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E-Commerce Performance Based on Knowledge Management and Organizational Innovativeness

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Abstract

Purpose: This study focuses on the performance of the strategy of Indonesia's companies in facing the development of e-commerce business. The relationship between Knowledge Management (Organizational Memory, Knowledge Sharing, Knowledge Absorption, Knowledge Acceptance), Organizational Innovativeness, Competitive Advantage (Time, Quality, Cost, Flexibility) and E-Commerce (Humanistic Factors: Management, Competence, Organizational Structures) examined in this case study. **Research design, data, and methodology:** This study uses two types such us qualitative and quantitative. A survey approach were conducted to collect data from the Group of Companies (Director and Manager), Academician (Lecturer), Regulator (Head of Government Institution Division), and Master of Management (at least five years). Total of 114 samples was collected and processed for statistical analysis using Smart PLS. **Results:** This study provide the findings proved that Knowledge Management and Organization Innovativeness simultaneously have positive influence on Competitive Advantage, while Knowledge Management, Organization Innovativeness, and Competitive Advantage simultaneously have positive influence on E-commerce where Competitive Advantage positively influence to E-commerce. **Conclusions:** The implementation of strategies or steps in this study are expected to steer and motivate an organization to successfully implement a good knowledge management system to pass on knowledge from generation to generation in the company Organizational Innovativeness strategies to improve e-commerce performance.

Keywords: E-Commerce, Information Technology, Knowledge Management, Organizational Competitiveness, Competitive Advantage

JEL Classification Code: M0, L1, M3

1. Introduction

The development of the current economic growth with the current globalization led to the digital era to meet the demands of people needs. This digital era cannot be separated from e-commerce, where the function of e-commerce as a medium to be a collection of technologies, applications, and businesses that connect companies or individuals as consumers to conduct electronic transactions, exchange of goods, and exchange of information through the Internet or another computer network (Razak et al., 2019; Indahingwati et al., 2019; Mansur et al., 2019). These changes have caused some new problems faced by various groups that demand all business people to find various solutions and strategies that will be applied to survive to have a competitive advantage through the characteristics and resources of a company to have a higher performance compared to other companies in the same industry or market.

The impact of these changes and challenges also applies to companies in Indonesia to actively confront and find solutions to survive in this digital era with strategies that can improve performance in e-commerce as a means to meet the needs of their customers. This is also supported by the market share of Indonesia itself and the culture of its people that are quick in adopting things related to technology. Figure 1 presented the growth of e-commerce sales in Indonesia. The data showed that e-commerce sales in Indonesia are increasing significantly every year.

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Table 1: The Growth Rate of E-Commerce Sales in Indonesia

	2011	2012	2013	2014	2015	2016	2017
Indonesia	104.5%	85%	71.3%	45.1%	37.2%	26.0%	22.0%
China	103.7%	94.1%	65.1%	51.2%	30.6%	22.6%	18.3%
India	47.2%	39.7%	34.6%	27.1%	23.7%	18.2%	16.6%
South Korea	17.6%	6.0%	6.9%	9.3%	8.3%	8.2%	7.3%
Australia	11.0%	10.05%	6.0%	5.7%	5.1%	5.0%	4.2%
Japan	27.1%	13.2%	-7.2%	7.1%	6.7%	5.6%	5.0%
Other	23.9%	12.4%	12.7%	12.0%	11.9%	11.0%	10.2%
Total Asia Pasific	37.2%	32.8%	23.1%	29.0%	20.9%	16.7%	14.2%

Source: Statista (2019)

Based on these changes and challenges, many companies in Indonesia, both profits and non-profits realize that it is very important to have appropriate Knowledge Management and Organizational Innovativeness in providing services to create or maintain Competitive Advantage of companies or organizations (private, government, individuals) in the E-Commerce era currently. This is supported by companies or organizations that are not ready to face the current technological developments in marketing, producing, and providing services got many problems. This study focuses on the performance of the strategy of Indonesia's companies in facing the development of e-commerce business. The purpose of this study is analyze and investigate the relationship between Knowledge Management (Organizational Memory, Knowledge Sharing, Knowledge Absorption, Knowledge Acceptance), Organizational Innovativeness, Competitive Advantage (Time, Quality, Cost, Flexibility) and E-Commerce (Humanistic Factors: Management, Competence, Organizational Structures). We hope, results of this study can contribute to the development of knowledge in the field of strategic management and can have an impact on industry players

2. Literature Review

2.1. Knowledge Management

Effective learning processes are linked to exploration, exploitation, and sharing of human knowledge (tacit & explicit) using appropriate technologies and cultural environments to enhance an organization's intellectual capital and performance (Jashapara & Tai, 2011). There are four important dimensions of Knowledge Management: Organization memory; Sharing knowledge; Absorption of knowledge and Acceptance of knowledge. These four dimensions of knowledge management measurement have been examined and tested by (March & Olsen, 1976; Cohen & Levinthal, 1990; Prahalad & Hamel, 1994; Nonaka & Takeuchi, 1995; Mack & Szulanski, 2017; Popper & Lipshitz, 1998; Davenport, Davies, & Grimes, 1998; Hansen, Nohria, & Tierney, 1999; Cross & Baird, 2000; Alavi & Leidner, 2001; (Becker, 2001; Gray, 2001; Hult, 2003; Wang, Ahmed, and Rafiq, 2008; Naidah & Iskandar, 2015).

2.2. Organizational Innovativeness

Innovation can be present in various forms, such as product or process innovation, radical or incremental innovation, administrative or technological innovation, and others. (Matinaro & Liu, 2017; Camisón-haba, Clemente-almendros, & Gonzalez-cruz, 2018; Valdez-juárez, Solano-rodríguez, & Philippe, 2018).

Table 2: Organizational Innovativeness Dimension or Indicator

Author	Product	Market	Process	Behavior	Strategic
(Schumpeter & Redvers, 1934)	x	x	x		
(Miller & Friesen, 1983)	x		x	x	x
(Capon, Farley, Lehmann, & Hulbert, 1992)		x			x
(Avlonitis, Kouremenos, & Tzokas, 1994)	x		x	x	x
(Subramanian & Nilakanta, 1996)			x		
(Hurley & Hult, 1998)				x	
(Rainey, 1999)				x	x
(Lyon, Lumpkin, & Dess, 2000)	x		x		
(North & Smallbone, 2000)	x	x	x	x	

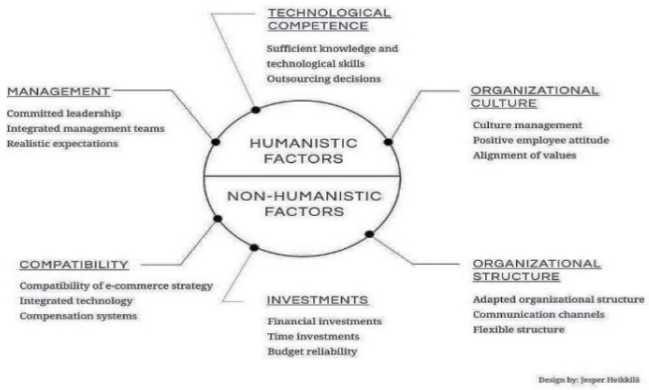
Source: Wang et al. (2004)

The importance of different dimensions is emphasized by the authors. For example, (Witell et al., 2016) suggested various possible innovative alternatives, namely developing new products or services, developing new production methods, identifying new markets, finding new sources of supply, and developing new forms of organization. Miller

and Friesen (1983) focus on four dimensions: innovation of new products or services, methods of production or service delivery, risk-taking by key executives, and seeking unusual and new solutions. Wang, Campus, and Campus (2004) adopted three dimensions of innovation: market innovativeness, strategic tendency to be a pioneer, and technological sophistication. They are product innovation, market innovation, process innovativeness, behavioral innovation, and strategic innovation. Research that emphasizes these different dimensions is briefly summarized in Table 2. In line with this perspective, we define organizational innovativeness as the overall innovative ability of companies to introduce new products to markets, or open new markets, by combining strategic orientation with innovative behavior and processes, measured by using dimensions or indicators.

2.3. Competitive Advantage

Ability gained through the characteristics and resources of a company to have a higher performance than other companies in the same industry or market. (Hwang & Kim, 2018) suggested that companies compete in the market on one or more of the following competitive priorities: time, quality, and cost, along with flexibility. Many researchers (Tutar, Nart, & Bingöl, 2015), (Jiang & Zhang, 2016), (Barney, 2011), (Ramune Ciarniene, 2015) found that the original concept of competitive priority suggested by (Clark & Oey-Gardiner, 1991) is suitable for analyzing the impact of innovation on competitive advantage. The critical success factors identified for the implementation of e-commerce strategies have been developed into models for the visualization of understandable theoretical frameworks shown by Figure 1 below (Johansson, 2015):



Source: Johansson (2015)

Figure 1: Factors for successful e-commerce strategy implementation

Critical success factors for the implementation of e-commerce strategies have been compiled into a visualization model of understandable theoretical frameworks. Critical success factors are divided into two main groups, humanistic factors, and non-humanistic factors. The factors are categorized according to whether the main concern of these factors is inherent in human resources in the organization or not. This criterion is the reason why management, technological competence, and organizational culture are categorized as humanistic factors, and they pay attention to changes in human capital.

The remaining factors are categorized as non-humanistic factors because they do not imply a direct relationship with human resources like other factors. Instead, they focus more on monetary and structural issues in the organization, and the labels collected for these factors are therefore contrary to humanistic factors - non-humanistic factors. The purpose of the circular structure of this model is to symbolize that all critical success factors are connected and oppose the impression that several factors are more important than others. The aim is to give an interpretation of a cycle without the starting or ending points mentioned because there are no consistent recommendations about what activities should be identified in theory. Besides, it is not debated that work with success factors must be resolved before starting to involve others. It's more about working with several factors simultaneously rather than ranking them in a certain order.

3. Research Methods and Materials

This study using purposive (judgmental) sampling in determining the sample. Assessment sampling is done by selecting sample members based on certain criteria (Cooper, Schindler, & Sun, 2006). Researchers used a particular consideration of the elements selected as the sample population. Members of the population selected as samples are determined directly by the researcher so that there is no opportunity for other members of the population to be sampled if out of consideration of the researcher. Judgmental sampling conducted by select or determine sample based on specific considerations and guidelines of the researcher.

In this study using qualitative data, namely this research based on seeing an object which includes observation/observation, interviews, literature studies, and questionnaires. Respondents in this study consisted of actors, users and eCommerce observers in various Companies (Directors and Managers), Academics (Lecturers), Head of Division of Government Agencies (Regulators) and Masters in Postgraduate Student Management with a minimum of 5 years experience. Where sampling of respondents is done by non-probability sampling techniques.

Table 3: Demographics of the respondents

Item	Number	Percentage	Accumulated Percentage
Gender			
Male	66	57.09.00	57.09.00
Female	48	42.01.00	100.00.00
Age (Year)			
< 25	5	04.04	04.04
> 25 – 35	75	65.08.00	70.02.00
> 35 - 45	25	21.09	92.01.00
> 45	9	07.09	100.00.00
Education Level			
Diploma	1	.9	.9
Bachelor	76	66.07.00	67.05.00
Magister or Doctoral	37	32.05.00	100.00.00
Position			
Staff	34	29.08.00	29.08.00
Supervisor	16	14.00	43.09.00
Manager	39	34.02.00	78.01.00
CEO	25	21.09	100.00.00
Work Experience (Year)			
< 5	25	21.09	21.09
> 5 - 15	57	50.00.00	71.09.00
> 15 - 25	24	21.01	93.00.00
> 25	8	07.00	100.00.00
Type of organization			
Government Enterprises	27	23.07	23.07
Owned Enterprises	86	75.04.00	99.01.00
NGO (Non-Profit)	1	.9	100.00.00
Business fields			
Information Technology	11	09.06	09.06
Transportation	4	03.05	13.02
Bank	4	03.05	16.07
Investment	5	04.04	21.01
Others	7	06.01	27.02.00
Education	19	16.07	43.09.00
Telecomunication	5	04.04	48.02.00
Public Services	11	09.06	57.09.00
Security	4	03.05	61.04.00
Mining	2	01.08	63.02.00
Consulting	21	18.04	81.06.00
Hotel & Restaurant	4	03.05	85.01.00
Manufacturing	17	14.09	100.00.00
Age of the Company (Year)			
< 5	26	22.08	22.08
> 5 - 15	14	12.03	35.01.00
> 15 - 25	23	20.02	55.03.00
> 25	51	44.07.00	100.00.00

Source: Own, 2019

This research method uses the random sampling method that is the sample chosen is really in accordance with the criteria of the research conducted. The number of samples in this study was as many as 114 respondents. The descriptive analysis here is an analysis of respondents who have participated. The characteristics and background of these respondents vary; therefore it is necessary to qualify to reflect the characteristics of each respondent. The results of the characteristics of respondents who have been analyzed and processed using SPSS are listed in table 3.

The measurement scale used in this research is the semantic scale from one to seven. This measurement scale was developed by Osgood (Osgood, C. E., May, W. H., and Miron, M. S. "Cross-Cultural Universals of Affective Meaning." Urbana, IL: University of Illinois Press, 1975). This scale is arranged in a continuous line. A very positive answer (very good) is located on the right of the line, and a very negative (very bad) answer is located on the left or vice versa. The data obtained is interval data, and usually this scale is used to measure certain characteristics possessed by the object of research. According to (Sedarmayanti, 2002) and (Meiyani & Putra, 2019), assessment on a semantic scale can be more profound than when using a Likert scale, since scores of semantic scales are considered to have interval level measurements to allow for the calculated average and standard deviations. To avoid ambiguous or biased answers, the alternative choices of respondents are omitted to be six scale.

Table 4: Validity and Reliability Results

No	Variable	Item	Alpha	Item total Correlation	Item to be taken out
1	**Knowledge Management**				
	a. Organizational memory	8	0,954	0,720 – 0,912	None
	b. Knowledge sharing	8	0,865	0,565 – 0,753	1 Item
	c. Knowledge absorption	4	0,831	0,512 – 0,740	None
	d. Knowledge receptivity	10	0,920	0,332 – 0,906	None
2	**Organization Innovativeness**				
	a. Product	4	0,884	0,768 – 0,798	1 Item
	b. Process	4	0,788	0,442 – 0,737	None
	c. Marketing	4	0,925	0,792 – 0,899	1 Item
	d. Strategy	4	0,485	0,326	2 Items
	e. Behavior	4	0,891	0,662 –0,869	None
3	**Competitive Advantage**				
	a. Time	5	0,789	0,243 – 0,777	1 Item
	b. Quality	5	0,915	0,693 – 0,855	None
	c. Cost	7	0,649	0,210 – 0,599	None
	d. Flexibility	5	0,940	0,785 – 0,920	1 Item
4	**E-Commerce**				
	a. Management	9	0,767	0,232 – 0,756	2 Items
	b.Technology Competencies	6	0,893	0,472 -0,883	1 Item
	c. Organizational culture	10	0,917	0,693 – 0,855	None
	d. Conformity	12	0,907	0,475 – 0,867	5 Items
	e. Investation	7	0,935	0,690 – 0,884	1 Item
	f. Organizational structure	7	0,901	0,557 – 0,836	2 Items

Source: Own, 2019

Validity test is carried out to determine whether or not the questionnaire distributed. The decision to test the validity of the respondent uses a significance level if the items of the respondents' questions if r count is greater or equal to r table (r count ≥ r table). The research instruments besides being valid, they must also be reliable (reliable). Therefore the reliability test is used to find out the accuracy of the questionnaire value, meaning that the research instrument if tested in the same group even though at different times the results will be the same. instruments can be said to be reliable if the results of Cα count> Cα table. Cronbach's Alpha Coefficient (Cα) is the most commonly used statistic to test the reliability of a research instrument. A research instrument is indicated to have an adequate level of reliability if the Cronbach alpha coefficient is greater or equal to 0.70.

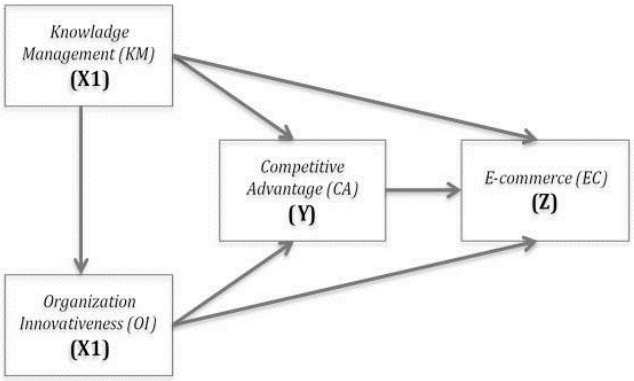


Figure 2: Research Model

This study discusses four variables, namely the Knowledge Management and Innovative Organizational variables as independent variables and Competitive Advantages and E-Commerce as the dependent variable. Independent variable is a variable that can influence other variables that are not free (dependent variable) while the dependent variable (dependent variable) is a variable that can be influenced by other variables (independent/free variables). This model explains the problem to be examined so that there are no errors in interpreting variables and terms of reference for researchers in describing the problems to be studied.

H1: Knowledge Management and Organization Innovativeness simultaneously affect Competitive Advantage.

H2: Knowledge Management, Organization Innovativeness, and Competitive Advantage simultaneously affect E-Commerce

H3:Organization Innovativeness mediates the relationship between Knowledge Management and Competitive Advantage.

H4: Organization Innovativeness mediates the relationship between Knowledge Management and E-Commerce.

H5:Competitive Advantage mediates the relationship between Knowledge Management and E-Commerce.

H6:Competitive Advantage mediates the relationship between Organization Innovativeness and E-Commerce

4. Results and Discussion

4.1. Structural Analysis

The structural model is a model that connects exogenous latent variables with endogenous latent variables or endogenous variable relationships with other endogenous variables. In this study, the structural model is related to six research hypotheses which imply a causality relationship between latent variables. There are four latent variables with 19 manifest variables. The latent variable Knowledge Management consists of 4 manifest variables; Organizational Innovativeness consists of 5 manifest variables. Competitive Advantage consists of 4 manifest variables and E-Commerce consists of 6 manifest variables. By using the second-order estimation method from Partial Least Square, the path diagram is obtained as below:

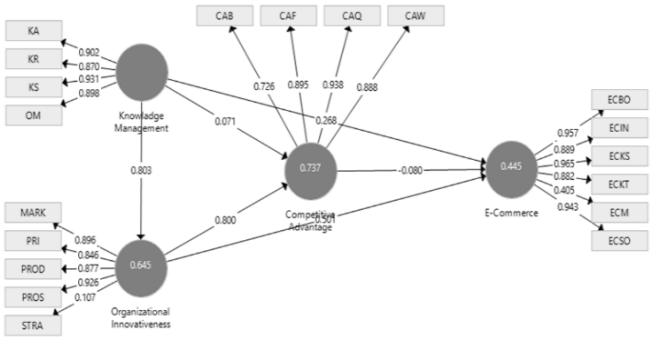


Figure 2: Path Diagram Full Model X1, X2,Y,Z with Manifest Variables

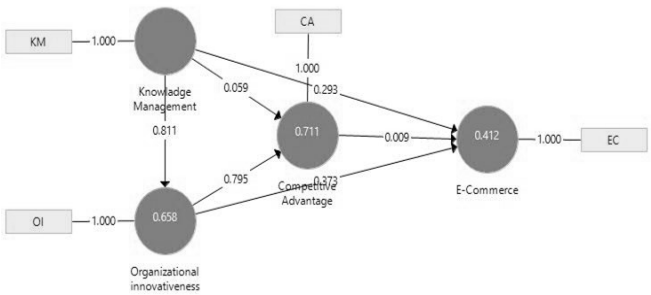


Figure 2: Path Diagram Full Model X1, X2, Y,Z with Manifest Variables

Table 5: Path Coefficient X1, X2, Y,Z

	CA	EC	KM	OI
Competitive Advantage		-0,080		
E-Commerce				
Knowledge Management	0,071	0,268		0,803
Organizational Innovativeness	0,800	0,501		

Based on the test results, it is proven that all hypotheses (H1, H2, H3, H4, H5)

4.2. Structural Model Testing

The structural model was evaluated using t-value and coefficient determination (R2). The value of R2 indicates the number of variants in the endogenous variable which can be explained simultaneously by exogenous latent variables. Table 6 showed the results of R Square:

Table 6: R-Square

	R Square	Adjusted R Square
Competitive Advantage	0,737	0,732
E-Commerce	0,445	0,430
Organizational Innovativeness	0,645	0,641

The total value of R2 is used to calculate the Goodness of Fit (GOF) because in smart pls there is no special menu to calculate the GOF. The value of GOF is used to indicate whether a model is fit. So the value of Goodness of Fit (GOF) is as follows:

Gof = Q2 = 1 - {(1-R1) (1-R2)) (1-R3)
= 1 - (1-0.737) (1-0.445) (1-0.645)
= 0.948

Table 7 shown, the value of Q2 = 0.948 means that 94.8% of the diversity of the endogenous variables is explained by the exogenous variables, the remainder is explained by other variables not found in the model. The greater the Goodness of Fit Q2 the greater the Exogenous variable can affect the Endogen variable. From the above Structural Equation can be seen R2 from each equation:

• Organization Innovativeness has R2 of 0.645, and this figure indicates that Knowledge Management can explain 64,5% variant of Organization Innovativeness, while the rest is explained by other factors that are not measured.

• Competitive Advantage has R2 of 0.737, and this figure indicates that Knowledge Management and Organization Innovativeness can explain 73,7% variant of E-Commerce, while the rest is explained by other factors not measured.

• E-Commerce has R2 of 0.445, and this figure indicates that Knowledge Management, Organization Innovativeness, and Competitive Advantage can explain 44,5% variant of E-Commerce, while the rest is explained by other factors not measured.

• Competitive Advantage as Intervening as well as an independent variable results Goodness of Fit (GOF) of 94.8%. GOF represents the overall goodness of the model.

Table 7: T-value or path coefficient

Coeficient[a]					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.528	.240		2.197	.030
Knowledge Management	.763	.052	.811	14.653	.000
Dependent Variable: Organizational Innovativeness					
(Constant)	1.315	.287		4.558	.000
Knowledge Management	.649	.062	.702	10.445	.000
Dependent Variable: Competitive advantage					
(Constant)	.958	.203		4.721	.000
Organizational Effectiveness	.826	.050	.843	16.582	.000
Dependent Variable: Competitive advantage					
(Constant)	1.699	.359		4.729	.000
Competitive Advantage	.549	.083	.530	6.615	.000
Dependent Variable: e-commerce					

4.3. Hypothesis testing

Based on the hypotheses test (Table 8). Between Exogenous and Endogenous variables, there are a direct and indirect effect. Hypothesis testing is done with a significance level of 5% (alpha 0.05) so as to generate a critical t-value from the table of 1.65.

In this study, there are 4 Hypotheses for the indirect influence of the relationship between Exogenous and Endogenous Variables. Hypothesis analysis is done at a significance level of 5%, resulting in a critical t value (t table) of 1.65. Below are the indirect influence of Hypotheses:

• The amount of indirect effect of Knowledge Management on Competitive Advantage through Organization Innovativeness is 0.803 x 0.800 = 0.6424. So the total effect of Knowledge Management on Competitive Advantage of 0.6424 + 0.071 = 0.7134. Organization Innovativeness can mediate the effect of Knowledge

Management on Competitive Advantage of 0.7134 or 71.34%.

• The amount of indirect effect of Knowledge Management on E-Commerce through Organization Innovativeness is 0.803 x 0.501 = 0.4023. So the total effect of Knowledge Management on E-Commerce is 0.4023 + 0.268 = 0.67. Organization Innovativeness can mediate the effect of Knowledge Management on E-Commerce of 0.67 or 67%.

• The Effect of Knowledge Management on E-Commerce through Competitive Advantage has no significant effect. Since one of the paths of Knowledge Management to E-Commerce relationship is not significant, the indirect and total relationship of Knowledge Management to E-Commerce is not significant.

• The effect of Organization Innovativeness on E-Commerce through Competitive Advantage has no significant effect. Since one of the pathways of Organization Innovativeness to E-Commerce relationship is not significant, the indirect and total relationship of Organization Innovativeness to E-Commerce also has no significant effect.

Table 8: Hyphotesis Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig	Result
	B	Std.error	Beta			
Knowledge Management → Competitive Advantage	0.051	0.080	0.056	0.640	0.000	Not Supported
Organizational Innovativeness → Competitive Advantage	0.782	0.085	0.798	9.164	0.000	Supported
Knowledge Management → E commerce	0.278	0.120	0.291	2.329	0.022	Supported
Organizational Innovativeness → Ecommerce	0.382	0.168	0.376	2.272	0.025	Supported
Competitive Advantage → Ecommerce	0.009	1.141	0.009	0.064	0.949	Not Supported
Knowledge Management → Organizational Innovativeness → e-Commerce	0.389	0.126	0.383	3.081	0.003	Supported
Knowledge Management → Competitive Advantange → e-Commerce	0.219	0.108	0.212	2.021	0.045	Supported
Organizational Innovativeness → Competitive advantage → e-Commerce	0.029	0.143	0.028	0.202	0.840	Not Support

5. Discussion

Based on the theory implementation and practice of the relationship between Knowledge Management (Organizational Memory, Knowledge Sharing, Knowledge Absorption, Knowledge Receptivity) (KM), Organizational Innovativeness (OI), Competitive Advantage (Time, Quality, Cost, Flexibility) (CA) and E-Commerce (Humanistic Factors: Management, Technological Competence, Organizational Structures) (EC), it can be summarized . In Knowledge Management, organizational memory has a very important role that should be adjusted or considered the most in facing the development of the business world in e-commerce. This is related to the existing culture within an organization itself as the main basis of the organization. In Organizational Innovativeness, Market has a very important role that should be adjusted or considered the most in facing the development of the business world in e-commerce. This is because the existing market becomes very big and open with many competitors. In Competitive Advantage, Flexibility has a very important role that should be adjusted or considered the most in facing the development of the business world in e-commerce. This is because the organization must be flexible in implementing its strategy to improve and create Competitive Advantage. In E-Commerce, humanistic factors as Organizational Culture and Non-Humanistic Factors as Investment have a very important role that should be adjusted or considered the most in facing the development of the business world in e-commerce. Knowledge Management and Organizational Innovativeness must run in a balanced and aligned in an organization to create Competitive Advantage in facing r running the maximum strategy in E-commerce. Organizational Innovativeness is important in creating Competitive Advantage in dealing with or running the maximum strategy of E-commerce in organizations to survive.

The application of knowledge management requires the support of organizational memory to support the KM process becoming more sophisticated and integrated. While the necessary components of organizational memory (OM) are very closely related to organizational member records which include a history of competence and also performance achievement (KPI). Of course, the digital era like today, the implementation of digital technology plays an important role to support KM to be better. Another

component of knowledge management is knowledge absorption which aims to provide an understanding of the internal organization to support the company's vision and mission. Efforts to create integrated knowledge management are not natural, the diversity of organizational members with different backgrounds, conditions and reasoning need urgent attention so that to support the optimal application of knowledge management training processes are required for internal organizations that are sustainable, measurable and directed (Naidah, Santosa & Soemarno, 2011). Optimizing knowledge management enables companies to achieve effective effectiveness and efficiency to support the company's competitiveness. The company's competitiveness is determined based on on-time effectiveness, quality improvement, overall cost efficiency, which is flexible. Flexibility consists of the effectiveness of SME resources, efforts to introduce new products, flexibility in production supported by technological capabilities, and product innovation-oriented in the future. The use of technology is also vital for the sustainability of e-commerce which aims to reach broader promotions, and a means to add insight to entrepreneurs in seeing market developments. Access to communication and facilitate reporting and analyze business developments owned by entrepreneurs or organizations. Knowledge Sharing and Knowledge Transfer refers more to sharing knowledge with individuals and organizations, whereas Knowledge Transfer is only limited to sharing knowledge about something we know only, for example, like discussions between friends. Knowledge Transfer refers more to the transfer of knowledge, where someone who provides such knowledge has particular expertise in the field that they have mastered (expert). However, Knowledge Sharing and Knowledge Transfer have the same goal, which is to provide benefits to individuals and organizations. Knowledge Sharing relies on several fundamental aspects such as; Organizational internal commitment, business perception, employee engagement, and synergy Integrated decision-making management. Innovation in the business world has several important aspects such as the application of the latest marketing ideas in the modern business world, the development of new designs, knowledge of business and integrated management governance, the ability of Research and Development (R&D) to the effort of sharing and involving employees (Share of employee) as a form of maximizing the application of innovation ideas. In the production process is not only based on access to quantity and quality of products but also interconnections involving internal and external parties of a business through time optimization and optimal cooperation that is built between the company's private and foreign companies, in this case, prospective consumers as end-users.

Theoretical Implication and Managerial Implication: Pressure from competitors in the market is extreme. Both in the development of new products on the market, continuous improvement in production processes even the introduction of the original product. All of them are pressures and threats so that the orientation of the industry must be able to synergy with the development of e-commerce. The e-commerce industry cannot stand alone to face the challenges and changes in innovation efforts, and the application of knowledge management is one of the keys to success in breaking through the competition.

6. Conclusions

Based on the results of this study, we can conclude that each variable has a significant and positive influence on other variables for improved performance in e-commerce and or improve the Competitive Advantage in E-commerce. So that the existence of this research is expected to be a reference in implementing the strategies or steps that will be taken by decision-makers in an organization in improving performance in the current e-commerce era, such as Knowledge Management and Organization If Innovativeness increased, then it will rise Competitive Advantage. If the Organization Innovativeness and Competitive Advantage is increased, then the E-Commerce will increase. Organization Innovativeness can be a means of an organization to improve its Knowledge Management to improve Competitive Advantage. Organization Innovativeness can be a means for an organization to improve its Knowledge Management to improve E-Commerce performance. Competitive Advantage can be a means for an organization to improve its Knowledge Management to improve E-Commerce performance. Competitive Advantage can be a means for an organization to increase its Organization Innovativeness to improve E-Commerce performance.

From the implementation of strategies or steps above are expected to help steer and motivate an organization to successfully implement a good knowledge management system to pass on knowledge from generation to generation in the company Organizational Innovativeness strategies to improve e-commerce performance. And besides it can support the development of science, especially in the field of knowledge management, Organizational Innovativeness, competitive advantage and e-commerce that can later be used as a reference for other researchers in the future in research related problems.

References

Alavi, M., & Leidner D. E,. (2001). Knowledge Management And Knowledge Management Systems: Conceptual Foundations And Research Issues. *MIS Quarterly, 17*(1), 107–136. Http://Dx.Doi.Org/10.2307/3250961

Avlonitis, G. J., Kouremenos, A., & Tzokas, N. (1994). *Assessing The Innovativeness Of Organizations And Its Antecedents: Project Innovstrat*. European Journal Of Marketing, *28*(11), 5–28.

Barney, J. B. (2011). *Establishing Strategic Management As An Academic Discipline. Competition, Competitive Advantage, And Clusters*. Oxford University Press. Https://Doi.Org/10.1093/Acprof:Oso/9780199578030.003.0002

Becker, M. C. (2001). Managing Dispersed Knowledge: Organizational Problems, Managerial Strategies, And Their Effectiveness. *Journal Of Management Studies, 38*(7), 1037–1051. Https://Doi.Org/10.1111/1467-6486.00271

Camisón, H., Clemente, A.S.J.A., & Gonzalez, C.T. (2018). How Technology-Based Firms Become Also Highly Innovative Firms? The Role Of Knowledge, Technological And Managerial Capabilities, And Entrepreneurs' Background. *Suma De Negocios, 4*(2), 162-170. Https://Doi.Org/10.1016/J.Jik.2018.12.001

Capon, N., Farley, J. U., Lehmann, D. R., & Hulbert, J. M. (1992). Profiles Of Product Innovators Among Large US Manufacturers. *Management Science*, *38*(2), 157–169. Https://Www.Jstor.Org/Stable/2632500

Ciarniene, R., & Standkeviciute, G. (2015). Theoretical Framework Of E-Business Competitiveness. *Procedia -Social And Behavioral Sciences, 213* (12), 734–739. Https://Doi.Org/10.1016/J.Sbspro.2015.11.528

Clark, D. H., & Oey,G.M. (1991). How Indonesian Lecturers Have Adjusted To Civil Service Compensation. *Bulletin Of Indonesian Economic Studies*, *27(*3), 129–141. Https://Doi.Org/10.1080/00074919112331336098

Cohen, W. M., & Levinthal, D. A. (1990). Absorptive Capacity: A New Perspective On Learning And Innovation. *Administrative Science Quarterly*, *35*(1), 128–152. Https://Doi.Org/10.2307/2393553

Cooper, D. R., Schindler, P. S., & Sun, J. (2006). (2006). *Business Research Methods Ed.9. New York*: Mcgraw-Hill Irwin. ISO 690. ISBN 0071244301, 9780071244305, 1-744

Cross, R., & Baird, L. (2000). Technology Is Not Enough: Improving Performance By Building Organizational Memory. *Sloan Management Review, 41*(3), 69.

Davenport, S., Davies, J., & Grimes, C. (1998). Collaborative Research Programmes: Building Trust From Difference. *Technovation*, *19*(1), 31–40. Https://Doi.Org/10.1016/S0166-4972(98)00083-2

Dittberner, E., & Johansson, L. (2015). E-Commerce Strategy Implementation – A Comparison Between Theory And Practice. *Jönköping International Business School, Thesis* (5). Https://Doi.Org/10.1007/S00392-016-0967-Z

Gray, P. H. (2001). The Impact Of Knowledge Repositories On Power And Control In The Workplace. *Information Technology & People, 14*(4), 368–384. Https://Doi.Org/10.1108/09593840110411167

Hansen, M. T., Nohria, N., & Tierney, T. (1999). What's Your Strategy For Managing Knowledge. *The Knowledge Management Yearbook 2000–2001*, 1–10.

Hult, G. T. M. (2003). An Integration Of Thoughts On Knowledge Management. *Decision Sciences*, *34*(2), 189-195.

Hurley, R. F., & Hult, G. T. M. (1998). Innovation, Market Orientation, And Organizational Learning: An Integration And Empirical Examination. *Journal Of Marketing*, 62(3), 42–54. Https://Doi.Org/10.2307/1251742

Hwang, S., & Kim, S. (2018). Does Mim Experience Affect Satisfaction With And Loyalty Toward O2O Services?. *Computers In Human Behavior, 82*, 70–80. Https://Doi.Org/Https://Doi.Org/10.1016/J.Chb.2017.12.044

Indahingwati, A., Launtu, A., Tamsah, H., Firman, A., Putra, A. H. P. K., & Aswari, A. (2019). How Digital Technology Driven Millennial Consumer Behaviour in Indonesia. *Journal of Distribution Science*, *17*(8), 25-34.

Jashapara, A., & Tai, W. C. (2011). Knowledge Mobilization Through E-Learning Systems: Understanding The Mediating Roles Of Self-Efficacy And Anxiety On Perceptions Of Ease Of Use. *Information Systems Management*. *28*(1), 71-83. Https://Doi.Org/10.1080/10580530.2011.536115

Jiang, H., & Zhang, Y. (2016). An Investigation Of Service Quality, Customer Satisfaction And Loyalty In China's Airline Market. *Journal Of Air Transport Management*, *57*(1), 80–88. Https://Doi.Org/Https://Doi.Org/10.1016/J.Jairtraman.2016.07.008

Lyon, D. W., Lumpkin, G. T., & Dess, G. G. (2000). Enhancing Entrepreneurial Orientation Research: Operationalizing And Measuring A Key Strategic Decision Making Process. *Journal Of Management*, *26*(5), 1055–1085. Https://Doi.Org/10.1177/014920630002600503

Mack, D. Z., & Szulanski, G. (2017). Opening Up: How Centralization Affects Participation And Inclusion In Strategy Making. *Long Range Planning*, *50*(3), 385–396. Https://Doi.Org/10.1016/J.Lrp.2016.08.004

March, J. G., & Olsen, J. P. (1976). Organizational Choice Under Ambiguity. Ambiguity And Choice In Organizations, *Universitesforlaget.* ISBN: 978-8200014782, Pp 1–408.

Mansur, D. M., Sule, E. T., Kartini, D., Oesman, Y. M., Putra, A. H. P. K., & Chamidah, N. (2019). Moderating of the Role of Technology Theory to the Existence of Consumer Behavior on e-commerce. *Journal of Distribution Science, 17(*7), 15-25.

Matinaro, V., & Liu, Y. (2017). Towards Increased Innovativeness And Sustainability Through Organizational Culture: A Case Study Of A Finnish Construction Business. *Journal Of Cleaner Production*, *142,* 3184-3193. Https://Doi.Org/10.1016/J.Jclepro.2016.10.151

Meiyani, E., & Putra, A. H. P. K. (2019). The Relationship Between Islamic Leadership On Employee Engagement Distribution In FMCG Industry: Anthropology Business Review. *Journal Of Distribution Science, 17*(5), 19–28. Http://Dx.Doi.Org/10.15722/Jds.17.05.201905.19

Miller, D., & Friesen, P. H. (1983). Strategy-Making And Environment: The Third Link. *Strategic Management Journal*, *4*(3), 221–235. Https://Doi.Org/10.1002/Smj.4250040304

Naing, N., Santosa, H. R., & Soemarno, I. (2011). Living on the floating houses for sustainable livelihoods at Lake Tempe, South Sulawesi. *Environment and Urbanization ASIA*, *2(*1),

93-108.

Naing, N., & Iskandar, B. P. (2015). Model of settlements float management based on local wisdom for disaster mitigation in Tempe Lake-Indonesia. *International Journal of Applied Engineering Research*, *10*(21), 42329-42335.

Nonaka, I., & Takeuchi, H. (1995). The Knowledge-Creating Company: How Japanese Companies Create The Dynamics Of Innovation. *Oxford University Press, New York*. 1-284

North, D., & Smallbone, D. (2000). Innovative Activity In Smes And Rural Economic Development: Some Evidence From England. *European Planning Studies*, *8(*1), 87–106. Https://Doi.Org/10.1080/096543100110947

Popper, M., & Lipshitz, R. (1998). Organizational Learning Mechanisms: A Structural And Cultural Approach To Organizational Learning. *The Journal Of Applied Behavioral Science*, *34*(2), 161–179. Http://Dx.Doi.Org/10.1177/0021886398342003

Prahalad, C. K., & Hamel, G. (1994). Strategy As A Field Of Study: Why Search For A New Paradigm? *Strategic Management Journal*, *15*(2), 5–16. Https://Doi.Org/10.1002/Smj.4250151002

Rainey, H. G. (1999). Using Comparisons Of Public And Private Organizations To Assess Innovative Attitudes Among Members Of Organizations. *Public Productivity & Management Review*, *23*(2),130–149. Http://Dx.Doi.Org/10.2307/3380775

Razak, M., Gunawan, B.I., Fitriany , Ashoer, M., Hidayat, M., & Aditya, H.P.K.P. (2019). Moving From Traditional To Society 5.0: Case Study By Online Transportation Business. *Journal Distribution Science*, *17*(9), 93- 102. Http://Dx.Doi.Org/10.15722/Jds.17.09.201909.93

Razak, M., Hidayat, M., Launtu, A., Kusuma Putra, A. and Bahasoan, S. (2020), "Antecedents and consequence of brand management: empirical study of Apple's brand product", *Journal of Asia Business Studies*, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/JABS-01-2019-0030

Schumpeter, J. A., & Redvers, O. (1934). Theorie Der Wirtschaftlichen Entwicklung. The Theory Of Economic Development. An Inquiry Into Profits, Capital, Credit, Interest, And The Business Cycle. *Journal Of Comparative Research In Anthropology And Sociology. 3*(2) 137-148.

Sedarmayanti, M., & Hidayat, S. (2002). Metodelogi Penelitian. *Mandar Maju, 1,* 1-271

Statista. (2019). eCommerce Indonesia Statista Market Forecast. Retrieved September 30, 2019, from https://www.statista.com/outlook/243/120/ecommerce/indonesia

Subramanian, A., & Nilakanta, S. (1996). Organizational Innovativeness: Exploring The Relationship Between Organizational Determinants Of Innovation, Types Of Innovations, And Measures Of Organizational Performance. *Omega, 24*(6), 631–647. Https://Doi.Org/10.1016/S0305-0483(96)00031-X

Tutar, H., Nart, S., & Bingol, D. (2015). The Effects Of Strategic Orientations On Innovation Capabilities And Market Performance: The Case Of ASEM. *Procedia - Social And Behavioral Sciences*, *207,* 709–719. Https://Doi.Org/10.1016/J.Sbspro.2015.10.144

Valdez,J., Solano, L. E., Rodríguez, O.J., & Philippe, D. (2018). Journal Of High Technology Management Research Modes Of Learning And Profitability In Colombian And Mexican Smes. *Journal Of High Technology Management Research*, *29*(2), 193–203. Https://Doi.Org/10.1016/J.Hitech.2018.09.007

Wang, C. L., Ahmed, P. K. & Rafiq, M. (2008). Knowledge Management Orientation: Construct Development And Empirical Validation. *European Journal Of Information Systems*, *17*(3), 219–235. Https://Doi.Org/10.1057/Ejis.2008.12

Wang, C. L., Campus, W., & Campus, S. (2004). The Development And Validation Of The Organisational Innovativeness Construct Using Confirmatory Factor Analysis Authors. *European Journal Of Innovation Management*. *7*(4), 303-314. Https://Doi.Org/10.1108/14601060410565056

Witell, L., Snyder, H., Gustafsson, A., Fombelle, P., & Kristensson, P. (2016). Defining Service Innovation: A Review And Synthesis. *Journal Of Business Research*, *69(*8), 2863–2872. Https://Doi.Org/10.1016/J.Jbusres.2015.12.055