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DIGITALIZATION IMPACT ON SUSTAINABLE FIRM PERFORMANCE OF SMALL, MEDIUM, AND LARGE BUSINESSES

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Abstract. Currently, the world is presented with sophistication in the field of technology, including company management. A superior company is an organization that can optimize all aspects. Speaking of existence, one of the essential pillars that support company sustainability is technology adoption. Referring to this premise, this study is structured to elaborate on the elements that determine firm performance (FP). These elements are designed into three factors: (1) digital technology usage/DTU, (2) digital transformation strategy/DTS, and (3) organizational agility/OA. This study concentrated on 159 samples compiled from small, medium, and large-scale businesses. Nonprobability sampling and purposive sampling data were extracted via PLS-SEM. Quantitative findings revealed that DTU has positive implications for DTS, OA, and FP. Empirical studies prove that DTS and OA also have a positive impact on FP. The current empirical research concludes that the increase in digital technology usage further develops digital transformation strategy, organizational agility, and firm performance. Improvements in digital transformation strategy or organizational agility can improve firm performance. Policy implications open up space for managerial actors to prioritize more complex ideas, solutions, and alternatives in strengthening mastery of the technology.

Keywords*:* digital technology usage; digital transformation strategy; organizational agility; firm performance; PLS-SEM.

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1. Introduction

The world is facing a post-pandemic, known as COVID-19, where economic conditions are still affected by the COVID-19 pandemic. The International Monetary Fund projects that the global economy will decline by 4.4% due to the COVID-19 pandemic [1]. In other words, this outbreak has generated a negative reaction to world polemics, especially uncertainty over business, economic, financial, and job uncertainties across sectors [2]. Indonesia's economic situation also experienced a slowdown. BPS [3] released that in the first quarter, Indonesia's economic growth in 2020 was 2.92%, but in the second quarter, Indonesia's economy grew negatively, reaching 5.59%, and in the third quarter, it grew negatively by 3.49%. Entering the fourth quarter, Indonesia's economic growth began to improve, although it remained minus around 2.21%. From the information above, it shows that post-pandemic economic growth is quite heavy, but it is starting to increase. COVID-19 itself has encouraged the majority of companies to create changes during a pandemic when companies were required to work from home (WFH) and triggered companies to co-exist with digital technology to support company operations during WFH. Companies are starting to look for various strategies so that firm performance can survive and even increase. Firm performance is the ultimate goal of every company and is crucial for top management [4; 5]. Firm performance is considered important because it shows the success of a company. Many components affect business performance, but the most important thing is whether the company is able to identify its resources by investigating business opportunities and barriers [6]. The ability of companies to explore these two patterns can be called dynamic capabilities.

Dynamic capabilities are the company's ability to build, configure, and integrate external and internal competencies to deal with different environments [7–9]. This scheme is designed with orientation and puts the company first in making the right decisions and perspectives amid a complex position [10]. Ellström et al. and Ghosh et al. predict that dynamic capabilities can be implemented into digital transformation in companies [11; 12]. Digital transformation is needed to combine sensing, seizing, and transforming as in dynamic capabilities, with the hope that companies will not make mistakes in making decisions about digital technology that will be integrated into the company [13]. The use of digital technology is faced with existing competition, where companies are committed to research related to digital technology that can be dedicated to trying competition in dynamic groups. Four papers from Akkaya & Iqbal [14], Awwad et al. [15], Baškarada & Koronios [16], and Gyemang & Emeagwali [17] reported that dynamic capabilities can support organizational agility to overcome uncertain market conditions. Speed is the key for companies to increase their competitive advantage, especially in a constantly shifting environment [18]. In the context of dynamic capabilities, digital technology usage is bridging companies to achieve competitive advantage [19]. Companies are encouraged to carry out digital transformation in order to survive at the level of global competition. The concept of digital transformation has been popularized and has become a business medium to signify the disruptive implications of digital technology for business and, more broadly, to show the power of today's companies to work more intensely [20]. Digital technology usage is considered to bring companies closer to more actively highlighting digital transformation. Apart from surviving the competition, digital transformation is also implemented amid the VUCA (volatility, uncertainty, complexity, and ambiguity), which is in the post-COVID-19 recovery phase.

Verhoef et al. [21] emphasized that companies need to have speed in capturing market movements. Ideally, companies will win the competition if they operate flexibly. Digitalization has had a very impressive impact on the world, especially in the VUCA condition. In principle, digitalization has disruptive properties, so speed is required in creating, accommodating, and changing business models to survive in the digital economy [22; 23]. Companies assess technology investment as a weapon to compete by increasing productivity, profit, and quality of operations [24]. The use of digital technology has been well-understood since the era of globalization. The use of digital technology in business is a determining factor in its contribution to management, service, company performance, and production. Currently, the use of digital technology in Indonesia is in the experimental stage. Several business sectors, such as food and beverage, service, trade, manufacturing, transportation, real estate, agriculture, and fisheries, are making use of digital technology. This is inseparable from a recent survey which shows that the food and beverage business sector dominates in terms of using digital technology to find suppliers and reach consumers [25]. The trading business sector occupies the second position for the utilization of digital technology, and the transportation business sector is in the last position for the utilization of digital technology. Various business fields in Indonesia have applied digital technology to find suppliers, reach consumers, digitize businesses, and market analysis. This is articulated in digital technology applications which are used in an effort to boost company value. Several studies [26–29] have linked the relationship between digital technology usage and firm performance in the financial services industry, mining industry, and SMEs. The use of digital technology does not guarantee increased firm performance. Several companies in Indonesia that use digital technology as their operations continue to lay off their employees. Respati detected that in 2021 several companies in Indonesia, including Shopee Indonesia, LinkAja, Tanihub, Zenius, SiCepat, GoTo, Indosat, and many more, carried out mass dismissals of their employees [30]. Referring to the literature, phenomena, and empirical constructions described above, a study was designed to discuss the impact of technology utilization on company performance.

The originality of this study lies in developing a landscape for firm performance, which is influenced by digital technology usage, digital transformation strategy, and organizational agility. Variables that influence firm performance have been found in several prior articles. However, the connections between the proposed concepts have not been fully optimally highlighted [31–34]. Moreover, to reveal the performance of a company, complexity is needed that can not only be understood from the financial scope, but also corporate governance based on skills in utilizing technology, determining strategies accurately, being competitive according to market changes, and adapting in response to changing times. The structure of the paper is grouped into five phases with the following main material: (1) Introduction, (2) Literature review and hypothesis development, (3) Research methodology, (4) Results and discussion, and (5) Conclusion.

2. Literature Review and Hypothesis Development

2.1. Digital Technology Usage – Digital Transformation Strategy

The use of digital technology in a digital transformation strategy has a significant impact [31; 36]. Digital technology plays a crucial role in the company's digital transformation. Digital

technology usage can change products, processes, services, business models, and competitive ecosystems [37]. Tsou and Chen respond to the significant effect of digital technology usage on digital strategy transformation [38]. Besides that, Martínez-Caro et al. argue that digital technology usage can help companies carry out digital transformation [39]. Basically, digital technology opens up new opportunities within companies that have an impact on their competitiveness cycle [40]. Examining its exclusive implications for the company, the following hypothesis is developed:
Hypothesis 1. Digital technology usage increases digital transformation strategies positively.

2.2. Digital Technology Usage – Organizational Agility

Digital technology has an impact on organizational agility. Organizational agility is defined as the speed with which a company captures change and maximizes existing opportunities [41]. Oliveira-Dias speculates that the relationship between information and digital technology in Industry 4.0 affects supply chain speed [42]. On the other hand, Saputra et al. [43] and Zhang et al. [44] claim that digital technology capability has a positive correlation with organizational agility, where the use of digital technology helps companies increase organizational agility to capture new opportunities in the market and face new obstacles. From here, the following hypothesis is proposed:
Hypothesis 2. Digital technology usage positively increases organizational agility.

2.3. Digital Technology Usage – Firm Performance

Digital technology products are issued to support company performance. A survey by Zhu and Kraemer [45] concluded that inclusive use of IT can stimulate enterprise inclusiveness. The presence of IT has brought significant changes to products, company structures, processes, and infrastructure [38]. Gillani et al. [27] estimate that digital manufacturing technology fosters firm performance. The use of digital technology encourages companies to channel new business models that can enhance company performance in facing dynamic market conditions and future threats [46; 47]. Companies take advantage of digital technologies such as blockchains, AI, and cloud platforms to get hidden big data, which can be used to increase processes and create new business models that can help companies penetrate new markets or improve positions in existing markets. Through the foundations and fundamental ideas, the following hypotheses are assumed:
Hypothesis 3. Digital technology usage positively increases firm performance.

2.4. Digital Transformation Strategy – Firm Performance

Trends towards digital transformation that have succeeded in systematically bridging the company's performance Vial linked the link between digital transformation and corporate structure, where the results also bring more competitiveness [48]. Warner & Wäger [49] proved the results that a digital transformation strategy is one of the solutions for companies to improve company performance and increase their competitive advantage in the market. A digital transformation strategy can create new business models, organizational structures, and processes within the company. Understanding the relationship between the two aspects above, the next hypothesis is proposed as follows:
Hypothesis 4. Digital transformation strategy positively increases firm performance.

2.5. Organizational Agility – Firm Performance

Organizational agility affects company performance. Recently, Troise et al. confirmed that the speed with which an organization triggers opportunities has an impact on financial performance, product innovation, and company performance innovation [50]. According to Liu & Yang [51], organizational agility can improve financial performance and the company's ability to quickly capture opportunities and take advantage of them. In addition, new ideas or innovations are easier to apply to agile companies, so they can improve company performance. Ravichandran emphasized that organizational agility has a relationship with firm performance [52]. Furthermore, Çakmak [53] found that organizational agility helps companies get a better position in the market and increase profits. In a theoretical landscape that has interactions between the two, the final hypothesis is written as follows:
Hypothesis 5. Organizational agility positively increases firm performance.

3. Research Methodology

3.1. Sample

The sample used in this study amounted to 159 units. The sample volume is calculated by multiplying the number of variables by the indicators of each construct [50]. The number of indicators is 32. The sampling technique is connected with the non-probability sampling and purposive sampling methods. The sample is concentrated in small, medium, and big (SMB) companies engaged in food and beverage, showroom and workshop, beauty and health, education, logistics and distribution, export and import, and others in Indonesia. The sample was selected based on reports from the Boston Consulting Group (BCG) and Telkom regarding the use of digital technology by several business sectors. Table 1 details the profile of respondents based on age, line of business and occupation, position level, type of business, number of employees, and age of company.

Table 1. Portrait of Social Demographic

Characteristics	Quantity	Cumulative (%)	Characteristics	Quantity	Cumulative (%)
Age			Number of employees		
▪ 22–30	35	22.02	▪ 5–99	95	59.75
▪ 31–40	37	23.28	▪ 100–499	43	27.05
▪ 41–50	46	28.94	▪ >500	21	13.21
▪ >50	41	25.79	*Total*	*159*	*100*
Total	*159*	*100*			
Field of Work and Business			Type of business		
▪ Food and drink	26	16.46	▪ Trading Business/UD	9	5.67
▪ Beauty and health	23	14.56	▪ Commanditaire Vennootschap/CV	23	14.47
▪ Export and import	21	13.3	▪ Incorporated Company/PT	106	66.67
▪ Showroom and workshop	16	10.13	▪ Individual	21	13.21
▪ Logistics and distribution	25	15.83	*Total*	*159*	*100*
▪ Education	12	7.6			
▪ Others	36	22.79			
Total	*159*	*100*			
Position level			Age of the company or business		
▪ Manager	45	28.31			
▪ Director	26	16.36	▪ 1–5	30	18.87
▪ Commissioner	25	15.73	▪ 5–10	46	28.94
▪ Owner	63	39.63	▪ >10	83	52.21
Total	*159*	*100*	*Total*	*159*	*100*

Source: Devised by the authors.

First, respondents aged 22-30 years were 22.02%, respondents aged 31-40 years were 23.28%, while those aged 41-50 years were 28.94%, and some were respondents aged over 50 years 25, 79%. This shows that the majority of respondents in the sample are currently aged 41-50 years. Second, the largest number of respondents was in other business fields (22.79%). Then, continued with the food and beverage sector (16.46%), the logistics and distribution business sector (15.83%), and the fewest are those operating in the education sector (7.6%). Third, 39.63% of respondents were business owners, 15.73% of respondents held positions as commissioners, 16.36% of respondents were in the ranks of directors, and 28.31% held positions as managers. Most respondents are at a high level as business owners.

Fourth, Table 1 also finds that there are four categories of work in different businesses operated by respondents, where 66.67% of respondents work in PT, 14.47% of respondents are CV, 13.21% work in individual businesses, and 5.67% of respondents work in UD. The majority of respondents work for incorporated companies. Fifth, from the scope of employees, 59.75% of respondents work in companies that have an average of 5-99 employees, 27.05% of respondents in companies that employ 100-499 employees, and 13.21% of respondents in companies with a composition of more than 500 employees. Uniquely, this implies that most respondents come from small-scale companies with 5-99 employees. Sixth, there are 52.21% of respondents who work in companies with a company age of more than 10 years, 28.94% of respondents in companies that are 5-10 years old, and 18.87% of respondents work in companies with an operational age of 1-5 years. Thus, the company age factor greatly determines the respondent's work experience and skills.

3.2. Data processing

The approach to collecting data is interviewing. Enumerators distribute data using Google Forms to respondents. Filling in the questionnaire is described via a Likert scale into five points: score 1 = strongly disagree (minimum) to score 5 = strongly agree (maximum). Each statement submitted has its own specifications according to the indicators. The data were dissected with partial least square-structural equation modelling (PLS-SEM). PLS-SEM is enabled to partially explore the relationship between variables. There are five stages in PLS-SEM, including the outer model (reliability and validity), inner model (path coefficient), fit model, effect size, and coefficient of determination.

3.3. Model

The research model is integrated into one exogenous variable, namely digital technology usage (DTU), and three endogenous variables, including digital transformation strategy (DTS), organizational agility (OA), and firm performance (FP). Further development is intended to test the effect of DTU on DTS, OA, and FP. Then, the second test focuses on the effect between DTS and OA on FP. Figure 1 displays the theoretical framework. This paper is an extension and refinement adopted from previous scientific work that concentrates on digital transformation across cases, such as business, government, and corporate organizations to the macro scale [e.g.; 54–60].

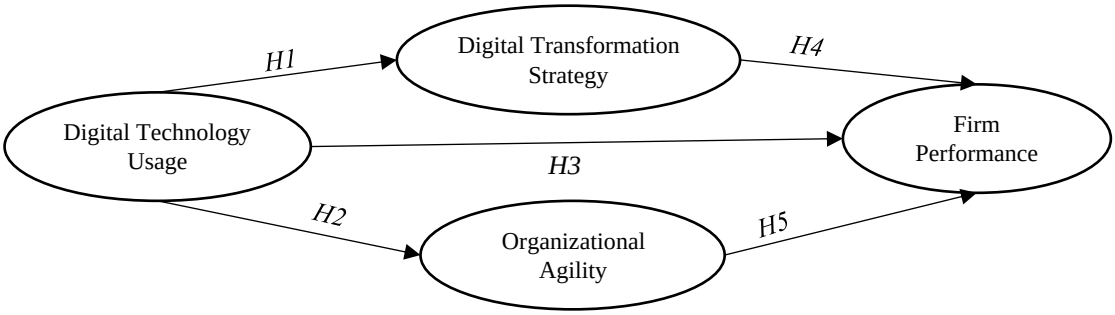

Figure 1. The Proposed Theoretical Framework
Source: developed by the authors.

4. Results and Discussion

4.1. Outer Model

In this phase, outer model testing is applied to diagnose internal consistency, discriminant validity, and convergent validity [61]. Internal consistency is part of the outer model test to identify the reliability of a variable. A variable is considered reliable if it meets a composite reliability score of > 0.6 and a Cronbach's alpha score of > 0.7. On the one hand, convergent validity aims to analyse the validity score of the indicator. Automatically, an indicator is classified as valid if the outer loading value is > 0.7. Then, discriminant validity looks at the average variance extracted (AVE). The feasibility of the model is reflected in the AVE score, where the condition is AVE > 0.5. Table 2 summarizes the outer model through internal consistency, discriminant validity, and convergent validity.

Table 2. Internal Consistency Test, Convergent Validity, and Discriminant Validity

Variables	Dimension	Indicators	Outer loading	Coefficient	Cronbach's alpha	AVE
Digital Technology Usage	DL*	DL1	0.788	0.922	0.7	0.762
		DL2	0.821			
	IET*	IET1	0.838	0.929	0.77	0.813
		IET2	0.836			
	SI*	SI1	0.845	0.933	0.726	0.785
		SI2	0.808			
Digital Transformation -on Strategy	DSS*	DSS1	0.875	0.969	0.855	0.775
		DSS2	0.84			
		DSS3	0.844			
	DS*	DS1	0.819	0.962	0.841	0.758
		DS2	0.856			
		DS3	0.838			
	DT*	DT1	0.835	0.957	0.864	0.786
		DT2	0.859			
		DT3	0.851			
Organizational Agility	DTC*	DTC1	0.769	0.945	0.762	0.677
		DTC2	0.83			
		DTC3	0.729			
	IC*	IC1	0.881	0.967	0.895	0.762
		IC2	0.811			
		IC3	0.823			
		IC4	0.861			

Variables	Dimension	Indicators	Outer loading	Coefficient	Cronbach's alpha	AVE
Firm Performance	RC*	RC1	0.808	0.964	0.827	0.744
		RC2	0.851			
		RC3	0.832			
	FP*	FP1	0.785	0.971	0.843	0.68
		FP2	0.838			
		FP3	0.792			
		FP4	0.787			
	MP*	MP1	0.829	0.958	0.833	0.673
		MP2	0.818			
		MP3	0.842			

Source: data output.
Note: DL = *Distributed Ledger*, IET = *Information Exchange and Transaction*, SI = *Shared Infrastructure*, DSS = *Digital Strategy Sensing*, DS = *Digital Seizing*, DT = *Digital Transforming*, DTC = *Digital Technology Capability*, IC = *Innovation Capability*, RC = *Relational Capability*, FP = *Financial Performance*, and MP = *Marketing Performance*.

Overall, Table 2 explains that all variables are classified as reliable by calculating the composite coefficient and Cronbach's alpha. Likewise with the dimensions of each indicator, where the statistical output shows valid results based on the outer loading score. Other findings found that the discriminant validity of this model is quite feasible because the AVE score shows more than the designed standard. In detail, the magnitude of each of these measures shows the largest versus the smallest score. As a comparison, on a reliable standard that uses composite coefficients, the highest is the DSS1 dimension (0.969) on the DTS variable, while the lowest is the DL1 dimension on the DTU variable (0.922). Surprisingly, the DL1 dimension with the lowest composite coefficient score also has the smallest Cronbach's alpha score of 0.7. Contrary to what is obtained from the IC1 dimension on the OA variable, it has the largest Cronbach's alpha score of 0.895. Additionally, through the indicators for each variable, it is calculated that the highest outer loading value is IC1 on the OA variable with a score of 0.881, while DTC3 (0.729) on the same variable is actually the lowest. Finally, for the model strength of the dimensions that make up the variables based on the AVE criteria, it was noted that the largest IET (0.813) on the DTU variable and MP (0.673) on the FP variable became the smallest AVE scores.

4.2. Inner Model

After passing the outer model criteria, testing the inner model, which synergizes with the path coefficient and partial test, is continued. The path coefficient shows the direction of the relationship between the two variables. The score on the path coefficient is shown by the original sample. If it gets closer to +1, then there is a positive relationship; if the score on the original sample is close to -1, then there is a negative relationship. Partial causality testing is determined by the direct effect. The direct effect is evaluated with a p-value; if the p-value is <0.05, then the exogenous variable has a strong bond with the endogenous variable. Table 3 reflects the path coefficient of the relationship for each variable. The three proposed hypotheses described in the previous chapter have been accepted, where DTU has a significant effect on DTS ($\rho = 0.000$), OA ($\rho = 0.009$), or FP ($\rho = 0.031$). This is in line with the two accepted hypotheses because DTS has a significant effect on FP ($\rho = 0.037$), and OA also has a significant effect on FP ($\rho = 0.000$).

Table 3. A Summary of Path Coefficient

Linkages	Original sample	T-value	ρ-value	Hypothesis	Remarks
DTU → DTS	0.947	130.992	0.000	H1	Accepted
DTU → OA	0.913	58.89	0.009	H2	Accepted
DTU → FP	0.204	2.163	0.031	H3	Accepted
DTS → FP	0.216	2.09	0.037	H4	Accepted
OA → FP	0.529	6.883	0.000	H5	Accepted

Source: data output.

When compared, the most dominant relationship of the five pathways is causality between DTU to DTS and OA to FP. In particular, the relationship between the relationship variables is positive. Even so, the strongest correlation concerning the original sample score (close to +1) is between DTU to DTS (0.947) and OA (0.913). From other linkages, such as OA to FP, it is classified as a moderate relationship, where the result is 0.529, while the two small relationships occur between DTU and DTS to FP with scores of 0.204 and 0.216, respectively.

4.3. Coefficient of Determination, Model Fit, and Effect Size

The coefficient of determination (R^2) is a measuring tool to test the suitability of the model [62]. The benefit of R^2 is that it maps the amount of variance in the endogenous variables explained by all exogenous variables. The value of R^2 has a value between 0 and 1, and the higher the value, the greater the level of suitability of the model. Testing the fit model is reflected in Q^2 through the blindfolding test [63]. Table 4 summarizes the results of R^2 and model fit.

Table 4. Coefficient of Determination and Model Fit

Exogenous variables	R-Square	R-Square Adjusted	SSO	SSE	Q^2
DTU	0.897	0.897	1.431	517.411	0.638
DTS	0.86	0.858	1.113	488.149	0.561
OA	0.833	0.832	1.590	705.224	0.556

Source: data output.

The effect size test identifies the effect of exogenous variables on endogenous variables. In PLS, the effect size is represented by the score f^2. Hair et al. indicated three categories in f^2, including 0.02 (weak influence), 0.15 (moderate influence), and 0.35 (strong influence) [64]. Testing through effect size is described below (see Table 5).

Table 5. Effect Size

Exogenous variables	FP	Remarks
DTU	8.732	Very strong
DTS	4.988	Very strong
OA	0.028	Weak

Source: data output.

In essence, the determination in the model that includes DTS, FP, or OA can influence FP with a strong capacity. The three R^2 scores for this study model are 0.897, 0.86, and 0.833. The varying effect size values reflect an unstable effect, especially in the relationship between OA and FP, with a score of 0.028. On the one hand, both DTU and DTS succeeded in influencing FP systematically, with scores reaching 8.732 and 4.988, respectively.

4.4. Justification

First, the study verifies that digital technology usage has a positive effect on digital transformation strategies. There are similarities with the scientific work of Audretsch and Belitski which revealed that digital transformation strategies are supported by digital technology usage such as social, mobile, the internet of things, analytics, and platforms [65]. Starting from past research by Fichman et al. and Teece et al. regarding digital technology usage that stimulates digital transformation strategies such as production processes, services, business models, and the company's competitive environment [66; 67]. Digital technology usage opens up new opportunities for making a corporate strategy to increase the company's competitiveness. Digital technology usage, such as big data, social media, and analytics, can help companies perform sensing, seizing, and transformation in the theory of dynamic capability.

Second, the study output confirms that digital technology usage has a positive effect on organizational agility. Interestingly, the relationship between information and digital technology in Industry 4.0 on supply chain speed results in the fact that information and digital technology have a positive effect on the speed of a company's supply chain. Organizational agility has one indicator, namely digital technology capability. This indicator is used to determine the level of adoption of digital technology within the company. The scientific magazines of Abubakre et al., Berisha-Shaqiri & Berisha-Namani, Pérez-Aróstegui et al., and Riedl et al. think that digital technology capability has a positive effect on organizational agility, so this shows that adaptation to digital technology will shape the organizational agility of a company expansively [68–71]. Then, by instilling organizational agility in companies, they can seek and capture new opportunities that exist in the market.

Third, it was found that digital technology usage has a positive effect on firm performance. There are similarities in these results with the manuscripts reviewed by Guo et al. [72] and Wang et al. [73] concerning the use of digital manufacturing technology having a significant influence on firm performance. The use of digital technology drives companies to create a new business model that can improve company performance in dynamic market conditions. Companies can take advantage of digital technologies such as blockchains, artificial intelligence (AI), the cloud, and the Internet of Things (IoT) to obtain big data that can be used to increase firm performance. The big data obtained can be used to seek new opportunities and create new corporate strategies. Digital technology can also be used to increase sales by utilizing social media, e-commerce, and other digital platforms. Experiences from Kristensson [74] and Zhang et al. [75] revealed that digital technology usage supports the creation of value, which can have a positive impact on increasing organizational performance.

Fourth, there is relevance between the digital transformation strategy and firm performance, which has a positive effect. Since the development of digital technology, many companies have begun to take advantage of it to increase their competitive advantage. Digital transformation strategies are carried out by companies to get maximum results to enhance company performance. The digital transformation strategy has three stages: digital sensing, digital seizing, and digital transformation [48]. The first stage of digital sensing is for companies to look for opportunities, identify consumer desires, and make strategies for using digital technology. The second stage is digital seizing, which requires companies to conduct trials

using digital technology within the company. The final stage is digital transformation, which is the company's foundation for implementing digital technology into the company by educating employees about the use of digital technology and creating digital business models.

Fifth, it is explained that organizational agility has a positive effect on firm performance. The role of organizational agility has a significant effect on firm performance. The paper highlighted by Mulyono and Syamsuri [76] explains that organizational agility has a positive impact on firm performance. Organizational speed increases the company's strength in the competition. Organizational agility assists companies in utilizing knowledge to improve firm performance [77]. Following up on the existing evidence that organizational agility has a digital technology capability. This dimension discusses the use of digital technology by companies to improve company performance by innovating products or services using digital technology and increasing customer satisfaction. The second dimension of organizational agility is relational capability, which discusses the relationship between the company and its partners, who are ready to help the company if a problem occurs. The last dimension is innovation capability; this dimension enables companies to drive innovation, invites employees to think creatively at work, and assesses the company's ability to tolerate the risks that exist from innovation.

Digital transformation strategy and organizational agility are needed in digital technology usage because the existence of organizational agility in getting opportunities to carry out digital transformations by utilizing digital technology can improve company performance [37]. Technically, digital transformation strategy, organizational agility, and digital technology usage are links in firm performance. Existing hypothesis testing is also synchronized with the publications of AlNuaimi et al. [78] and D'Oliveira Andrade et al. [79] regarding digital transformation strategy and organizational agility, and digital technology usage supports firm performance.

5. Conclusions

The objective of this paper is to identify the causality between digital technology usage, organizational agility, and digital transformation strategy on firm performance. For case studies of companies at the SMB level in Indonesia, the findings conclude that digital technology usage significantly influences digital strategy transformation, organizational agility, and firm performance. It was also found that improvements in digital transformation strategy and organizational agility had a significant impact on firm performance. This study has several weaknesses. Looking ahead, the next recommendations could explore the limitations of this study. First, the studies addressing SMB-scale business clusters are not concentrated in one area, so there is too much to learn. Lack of control over variables such as the intensity of digital technology use and the type of digital technology applied. As a result, the data collected is not homogeneous. Second, the duration of data collection is contemporary, so the observational data is not large. Furthermore, the limitations of the study are evident from the very diverse sample of business categorizations, so there is a possibility that the findings highlighted are less effective. Subsequent research is suggested to focus on one type of business in Indonesia. This study is only in its initial stages and needs to be developed further. Besides that, the study only highlights the use of digital technology but does not describe in detail the type of digital technology being investigated, so that papers for future agendas can specifically discuss the type of digital technology applied. Take examples like AI and other programs or projects.

For the long term, for example, when dealing with the COVID-19 crisis, the competent authorities and managerial actors need to consider policies, controls, and accurate steps that lead to system improvements. By realizing and prioritizing technology in the system, company performance can be maximized. Also, internal regulations must optimize human resources in synergy with the use of technology that is more appropriate according to the development of the era. In this way, there are further policy implications as a pioneer in internal or external assessments regarding the integration of managerial resources into digital technology that enables universal business expansion.

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Appendix

Table A-1. Descriptive Statistics Recapitulation of Constructs and Indicator Variables

DTU	Statement	Mean	Indication
Information Exchange and Transaction/IET			
IET1	Our company has a fast transaction and information process	3.63	Agree
IET2	Our company has a transaction system that is easy to apply	3.7	Agree
Distributed Ledger/DL			
DL1	Our company develops information security systems for consumers	3.73	Agree
DL2	This company builds a good information security system network	3.67	Agree
Shared Infrastructure/SI			
SI1	Companies target digital technology to share information across departments or across divisions	3.74	Agree
SI2	Our company has a digital technology connection	3.6	Agree
Mean average		*3.68*	*Agree*
DTS	**Statement**	**Mean**	**Indication**
Digital Strategy Sensing/DSS			
DSS1	Before implementing widespread use of digital technology with successful experiments in one or several company divisions	3.66	Agree
DSS2	Our company adopts digital technology into its strategy and corporate goals	3.73	Agree
DSS3	Our company responds to change by utilizing digital technology	3.65	Agree
Digital Seizing/DS			

DS1	Our company collaborates with external parties in developing digital technology	3.69	Agree
DS2	The company has designed a digital business model	3.72	Agree
DS3	Our company increases the knowledge of company employees about digital technology	3.6	Agree
Digital Transforming/DT			
DT1	This company makes good use of digital technology	3.7	Agree
DT2	Our company encourages digital technology to expand product or service innovation	3.68	Agree
DT3	Our company prioritizes the latest digital technology to provide customer satisfaction	3.83	Agree
Mean average		*3.7*	*Agree*
OA	**Statement**	**Mean**	**Indication**
Digital Technology Capabilities/DTC			
DTC1	Our company can support digital technology well	3.82	Agree
DTC2	The company synergizes digital technology in developing product or service innovations	3.57	Agree
DTC3	This company encourages the latest digital technology to provide customer satisfaction	3.7	Agree
Relational Capabilities/RC			
RC1	This company has partners who help solve company problems	3.61	Agree
RC2	The company is here to help uncover and solve problems when needed	3.7	Agree
RC3	Our company has partners who are always committed to offering new alternatives	3.84	Agree
Innovation Capabilities/IC			
IC1	Our company innovates	3.68	Agree
IC2	The company offers new access, including creativity support	3.81	Agree
IC3	Our company is always looking for new ideas	3.59	Agree
IC4	Our company can tolerate the risks of innovation	3.71	Agree
Mean average		*3.7*	*Agree*
FP	**Statement**	**Mean**	**Indication**
Financial Performance/FP			
FP1	Our company is experiencing sales growth	3.63	Agree
FP2	The company succeeded in retaining consumers continuously	3.55	Agree
FP3	The company is experiencing progress in profitability	3.75	Agree
FP4	Revenue at the company grew better than before	3.62	Agree
Marketing Performance/MP			
MP1	Compared to the previous period, our company succeeded in entering new markets faster than competitors	3.8	Agree
MP2	Our company succeeded in introducing new products or services to the market faster than competitors	3.62	Agree
MP3	Compared to the previous period, our company has a larger market share than competitors	3.67	Agree
Mean average		*3.66*	*Agree*

Source: data output.

Abbreviations: DTS = *Digital Technology Usage*, DTS = *Digital Transformation Strategy*, OA = *Organizational Agility*, and FP = *Firm Performance*.