# Effect of Product Innovation, Value Co-Creation

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# Effect of Product Innovation, Value Co-Creation, Market Sensing on Firm Performance Bateeq Indonesia

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The aim of this study is to analyse the effect of product innovation, market sensing capability, value Co-Creation on firms performance. SMEs Bateeq firms in Central Java used as a sample. Sampling was done using purposive sampling technique. Data were collected using a questionnaire given directly to the respondents. The total data that can be further analysed as much as 211 respondents. Data analysing using Structural Equation Modelling-SEM with the AMOS program assistance. The result showed that the product innovation has significant effect on value co-creation. In addition, value co-creation to be mediator in relatioship product innovation have significant effect on firm performance.

**Keywords**: product innovation; market sensing capability; value co-creation; firm performance

## 1. INTRODUCTION

The problem of developing business now is changing of value from firm to customer. The tight competition and limited innovation by the firms, so customers and market have be actors change this situation. Innovation is a key for companies to survive in the midst of competition, making the company grow so much faster, more efficient and more profitable Alpay, et al (2012). It is also becoming the way for company to maintain a competitive market Lin et al, (2013) increase the value of the product, Aydin et al, (2007) a key to compete in global competition Akman and Yilmaz, (2008) to create growth and sustained dynamic performance in a changing environment and it is crucial to improve the competitiveness of the company and the company's firms performance. Competitive capability in the organization is the ability to learn, innovate and respond to global challenges, dynamics, and ambiguity, which is used to develop strategies and make innovation more effective.

Therefore, as a consequence, product innovation is considered as very important for firms performance. Although it is generally, the product innovation

accepted as the rain key to achieving better performance, but still there are differences in the results of previous studies on the relationship between product innovation and firms performance Hoonsopon and Ruenrom, (2012), Avlonitis and Salavou, (2007), Akgun, et al (2009) dan Augusto, et al (2011) in contrary case study found between product innovation and firms performance have not significant Fu, et al (2008), Al-Zyadaat et al (2012).

Innovation is essensial for the firm survive. What did it to do? Co-creation as problem solving for the firm survive. In particular, cooperation through co-creation would facilitate access to new resources and intangible capabilities, innovation and greater adaptation to enormously dynamic environments organizations need to take advantage of the involvement of customers and other stakeholders because they can offer new and unique resources, such as knowledge and experience Ford, et al. (2011). However, although this is a very topical subject, there has been insufficient research in the field of industrial marketing on procedures and methods for establishing effective processes of co-creation to encourage innovation in the development of solutions and to promote market sensing. This article aims to contribute by analysing how the co-creation of value can influence the companies firm performance and how market sensing affects value co creation? In particular, we aim to answer the following questions. How is it possible to create product innovation and market sensing through co-creation enhance firm performance?

#### 2. THEORETICAL FRAMEWORK AND HYPOTHESIS

In order to answer these questions, we use social exchange theory (SET in advance) and that grew out of the resource-based view (RBV), as well as the marketing approach called service dominant- Logic (SD-L below). The combination of these approaches enables us to consider the dual challenge associated with the above questions – on the one hand encouraging cooperation and, on the other, managing relations to seek mutual benefit.

With the above aim, we present a qualitative research carried out in different count RBV, on the other hand, sustains that differences in performance can be attributed to the possession of a set of unique resources that are strategically valuable Barney, (1991) It includes the role taken by customers and other stakeholders (suppliers, distributors, border agents) when drawing up solutions, called co-creation Prahalad and Krishnan. (2008) The criterion behind this principle is that value is created collaboratively through mutual exchange interactions in general and service in particular, argue that value is co-created by multiple actors through processes of exchanging and integrating public, private, and market-facing resources Vargo et al., (2008). S-D logic argues that value is always co-created, jointly and reciprocally, in interactions among actors through the exchange of service (i.e. applied resources such as competences and skills) Lusch and Vargo(2014); Vargo and Lusch (2004)

Payne et al. (2008). The analysis lead to suggestion that co-creation includes: (1) active involvement between at least two actors; (2) integration of resources that create mutually beneficial value; (3) willingness to interact and (4) a spectrum of potential form of collaboration. Based on these factors Goornroos (2008) analyzed value co-creation process and provide (1) active involvement; (2) integration of resources that create mutually beneficial value; (3) willingness to interact and (4) a spectrum of potential form of collaboration. In the process of co-creation both customer and organization are equally important. Through interaction, the organization gets an opportunity to influence the customer value creating process value creating processes (customer process and organizational process) are merging into.

Sensing capability is defined as the ability of a firm to sense and identify opportunities and options in its scanning, searching and exploring across technologies and markets for its new product development Zhang and Wu (2013) Sensing capability in scanning, searching, and exploring across technologies and markets for product innovation, we are capable of exploring opportunities and options, detecting new opportunities and product solution options, spotting new technology possibilities, identifying trends in customer needs.

Based on the inconsistencies effect of product innovation and firms performance in the previous studies, this study conduct to analyze the role of value co-creation in mediated the relationship of product innovation, market sensing and firms performance.

#### 3. CONCEPT DEVELOPMENT AND HYPOTHESES

## 3.1 Product Innovation and Value Co-Creation

Value co-creation is a coalition of different economic actors for reconfiguration and integration competence to generate shared value. Saarijärvi, *et al* (2013) explain that the value co-creation has always two sides, which are value creation based on the perspective of corporate and customers. Both parties then provide resources in order to process of value creation by integrating the resources of each party through the mechanism of co-design, co-development, or codistribution.

Value creation is a concept which describes the firms' efforts to deliver superior performance for the desired customers through innovation. Innovation enables companies to update their products with the attributes that

ultimately meet the needs of customers more than existing products O'Cass and Ngo (2012). Value creation was concept to create superior performance for customer O'Cass and Ngo (2012). Parthasarathy, et al (2011) found that product innovation is an instrument to the creation of value. Vargo, et al (2008) states that value creation is a core purpose and central process of economic exchange. Value is co-created by this reciprocal and mutually beneficial relationship.

Hypothesis 1: The higher the product innovation, the higher the level of value co-creation

#### 3.2 Value Co-Creation and Marketing Performance

The benefit Value co-creation made the maximal capital increasing for the firms. Studi Aspara and Tikkanen (2012) had two starategies value creation as value capture – strategies that ensure that the maximum value of the portion capturedor provided by the firm itshelf in the form of profits, instead of members of the value chain or competitors. Meanwhile, value creation - as a strategy that refers to the value of the utility (benefit) in which products or other offers of the company created by the customer. They hypothesized that the emphasis on value capture strategies has a negatively affect on firms performance, while the emphasis on value creation strategy has a positive effect on firm performance. The results of the study Aspara and Tikkanen (2012) showed a positive and significant effect of the emphasis on value creation strategy on firm performance, while the emphasis on value capture strategies has no significant effect on firms performance. Similar results were also found by Sullivan, et al (2012) that positively influence the value creation on fims' sales performance.

Hypothesis 2: The higher the level of value co-creation, the greater the firms performance

#### 3.3 Product Innovation and Firms Performance

Avlonitis and Salavou (2007) stated that the innovation of products consist of uniqueness and newness in small and medium enterprises (SMEs) has positive and significant impact on the performance of firms. It was proved from the market share and sales volume. Research studies Lau *et al*, (2010) suggested that product innovation is a source of productivity and agent of organizational change for companies to survive, because only companies with full and powerful products innovation will open up greater opportunities for challenging products marketing with competitors. This research was supported Prajogo, (2006), Bates and Khasawneh, (2005), Akman and Yilmaz (2008), Rosli and Sidek (2010)

Hypothesis 3: The higher the product innovation, the greater the firms performance.

# 3.4 Market Sensing and Value Co-Creation

The experience of provides a clear illustration of how a market oriented firms creates value for both customers and shareholders. This paratigmatic transformation requires changes in the way companies are organized to create and deliver value to their customers. Business marketers have to continuously increase their contribution to the value chain. Tournois (2013) with data collected from 55 companies, involving 146 managers and 425 consumers of

branded products that these companies sell, indicate that market orientation correlates with customer value and result statistically significant

Hypothesis 4: The higher the market sensing, the greater the level value cocreation

# 3.5 Market Sensing and Firm Performance

Market sensing is organization capability for changing market and predicting accurate market response, as potensial organization development to enhance firm performance Foley and Fahy (2004). According Teece (2007) the firms done searching, sensing and adventuring for the firms investigated customer, industries structure, technology and new opportunity. So the firms need good sensing from market or customer increasing the change event and trend, activitity for searching new informasion which firms competitive. The good sensing made efectively and identification new knowledge Sin, *et al* (2005) market sensing made superior value and continuitas of performance

Hypothesis 5: The higher the market sensing, the greater the firms performance

#### 4. RESEARCH METHOD

#### 4.1 Sample and Data Collection

The role of value co-creation done in bateeq industries as Bateeq Tiga Negeri in Central Java, Indonesia which collaboration three bateeq with producen, supplier and customer. They regional from Lasem, Pekalongan and Surakarta as population. One bateeq three collaboration with three motive from three places to do co-creation created. The sampling technique is done by using a purposive sampling technique, where long time of firms operating as a requirement for sampling. Data is done by providing direct questionnaire developed the 211 respondent business owners. The data were analyzed using structural equation modeling with AMOS program assistance.

#### 4.2 Data Analysis

• Validation of the data collected is done with the data of 211 quesioner collected and data that can be used for futher testing. Thus, the analysis of hypothesis testing can be done. The results of hypotheses testing based on hypotheses that have been formulated can be seen in the following figure. Indicator product innovation level of uniqueness, novelty, and develop product creative collaboration, develop the old design for a new product (Killa, 2014). Indicator value co-creation mutual exchange interactions, willingness to interact and a spectrum of potential form of collaboration Payne, et al (2008). Market sensing indicator: exploring opportunities and options, detecting new opportunities, spotting new tecnology possilities, sensing trend customer needed Zhang and Wu (2013). Firm Performance is sales volume, sales growth, new customer level Avlonitis and Salavou (2007)

Tabel. 1
Scale & Measurement – Construct Validity

Indikator	Standardized Loadings	α	CR
Product Innovation:			
Level Product uniqueness			
Product novelty to get other	0.72		
new idea	0.76		
Develop product creative			
collaboration	0.75		
Develop the old design for a			
new product	0.75	.83	.83
Value Co-creation :	0.73	.00	.00
Mutual exchange interaction			
Sharing information and	0.80		
knowledge			
A spectrum of potential form	0.76		
of collaboration			
Willingness to reciprocal	0.81		
interact			
	0.77	.86	.87
Market sensing:	0.40		
Exploring opportunities and	0.69		
options	0.73		
Detecting new opportunities	0.72		
Spotting new tecnology	0.67		
possilities	0.07	.77	.84
Sensing trend customer needed	0.64	•//	.04
needed	0.01		
Firm Performance:			
Sales volume	0.74		
Sales growth			
New customer level	0.81		
New area level for sales	0.80	.86	.88
	0.79		

#### 4.3. Reseach Finding

The research used estimation of Coeffisient Cronbach's Alpha ( $\alpha$ ), Composite Score Reliability (CR) and Average Variance Extracted (AVE) to construct reliability assessment. Statistical results for all database with a value of alpha and the value of the composite reliability (CR) must be above 0.7 (see table 2). Value of Average Variance Extracted (AVE) is recommended to be above 0.5. Table 2 shows the measurement scales, confirmatory factor analysis and reliability. Cronbach's alpha Coeffisient and AVE estimation was also done by Sobel test to determine whether the value co-creation would fill the gap between product innovation and firms performance or not. Sobel test would also be used to

comprehend the influence of market sensing toward firms performance. Sobel will be of significant value when Sobel test has a value of > 2 and a two-tailed probability < 0.05 (Soper, 2016).

The statistical results shows that the product innovation, market sensing capability have positive and significant impact to the value co-creation, as well as product innovation, market sensing capabilities have positive and significant impact on the firms performance. Statistical results are presented in Table 2 below:

			Estimat e	S.E.	C.R.	P	Label
Value_Cocreation	< -	Product_Innovatio	,370	,08 3	4,46 2	***	Significan t
Value_Cocreation	<	Market_Sensing	,387	,08 6	4,52 2	***	Significan t
Firms_Performanc	<	Value_Cocreation	,594	,15 8	3,76 4	***	Significan t
Firms_Performanc	<	Product_Innovatio	,248	,10 5	2,36 9	,01 8	Significan t

Market Sensing

,10

,268

2,48

Significant

Tabel. 2 Regression Weight

#### 4.4. Measurement validation

Firms Performanc <--

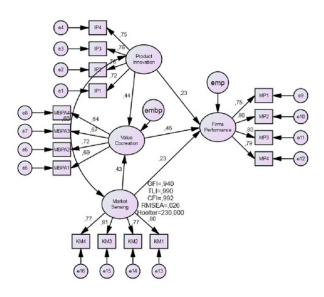
Measurement model was using AMOS 20 by applying the maximum likelihood (ML) procedural. The statistical results with a model that is fit Chisquare = 111.53, df = 98, CMIN / DF = 1.138, GFI = 940, TLI = 990, CFI = .992, RMSEA = .026, Hoelter = 230. Value of Sobel test> 2 and two-tailed value <0.05 which means significant.

Multi-items analyzed by estimated factor loading, Cronsbach alphas, Composite Reabilities (CR) and Average Variances Extracted (AVE). All results are positive and significant factor loading (p $\leq$  .05) Cronsbach alphas, Composite Reabilities (CR) range of .77 to .86 and .83 to .88 all values above 0.7. Lastly, AVE all cases above 0.5. And all the indicators and construct reliability on the results support of this study. Hoelter value> 200 at a rate of .01 and .05 then the model is considered fit, and the sample number 211 is considered sufficient to make the model fit. Results Sobel test = 2,544 and two-tailed value of <0.05, it means that the value of Sobel test between product innovation and firms performance is capable to be mediated by value co-creation. Sobel test also shows value co-creation is able to mediate between the market sensing capabilities and firms performance.

## 4.5 Structural Model

Final results of the study has shown structural models of the relationship between dependent and independent variables with a satisfactory value or goodness-of-fit. Model Chi-square = 111.53, df = 98, CMIN / DF = 1.138, GFI = 940, TLI = 990, CFI = .992, RMSEA = .026, Hoelter = 230.

Fig. 1 Full Structural Model



Output regression coefficients are shown in Table 1, indicating a strong correlation for all the hypotheses that have been tested. Hypothesis test produces a positive and significant correlation between the influence of product innovation to the value co creation (H1 supported), market sensing capability has a positive and significant relationship to advatage of value co creation (H2 supported). Value co cration has a positive and significant impact with firms performance (H3 supported). Product innovation has a significant positive effect on the firms performance (H4 supported). Market sensing capability has a positive and significant relationship to the firms performance (H5 supported).

#### 5. DISCUSSION AND IMPLICATION

# 5.1 Discussion

The results of this study confirm the argument that product innovation is a consequence of the pursuit of performance and prove that product innovation which is indicated by level of uniqueness, novelty, develop product creative collaboration and develop the old design for a new product could improve firms performance Zhang and Wu (2013). Further product innovation also have significant positive effect on value co-creation, which has the meaning that the higher the firms in creative industries improve their product innovation, the value co-creation will increase. Thus, these results support the view that the value co-creation can be obtained through product innovation Parthasarathy et al (2011). The analysis indicates a positive and significant effect of value cocreation on firms performance, which means that the higher the level of value co-creation is done the firms in the bateeq industry will increase firms performance. These results confirm the argument of Gulati, et al (2000) and Payne et al. (2007) that the value creation in the networking impact on enterprise performance improvement. This finding provide strong support for the importance of product innovation and value co-creation in improving firms performance evidenced a significant positive effect of on product innovation and a significant positive effect of product innovation on firms performance. On the other hand the results of this study confirm the importance of value co-creation as an important aspect of relationship product innovation and firms performance, which proved the positive effect of product innovation on value co-creation, and the positive effect of value co-creation to firms performance.

#### 5.2. Managerial Implication

The results of this study provide two possible alternative to be done by the owners of small and medium enterprises in the bateeq industry in Indonesia is the first, managing product innovation by increasing the uniqueness of the product, including the attributes of the product, increasing the variance motive of the product continuously, and increasing quality product. With increasing product innovation can increase the firms performance. The second alternative is using the value co-creation approach with customers to achieve high firms performance. Owners can manage value co-creation by increasing the responsiveness to changing in customer' demand, increasing flexibility to changing customer needs, and deliver quality product to customers. The value creation occurs when product innovation improved.

#### 5.3. Conclusion

Results of this research indicate the important role of the value co-creation in bridging the gap between the product innovation and firms performance. Even though there was researches result claimed that there is contradiction between product innovation and firms performance by the study of Yalcinkaya *et al.* (2007), Fu *et al.* (2008), Al-Zyadaat, *et al.* (2012), results of this contradiction is concluded with clear statement that value co-creation are able to mediate the gap between product innovation and firms performance. Value Co-creation are also capable of mediating market sensing capability to increase firms performance. And 5 results supported the hypothesis stated.

#### 5. 4. Future Research

To win the global business competition bateeq SMEs must be able to innovate in order to improve firms performance. Bateeq SMEs should be able to continue product innovation to survive. Surely, it is better when bateeq SMES are also able to make their own branch label to simplify consumers in identifying products of bateeq SMEs in the market. Finally, this research gives focus on the bateeq SME industries in Indonesia, to develop new strategy of Indonesian SMEs marketing in the future. Hopefully, the next research about advantage of Value co-creation will be applied to other industries such as the bateeq industries to perfectionate patterns against other products.

#### REFERENCE

- Akman, G., and Yilmaz, C. (2008). Innovative Capability, Innovation Strategy And Market Orientation: An Empirical Analysis In Turkish Software Industry. *International Journal of Innovation Management*, 12(1): 69-111.
- Al-Zyadaat, M. A., Saudi[a], M. A., and Al-Awamreh, M. A. (2012). The Relationship Between Innovation and Marketing Performance in Business Organizations: An Empirical Study on Industrial Organizations in the Industrial City of King Abdullah II. *International Business and Management*, 5(2): 76-84.
- Alpay, G., Bodur, M., Yilmaz, C., and Buyukbalci, P. (2012). How does innovativeness yield superior firm performance? The role of marketing effectiveness. *Innovation: Management, Policy & Practice*, 14(1).
- Aspara, J., and Tikkanen, H. (2012). Creating novel consumer value vs. capturing value: Strategic emphases and financial performance implications. *Journal of Business Research*.
- Augusto, M., Lisboa, J., and Yasin, M. (2011). The Impact Of Innovation On The Relationship Between Manufacturing Flexibility And Performance: A Structural Modelling Approach. *International Journal Of Business Research*, 11(4): 65-72.
- Avlonitis, G. J., and Salavou, H. E. (2007). Entrepreneurial orientation of SMEs, product innovativeness, and performance. *Journal of Business Research* 60: 566-575.

- Aydin, S., Cetin, A. T., and Ozer, G. (2007). The Relationship Between Marketing and Product Development Process and Their Effects on Firm performance *Academy of Marketing Studies Journal*, 11(1).
- Bates, R., and Khasawneh, S. (2005). Organizational learning culture, learning transfer climate and perceived innovation in Jordanian organizations. *International Journal of Training and Development* 9(2).
- Chen, Y.-S., James Lin, M.-J., and Chang, C.-H. (2009). The positive effects of relationship learning and absorptive capacity on innovation performance and competitive advantage in industrial markets. *Industrial Marketing Management* 38: 152-158.
- Cillo A, P., De Lucab, L. M., and Troiloa, G. (2010). Market information approaches, product innovativeness, and firm performance: An empirical study in the fashion industry. *Research Policy* 39 39: 1242–1252.
- Dibrell, C., Davis, P. S., and Craig, J. (2008). Fueling Innovation through Information Technology in SMEs\*. *Journal of Small Business Management* 46(2): 203–218.
- Foley, A., and J. Fahy (2004) Toward a Further Understanding of The Development of Market Orientation in The Firms: A Conceptual Framework Based on The Market Sensing Capability, *Journal of Strategic Marketing*, Vol. 12, 219-230
- Fu, F. Q., Jones, E., and Bolander, W. (2008). Product Innovativeness, Customer Newness, and New Product Performance: A Time-Lagged Examination of Impact of Salesperson Selling Intentions On New Product performance. *Journal of Personal Selling & Sales Management*, XXVIII(4): 351-364.
- Hoonsopon, D., and Ruenrom, G. (2012). The Impact of Organizational Capabilities on the Development of Radical and Incremental Product Innovation and Product Innovation Performance. *Journal of Managerial Issue*, XXIV(3): 250-276.
- Hua, S. Y., and Wemmerlov, U. (2006). Product Change Intensity, Product Advantage, and Marketn Performance: An Empirical Investigation of the PC Industry. *Journal product innovation management*, 23: 316-329.
- Hult, G. T. M., and Ketchen, D. J. (2001). Does market orientation matter?: a test of the relationship between positional advantage and performance. *Strategic Management Journal*, 22(9): 899-906.
- Killa, M. F. (2014). Effect of Entrepreneurial Innovativeness Orientation, Product Innovation, and Value Co-Creation on Marketing Performance. *Journal of Research in Marketing*, 2(3).
- Lages, L. F., Silva, G., and Styles, C. (2009). Relationship Capabilities, Quality, and Innovation as Determinants of Export Performance. *Journal of International Marketing*, 17(4): 47-70.
- Langerak, F., Hultink, E. J., and Robben, H. S. J. (2004). Product Development & Management Association The Impact of Market Orientation, Product Advantage, and Launch Proficiency on New Product Performance and Organizational Performanc. *Journal Product Innovation Management* 21: 79-94.

- Lau, A. K. W., Tang, E., and Yam, R. C. M. (2010). Effects of Supplier and Customer Integration on Product Innovation and Performance: Empirical Evidence in Hong Kong Manufacturers. *Journal Innovation Product*, 27: 761-777.
- Lee, J.-S., and Hsieh, C.-J. (2010). A Research In Relating Entrepreneur ship, Marketing Capability, Innovative Capability And Sustained Competitive Advantage. *Journal of Business & Economics Research* 8(9).
- Lin, R.-J., Tan, K.-H., and Geng, Y. (2013). Market demand, green product innovation, and firm performance: evidence from Vietnam motorcycle industry. *Journal of Cleaner Production* 40: 101-107.
- O'Cass, A., and Ngo, L. V. 2012. Creating superior customer value for B2B firms through supplier firm capabilities. *Industrial Marketing Management*, 41(1): 125-135.
- O'Cass, A., and Sok, P. 2013. Exploring innovation driven value creation in B2B service firms: The roles of the manager, employees, and customers in value creation. *Journal of Business Research*, 66(8):1074-1084.
- Parthasarathy, R., Chenglei, H., and Aris, S. 2011. Impact of Dynamic Capability on Innovation, Value Creation and Industry Leadership. IUP Journal of Knowledge Management, 9(3): 59-73.
- Prahalad, C. K. and Ramaswamy, V. (2004) Co-Creation Experiences: The Next Practice in Value Creation The future of competition: co-creation unique value with customer
- Prajogo, D. I. (2006). The Relationship between Innovation and Business Performance—A Comparative Study between Manufacturing and Service Firms. *Knowledge and Process Management*, 13(3): 218-225.
- Sandvik, I. L., and Sandvik, K. 2003. The impact of market orientation on product innovativeness and business performance. *International Journal of Research in Marketing*, 20(4): 355-376.
- Saarijärvi, H., Kannan, P. K., and Kuusela, H. 2013. Value co-creation: theoretical approaches and practical implications. *European Business Review*, 25(1): 6-19
- Song, X. M., and Parry, M. E. (1997). The Determinants of Japanese New Product Successes. *Journal of Marketing Research*, XXXIV: 64-76.
- Soper, D. S. (2016). Sobel Test Calculator For The Significance of Mediation (Software): Available From hhtp://www.danielsoper.com.
- Vargo, S. L., Maglio, P. P., and Akaka, M. A. 2008. On value and value co-creation: A service systems and service logic perspective. European Management Journal, 26(3): 145-152.
- Verhees, F. J. H. M., and Meulenberg, M. T. G. (2004). Market Orientation, Innovativeness, Product Innovation, and Performance in Small Firms\*. *Journal of Small Business Management* 42(2): 134-154.
- Verhees, F. J. H. M., Meulenberg, M. T. G., and Pennings, J. M. E. 2010. Performance expectations of small firms considering radical product innovation. *Journal of Business Research*, 63(7): 772-777.
- Voss, G. B., and Voss, Z. G. (2000). Strategic orientation and firm Performance in an artistic Environment. *Journal of Marketing*, 64: 67-83.

- Wang, Z., and Wang, N. 2012. Knowledge sharing, innovation and firm performance. Expert Systems with Applications, 39(10): 8899-8908.
- Yaslioglu, M., Çaliskan, B. Ö. Ö., & Sap, Ö.(2013) The Role of Innovation and Perceived Service Quality in Creating Customer Value: A Study on Employees of a Call Center Establishment. Procedia -Social and Behavioral Sciences, 99: 629-635.
- Yalcinkaya, G., Calantone, R. J., and Griffith, D. A. (2007). An Examination of Exploration and Exploitation Capabilities: Implications for Product Innovation and Market Performance. *Journal of International Marketing*, 15(4): 63-93.
- Zhang, J., and W.-P. Wu. 2013. "Social capital and new product development outcomes: The mediating role of sensing capability in Chinese high-tech firms". *Journal of World Business*, Vol. 48, No. 4, hlm: 539-548.

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