Indonesian cities' readiness to confront the metaverse. The COVID-19 pandemic has increased the use of metaverses to replace offline human experiences in a variety of fields. The Metaverse, which strives to reconstruct the realm, would go a far toward to transforming the existing relationship between humans and cities

Given the fact that the metaverse is the next generation of the internet, cities require the readiness of infrastructure, ecosystems, and users that can use it. This readiness cannot be achieved in a short time and requires a process of maturing the city's capacity to use information technology. As a result, the metaverse is an advancement of smart city outcomes. Unless the execution of a smart city has given substantial benefits to the city and its citizens, then this result will be used to confront and advantage from the metaverse.

However, many challenges should be encountered before metaverse can be completely integrated into the physical world and our daily lives. The Metaverse poses severe awareness about the impact and effects from its underlying technologies in the context of urban society's core values.

REFERENCES

A.S. Hovan George et al. (2021). Metaverse : The Next Stage of Human Culture and the Internet. *Ijartet*, *8*(12), 1–10. https://doi.org/10.20247/IJARTET.2021.0812001

A, S. G. (2022). Study Of Blockchain Technology, AI and Digital Networking in Metaverse. *IRE Journals* |, *5*(8), 110–115. Retrieved from https://www.researchgate.net/publication/358608017

Abdel-Moneim Gaffar, A., & Abdel, A. (2021). Using Metaverse to Rebuild Non-reachable or Ruined Heritage Buildings. *International Journal of Architecture, Arts and Applications*, *7*(4), 119–130. https://doi.org/10.11648/j.ijaaa.20210704.13

Advertorial. (2022, April 8). Wali Kota Ungkap Pembangunan Semarang Metaverse City. *CNN Indonesia*.

Akour, I. A., Al-Maroof, R. S., Alfaisal, R., & Salloum, S. A. (2022). A conceptual framework for determining metaverse adoption in higher institutions of gulf area: An empirical study using hybrid SEM-ANN approach. *Computers and Education: Artificial Intelligence*, *3*, 100052. https://doi.org/10.1016/j.caeai.2022.100052

Alizadeh, T. (2018). Crowdsourced Smart Cities versus Corporate Smart Cities. *IOP Conference Series: Earth and Environmental Science*, *158*(1). https://doi.org/10.1088/1755-1315/158/1/012046

Anugraha, S. (2021). Seoul will be the first city government to join the metaverse. Retrieved April 28, 2022, from https://qz.com/2086353/seoul-is-developing-a-metaverse-government-platform/

Babajide, R. (2021). Smart Cities Are Quickly Turning into Metaverse Cities. Retrieved May 3, 2022, from https://medium.com/our-world-tomorrow/smart-cities-are-about-to-dive-into-the-metaverse-fa036454283f%0A!%22#$%25

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Bauer, T., Oliveira Antonino, P., & Kuhn, T. (2019). Towards Architecting Digital Twin-Pervaded Systems. *Proceedings - 2019 IEEE/ACM 7th International Workshop on Software Engineering for Systems-of-Systems and 13th Workshop on Distributed Software Development, Software Ecosystems and Systems-of-Systems, SESoS-WDES 2019*, 66–69. https://doi.org/10.1109/SESoS/WDES.2019.00018

Bibri, S. E., & Allam, Z. (2022). The Metaverse as a Virtual Form of Data-Driven Smart Urbanism : On Post-Pandemic Governance through the Prism of the Logic of Surveillance Capitalism. *Smart Cities 2022*, *5*, 715–727.

Binson, B. (2020). Crypto Art During the COVID-19 Pandemic. *Journal of Urban Culture Research*, *21*, 2020–2021.

Cammack, R. G. (2010). Location-based service use: A metaverse investigation. *Journal of Location Based Services*, *4*(1), 53–65. https://doi.org/10.1080/17489721003742827

Chukwunonso, A. G., Njoku, J. N., Lee, J., & Kim, D. (2021). Security in Metaverse : A Closer Look. In *The Third IEEE International Conference on Trust, Privacy and Security in Intelligent Systems, and Applications (IEEE TPS'21)*. https://doi.org/10.1109/TPSISA52974.2021.00032

Davis, A., Murphy, J., Owens, D., Khazanchi, D., & Zigurs, I. (2009). Avatars, people, and virtual worlds: Foundations for research in metaverses. *Journal of the Association for Information Systems*, *10*(2), 90–117. https://doi.org/10.17705/1jais.00183

Deng, T., Zhang, K., & Shen, Z. J. (Max). (2021). A systematic review of a digital twin city: A new pattern of urban governance toward smart cities. *Journal of Management Science and Engineering*, *6*(2), 125–134. https://doi.org/10.1016/j.jmse.2021.03.003

Dinisari, M. C. (22AD, April 29). Pemprov DKI Jakarta-WIR Group akan Kembangkan Metaverse Jakarta, Seperti Apa? *Bisnis.Com*.

Dirhantoro, T. (2022). Menkominfo Sebut Indonesia Berpeluang Kembangkan Metaverse Dunia karena Punya Kearifan Lokal. Retrieved June 1, 2022, from https://www.kompas.tv/article/251650/menkominfo-sebut-indonesia-berpeluang-kembangkan-metaverse-dunia-karena-punya-kearifan-lokal

Duan, H., Li, J., Fan, S., Lin, Z., Wu, X., & Cai, W. (2021). Metaverse for Social Good: A University Campus Prototype. *MM 2021 - Proceedings of the 29th ACM International Conference on Multimedia*, 153–161. https://doi.org/10.1145/3474085.3479238

Editor CNN Indonesia. (2021, December 22). Terinspirasi Zuckerberg, Jokowi Sebut Warga NU Bisa Ngaji di Metaverse. *CNN Indonesia*.

Fadhila, Z. (2022). *Metaverse in Indonesia : A Hype or Hope ?* Yogyakarta.

Fernandez, C. B., & Hui, P. (2022). Life, the Metaverse and Everything: An Overview of Privacy, Ethics, and Governance in Metaverse. *ArXivLabs*, (April). https://doi.org/10.13140/RG.2.2.35094.63042

Gaubert, J. (2021). Seoul to become the first city to enter the metaverse. What will it look like?

Geraghty, L., Lee, T., Glickman, J., & Rainwater, B. (2022). *The Future Cities and the Metaverse*. Miami. Retrieved from https://www.nlc.org/wp-content/uploads/2022/04/CS-Cities-and-the-Metaverse_v4-Final-1.pdf

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Goverment, S. M. (2021). *Seoul to provide public services through its own metaverse platform*. Seoul. Retrieved from https://english.seoul.go.kr/seoul-to-provide-public-services-through-its-own-metaverse-platform/

Hemmati, M. (2022). The Metaverse: An Urban Revolution. *Tourism of Culture*, *2*, 53–60. https://doi.org/10.22034/TOC.2022.323276.1067

Hollands, R. G. (2015). Critical interventions into the corporate smart city. *Cambridge Journal of Regions, Economy and Society*, *8*(1), 61–77. https://doi.org/10.1093/cjres/rsu011

Interesse, G. (2022). China's Debut in the Metaverse: Trends to Watch.

Jakarta, P. P. D. (2022). *Siaran Pers Pemprov DKI Jakarta-WIR Group Akan Kembangkan Metaverse Jakarta*. Jakarta. Retrieved from https://wirglobal.com/wp-content/uploads/2022/04/Siaran-Pers-Pemprov-DKI-Jakarta-WIR-Group-Akan-Kembangkan-Metaverse-Jakarta.pdf

Jeon, H., Youn, H., And, S. K., & Kim, T. (2021). Blockchain and AI Meet in the Metaverse. In Tiago M. Fernández-Caramés & P. Fraga-Lamas (Eds.), *Advances in the Convergence of Blockchain and Artificial Intelligence*. London: IntechOpen Limited. https://doi.org/10.5772/intechopen.99114

Jeon, J. E. (2021). The Effects of User Experience-Based Design Innovativeness on User–Metaverse Platform Channel Relationships in South Korea. *Journal of Distribution Science*, *19*(11), 81–90. https://doi.org/10.15722/jds.19.11.202111.81

Kaji, S., Kolivand, H., Madani, R., Salehinia, M., & Shafaie, M. (2018). Augmented Reality in Smart Cities: A Multimedia Approach. *Research Online Journal of Engineering Technology*, *6*(1), 28–45. Retrieved from http://researchonline.ljmu.ac.uk/

Kemec, A. (2022). From Reality to Virtuality: Re-discussing Cities with the Concept of the Metaverse. *International Journal of Management and Accounting*, *4*(February), 12–20. https://doi.org/10.34104/ijma.022.00120020

Knox, J. (2022). The Metaverse, or the Serious Business of Tech Frontiers. *Postdigital Science and Education*, *4*(2), 207–215. https://doi.org/10.1007/s42438-022-00300-9

Korea, S. C. (2021). *Seoul Metropolitan Government builds its own ' Metaverse Platform ' for the first time in a new concept public service*. Seoul. Retrieved from https://smartcity.go.kr/en/2021/11/03/서울시-지자체-최초로-자체-메타버스-플랫폼-구축해/

Kurniasari, H., David, W., Cempaka, L., & Ardiansyah. (2022). Effects of drying techniques on bioactivity of ginger (*Zingiber officinale)*: A meta-analysis investigation. *AIMS Agriculture and Food*, *7*(2), 197–211. https://doi.org/10.3934/agrfood.2022013

Lee, L.-H., Braud, T., Zhou, P., Wang, L., Xu, D., Lin, Z., … Hui, P. (2021). All One Needs to Know about Metaverse: A Complete Survey on Technological Singularity, Virtual Ecosystem, and Research Agenda. *Journal of Latex Class Files*, *14*(8). https://doi.org/10.13140/RG.2.2.11200.05124/8

Lim, W. Y. B., Xiong, Z., Niyato, D., Cao, X., Miao, C., Sun, S., & Yang, Q. (2022). Realizing the Metaverse with Edge Intelligence: A Match Made in Heaven, 1–9. Retrieved from http://arxiv.org/abs/2201.01634

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

M. Damar. (2021). Metaverse Shape of Your Life for Future: A bibliometric snapshot. *Dergipark.Org.Tr*, *1*, 1–8. Retrieved from https://dergipark.org.tr/en/pub/jmv/issue/67581/1051371

Metaverse in China, The Official Stance From The Media. (2022). Retrieved June 1, 2022, from https://influencematters.asia/2022/04/29/metaverse-in-china-the-official-stance-from-the-media/

Mohammadi, N., & Taylor, J. E. (2018). Smart city digital twins. *2017 IEEE Symposium Series on Computational Intelligence, SSCI 2017 - Proceedings*, *2018-Janua*, 1–5. https://doi.org/10.1109/SSCI.2017.8285439

Mozumder, M. A. I., Sheeraz, M. M., Athar, A., Aich, S., & Kim, H. C. (2022). Overview: Technology Roadmap of the Future Trend of Metaverse based on IoT, Blockchain, AI Technique, and Medical Domain Metaverse Activity. *International Conference on Advanced Communication Technology, ICACT*, *2022-February*, 256–261. https://doi.org/10.23919/ICACT53585.2022.9728808

Mystakidis, S. (2022). Metaverse. *Encyclopedia*, *2*(1), 486–497. https://doi.org/10.3390/encyclopedia2010031

Noor, M. (2023). Urban Life in the Metaverse : Potential for Utopia or Wholly Unnecessary ? Retrieved April 28, 2022, from https://www.theurbanist.org/2022/01/25/urban-life-in-the-metaverse-potential-for-utopia-or-wholly-unnecessary/

Nugroho, I. (2020). Digital Divide: Ancaman Kita Semua. Indonesia.

Owens, D., Mitchell, A., Khazanchi, D., & Zigurs, I. (2011). An Empirical Investigation of Virtual World Projects and Metaverse Technology Capabilities. *Data Base for Advances in Information Systems*, *42*(1), 74–101. https://doi.org/10.1145/1952712.1952717

Park, S. M., & Kim, Y. G. (2022). A Metaverse: Taxonomy, Components, Applications, and Open Challenges. *IEEE Access*, *10*, 4209–4251. https://doi.org/10.1109/ACCESS.2021.3140175

Pokhrel, A., Katta, V., & Colomo-Palacios, R. (2020). Digital Twin for Cybersecurity Incident Prediction: A Multivocal Literature Review. *Proceedings - 2020 IEEE/ACM 42nd International Conference on Software Engineering Workshops, ICSEW 2020*, 671–678. https://doi.org/10.1145/3387940.3392199

Primadhyta, S. (22AD, January 13). Bappenas Siapkan Metaverse Ibu Kota. *Cnnindonesia.Com*.

Ramesh, U. V, Harini, A., Gowri, D., Durga, K. V., Druvitha, P., & Siva Kumar, K. (2022). Metaverse: Future of the Internet. *International Journal of Research Publication and Reviews Journal Homepage: Www.Ijrpr.Com*, *3*(2), 93–97. Retrieved from www.ijrpr.com

Rillig, M. C., Gould, K. A., Maeder, M., Kim, S. W., Dueñas, J. F., Pinek, L., … Bielcik, M. (2022). Opportunities and Risks of the "Metaverse" For Biodiversity and the Environment. *Environmental Science & Technology*, *56*, 4721–4723. https://doi.org/10.1021/acs.est.2c01562

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

Song, Y., & Hong, S. (2021). Build a Secure Smart City by using Blockchain and Digital Twin. *Ijasc*, *3*(3), 9–13. https://doi.org/10.22662/ijasc.2021.3.3.009

Sudah, R., Petrov, O., & Gupta, G. (2022). Can the metaverse offer benefits for developing countries? Retrieved May 4, 2022, from https://blogs.worldbank.org/digital-development/can-metaverse-offer-benefits-developing-countries

Team, S. news. (2021). Seoul to use metaverse platform to deliver public services. Retrieved June 1, 2022, from https://www.smartcitiesworld.net/news/news/seoul-to-use-metaverse-platform-to-deliver-public-services-7104

Tirta, I. (22AD, March 11). Wali Kota Makassar Perkenalkan Konsep Metaverse pada Programnya. *Republika.Co.Id*.

VR-Nachrichten. (2022). Virtual Seoul City Hall kicks off the beta release of “Metaverse Seoul.”

Wei, H. (2022, February 22). Future of internet virtually in sight. *China Daily*.

Wyk, B. van. (2022). A brief guide to promising metaverse startups in China.

Yang, Z. (2022). China ’ s cities are going to the metaverse — before they even know what it is. Retrieved May 3, 2022, from https://www.protocol.com/china/metaverse-chinese-local-government

Yoo, S.-C., Piscarac, D., & Kang, S. (2022). Digital Outdoor Advertising Tecoration for the Metaverse Smart City. *International Journal of Advanced Culture Technology*, *10*(1), 196–203. Retrieved from https://doi.org/10.17703/IJACT.2022.10.1.196

Zhao, Y., Jiang, J., Chen, Y., Liu, R., Yang, Y., Xue, X., & Chen, S. (2022). Metaverse: Perspectives from graphics, interactions and visualization. *Visual Informatics*, *6*(1), 56–67. https://doi.org/10.1016/j.visinf.2022.03.00

The Model of Government Communication in a Level of Homogen Community in era The Government 4.0.

Susanti
Universitas Terbuka
e-mail: susanti@ecampus.ut.ac.id

Article Info

Article of OSC 2022

Article history:

Received May 17th, 2022
Accepted June 05th, 2022
Published Nov 17th, 2022

Abstract

The implementation of local government in a homogeneous society lagging behind requires its own strategy. In era The government 4.0. with all its efforts needs to build a spirit of independence and motivate the community through local wisdom that is the trust of the community. Government communication in homogeneous societies lagging behind and being marginalized in government practices requires the support of government leadership. The communication gap between the public and the government is bridged through the government communication model. The right model of government communication requires a bridge of government leadership that uses cultural factors and local wisdom to generate independence and motivate the community. This communication model of government on the other hand also has a negative side which is to raise the spirit of primordialism, therefore it is also necessary to think the leadership pattern of a moderate government. The mindset is expected to be able to gather traditional things towards the mindset of modern society. The hope is that government policies can be well received by the community so that people's welfare is quickly realized.

Keywords*: Government Communication, homogeneous lagging, concocting local wisdom, primordialism.*

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

INTRODUCTION

Law No. 32 of 2014 concerning Regional Government in its substance regulates the election of regional heads through individual channels, without passing through the selection of political parties. In several regions, regional heads have won victories from individual lines, including one in Kupang Regency in the period 2013-2018. Victory of individual lines in Kab. Kupang further strengthens identity politics, where the ethnic factor, namely the Timorese, becomes dominant in the administration of government. The administration of the government supported by the majority of the bureaucracy of the Timorese tribe could occur, bearing in mind that previously most of the other tribes who had experienced leading the bureaucracy were moved to the newly created area Sabu Rajua is based on the consideration of the elected regional head. The lack of experience in leading the government bureaucracy of the Timorese in the majority of Timorese (88%) also makes government communication less smooth.

Likewise, internal government communication that occurs in regional government, namely between regional heads and the bureaucracy also experiences various obstacles. Bureaucratic leaders, mostly from Timorese (70%) with minimal experience in leadership, made the ideas of the brilliant regional head not applicable in the community. These ideas are generally related to poverty alleviation programs through community participation in helping themselves to improve the household economy, for example: forced cultivation planting (TP2T). The TP2T program is APBD, even in the last two years (2017 and 2018) can be translated into APBD, but due to limitations or fear of bureaucracy finally can not run. Since the program was not running, the regent took the initiative to change it in the forced planting movement (TP2T).

This indigeneous empowerment was carried out by the government using Timorese philosophy, namely "at senan tasek'ok ma tasek'ok hetsen" which means that everyone forces themselves to plant and plant as much as possible for their own interests. This philosophy departs from the habits of people in this region who are not fond of planting, so that a lot of abandoned land is abandoned and not utilized. Through TP2T, the community is motivated to solve their own economic problems with motivation from the government. The success of this program also makes Kabang Regency as a place of comparative studies for other districts in NTT. Through this TP2T Movement, the government aims to change the mindset or mindset of the people not to expect government assistance, but must help themselves through work. The regent called it one of the forms of community awareness raising in development.

Based on this background, the problem is: How is the government communication model developed so that the community can succeed the TP2T movement? The method used to analyze this problem is based on qualitative methods and is supported by field observations on the bureaucracy and the people of Kab. Kupang.

GOVERNMENT COMMUNICATION MODEL

By reference there is no specific model that puts pressure on government communication. In essence the communication model is developed from the flow of communication and environmental aspects in existing government organizations. The model developed is based on the information flow that occurs, namely linear, circular and convergent models; while the models developed are based on environmental aspects in government organizations including structural / hierarchical models, procedures, and structures and processes.

The linear model is based on the stimulus-response paradigm. The communicant will respond according to the stimulus received. This linear model is defined as the process of delivering messages from the communicator to the communicant through salurah; so the main

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

components of this model are: messages, advocacy roles, gatekeepers (channel roles), recipients (user system behavior), and feedback (Laswell's Model in Sanders & Canel (ed), 2013). The circular model is based on the interpersonal paradigm, where the communicator and communicant are equal. This circular model focuses on the problem of delivering messages based on the level of accuracy. According to Shannon and Weaver, and Schramm in Sanders & Canel (ed), 2013) it can be concluded that the picture of the communication process is no longer as straight as the linear model; but rather is an endless circle. This means that the base and the end cannot be seen because it is integrated (Schramm's model in Sanders & Canel (ed), 2013). This circular model is more realistic to be applied to public or interpersonal communication. Convergent models describe a convergent (centralized) process with information that is agreed with between the communicating parties in order to achieve mutual understanding (consensus). The main components of the convergent model are: information, convergence, mutual understanding, mutual agreement, joint action, and network relationship. The effectiveness of convergent communication will be achieved if there is a shared understanding between actors involved in communication, so that this communication is widely used in development communication.

The communication model based on environmental aspects in organizations, especially government organizations is very much influenced by the administration of government. Hasan (2009) emphasizes the importance of aspects of structure, procedure, and culture. Sanders & Canel (2013) revealed that the structure includes administration and human resources; while the process includes communication where each of these elements can be broken down into several indicators.

Structure	Administration	Formal Rules	Organization Charts Legislation Policies and Guidance
		Financial Resources	Budget Reward System
	Human Resources	Skill Knowledge Values	Professional Profiles Training Recruitment
Process	Communication	Information Gathering and Analysis	Research work (commissioned or internally undertaken) Coordination and planning mechanism and routiness
		Information Dissemination	Briefings, meetings, press conference Digital media Campaigns and advertising
		Information Evaluation	Feedback mechanisms Media analysis Communication Metrics (ROI Measure)

Source: Sanders & Canel, 2013.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

GOVERNMENT COMMUNICATION MODELS IN LEADING HOMOGEN COMMUNITIES

In a homogeneous community in Kab. Kupang they live in groups and on average with the level of welfare of the lower classes and the average level of education of elementary school; difficult to accept ideas outside the group. New ideas will be more easily accepted if they come from internal groups. The regional head comes from the internal group, so the ideas or new ideas of the regional head are more easily accepted by the community.

In disadvantaged communities, culture factors will become dominant when compared to structural and procedural aspects. The same culture will be easily accepted, moreover it is supported by aspects of cultural structures and procedures; of course community acceptance will receive messages and implement them more valid. Culturally, the Bupati was considered a figure who represented the clever or educated Timorese who came from aristocratic tribes; so that it will be easier to unite the identity of the Timorese people and move government programs through their role. The role of the Bupati in adat in leading traditional events, or in the tasks of administering government.

Structurally, the Regional Head in a government organization is the highest position obtained politically. Factually, based on observations, there is a gap of thoughts and ideas between the regent and the bureaucracy. As a result, activities can run but cannot be translated into government programs (cannot be funded through the APBD). At T.A. 2017 and T.A. 2018 The new TP2T program can be financed through the APBD, meaning that during the 2 years of the administration there was a miscommunication between the regional head and the bureaucracy. This can occur because the bureaucracy cannot translate the idea of the regent into a program of activities financed through ABPD.

Procedurally, communication between the district head and the community runs smoothly without obstacles; even the community can be mobilized in the TP2T Movement. This means that the TP2T movement has not been funded by the local government for two years; however, the Bupati can move the community that the community must help its own economy through the movement. The TP2T movement was quite successful in improving the economy and welfare of the people because it was based on a philosophy that was lifted from local wisdom. The Regent as a government communicant can succeed because he is able to understand the situation that occurs where without funding from the government successfully motivates the community. Understanding this situation is important because the Bupati, who comes from within the Timorese Tribe, is considered a portrait of a tribe, most of whom are less prosperous but able to get out of the zone. Regent figures become idols so they are able to move the community to change.

The model of government communication that was built in the Government of Kab. Kabang is based on the above analysis if described as follows.

ISBN: 978-602-392-329-8
e-ISBN: 978-602-392-330-4

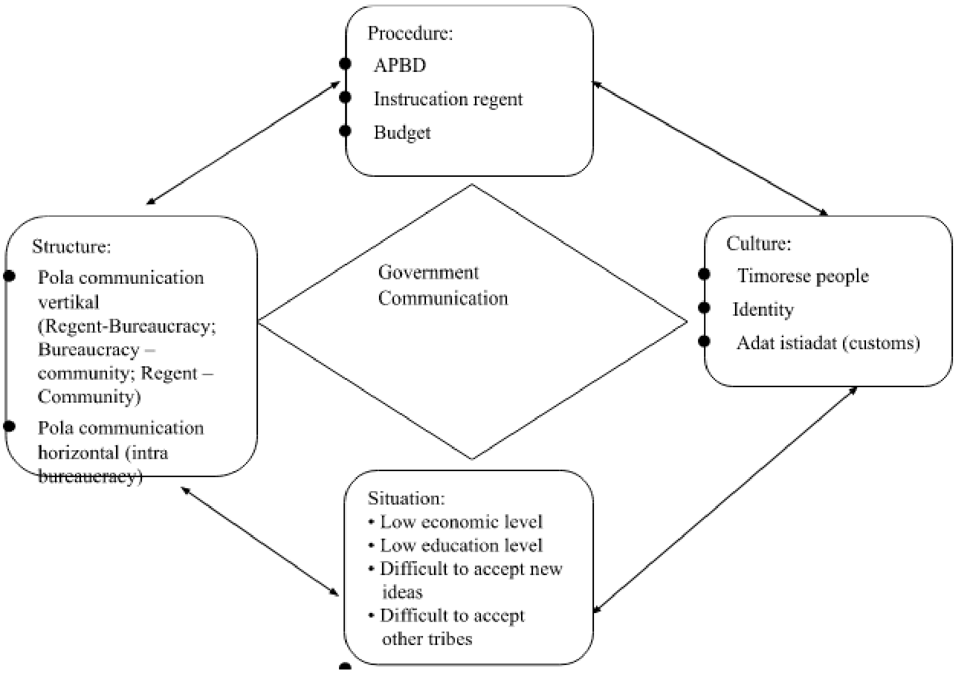


Figure 1**.** Governance Communication Model in Underdeveloped Homogen Communities

CONCLUSION

Cultural aspects play an important role to support the success of government communication in homogeneous communities lagging behind.

REFERENCES

Dwidjowijoto, Riant N. 2004. *Komunikasi Pemerintahan: Sebuah Agenda bagi Pemimpin Pemerintahan Indonesia.* Jakarta: Gramedia

Hasan, Erliana. 2009. *Paradigma Komunikasi Pemerintahan*. Pidato pengukuhan Jabatan Guru Besar dalam Komunikasi Pemerintahan IPDN. Jakarta: Depdagri IPDN.

Sanders, Karen & Canel, Maria Jose. 2013. *Government Communication Cases and Challenges.* London, New Delhi, New York, Sydney: Bloomsbury.

Faculty of Law, Social and Political Sciences
Universitas Terbuka - Indonesia
(FHISIP-UT)

1. Departement of Public Administration
2. Departement of Government Studies
3. Departement of Business Administration
4. Departement of Taxation
5. Departement of Communication Science
6. Departement of Library Science
7. Departement of Archival Science
8. Departement of Sociology
9. Departement of Law
10. Departement of English Literature and Translation Studies

UNIVERSITAS TERBUKA

OSC SECRETARIATE

Faculty of Law, Social, and Political Sciences Universitas Terbuka
Tel. +6221-7490941 ext. 1923 (Sarah) ext. 1945 (Megafury)
Website: http://osc.fhisip.ut.ac.id
Email: osc.fhisip@ecampus.ut.ac.id