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THE INFLUENCE OF INFORMATION AND COMMUNICATION TECHNOLOGY ON FIRM PERFORMANCE THROUGH COMPETITIVE ADVANTAGE: A CASE STUDY IN COSMETIC INDUSTRIES OF INDONESIA

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ABSTRACT

Nowadays, Information and Communication Technology becomes important for companies to be able to operate their business when facing competitors. ICT adoption can help to access opportunities when markets are dynamic and uncertain. Company knowledge can be a real competitive resource in order to improve company performance. ICT is considered capable of producing the best performance of the company. With the development of the company's performance, it will create renewal of resources that can compete in uncertain market conditions. This journal aims to determine the influences of ICT on company performance through competitive advantage as its mediating variable. Data was collected from 37 cosmetics industries in Bandung, Indonesia. All respondents were chosen by using probability sampling using the cluster sampling method. The data analysis is used to see the influence and hypothesis testing by using Path Analysis. The results show that ICT has a positive effect on company performance through competitive advantage as a mediating variable.

KEY WORDS

Information, communication technology, firm performance, competitive advantage.

Every company has a set standard for achieving effective and efficient company performance with the aim of producing economic results (Mohamed Abdi & Yassin Sheikh Ali, 2013). These standards are created using company capabilities and resources (tangible and intangible) (Barney, 1991; Penrose, 1959; Wernerfelt, 1984). Company resources can be in the form of utilizing ICT (Information Communication and Technology) to determine strategies that are capable of winning competition in the field (Lucchetti & Sterlacchini, 2004; Lyver & Lu, 2018).

The theory of Resources-based theory of the firm (RBV) that refers to the thinking of Penrose (1959) states that companies are limited by their capabilities and resources. Furthermore, based on the idea of Grant (1996) these capabilities and resources will increase through new knowledge that is managed and processed by the company from time to time. So that company resources that are well managed will create renewal of resources that can compete in uncertain market conditions.

The company in this research is a cosmetics industry company in Bandung Raya, Indonesia. Where at this time cosmetics have begun to shift into daily major needs. There was even a survey from NPD (National Purchase Diary Panel Inc.), a market research company in America, that 23% said that they would not reduce their cosmetics costs even though their financial condition was not too good (Kumar, 2005). This proves that the position of cosmetics can be aligned with other primary needs such as clothes and food.

The cosmetics industry is a company that manufactures cosmetic products with standards set by Balai POM which is an institution in Indonesia which is responsible for overseeing the circulation of drugs and food in the community. Data obtained from Balai POM (2018) there are 37 cosmetics industries in Bandung Raya, 17 industries in Bandung City, 4 industries in Kab. West Bandung, 12 industries in the Regency. Bandung, and 4 industries in Cimahi City. The cosmetics industry in Greater Bandung is limited by its capabilities and resources. Therefore it is necessary to increase new knowledge by companies, one of them is increasing knowledge about the use of ICT.

Knowledge possessed by individuals can be a real competitive resource in order to improve organizational performance (Grant, 1996). Resource utilization is the definition of company performance, where company performance depends on how ICT is implemented. Success in the application of ICT requires a human resource strategy in developing the skills needed in the company (Wulong Gu and Surendra Gera, 2004).

Other research states that the quality of ICT used is related to company productivity (Lyver & Lu, 2018; Taruté & Gatautis, 2014). Sophisticated technology combined with communication technology produces the best performance of the company. But not only ICT is used but combined with technological sophistication (Baldwin & Diverty, (1998); Sabourin, (2015)). The company's performance is considered good if it has results or achievements in a certain period of time which is influenced by the company's operational activities in utilizing the resources owned (Puspitasari & Srimindarti, 2014).

This statement is reinforced by the results of research by Iacovone, et al (2017) which shows that only companies that face competitive pressures are showing an increase in their performance as a result of more intensive use of ICT. For companies that face low competition, there seems to be no relationship at all.

In this paper, trying to explain the effect of ICT on company performance through competitive advantage in the cosmetics industry in Bandung Raya with the aim of finding alternative resources to improve company performance.

LITERATURE REVIEW

This paper is based on a systematic mapping study (Kitchenham & Charters, 2007) about company performance in the industry. Mapping has been carried out in the last 10 years by reviewing previous literature published in trusted publishers such as Scopus, Elsevier, Emerald, and Routledge. Article selection refers to the topic being researched and categorizes the findings based on advice from Petersen (2004). The findings show that the most discussed topic is ICT (Information Communication and Technology) as an antecedent of company performance.

Table 1 – Antecedents of Company Performance in Industry in 2007-2017

Variable Relationship	Researcher
ICT – Firm Performance	Kim et al.,(2016); Davis et al.,(2016); Rauch et al.,(2016); Yang et al.,(2015); Khalid et al.,(2015); Hsu et al.,(2014); Binuya (2014); Katsaros et al.,(2014); Wei et al.,(2014); Kim et al.,(2013); Bauer et al.,(2012); Sila et al.,(2012); Kmieciak et al.,(2012); Pérez et al.,(2012); Evangelista et al.,(2012); Hernández-Ortega (2011); Hwang et al.,(2011); Egbetokun et al.,(2010); Zheng (2009); Suhardi, et al.,(2017); Susilo (2014); Ong (2014); Trantopoulos et al.,(2017); Hong (2013); Feng et al.,(2017); Brzozowski et al.,(2014); Idrus (2014)
ICT – Competitive Advantage	Mahardiko (2014); Iacovone (2016); Qamarani (2015)
Competitive Advantage – Firm Performance	Wei et al.,(2014); Kim et al.,(2013); Khalid et al.,(2015); Hsu et al.,(2014); Zheng (2009)
ICT – Competitive Advantage – Firm Performance	Iacovone (2016); Ricciardi et al. (2017)

The model in this study proposes that ICT in the cosmetics industry will create effective and efficient company performance directly. But it can also be through competitive advantage. Efforts to create company performance in the industry are related to Resources-based theory of the firm or resource-based view (RBV) with reference to Penrose (1959). The theory states that the company has a routine, where the company is limited by its capabilities and resources. Furthermore, based on the idea of Grant (1996) these capabilities and resources will increase through new knowledge that is managed and processed by the company from time to time.

Competitive advantage is a way to achieve company performance. Nonaka (1991) considers knowledge as a source of intangible competitive advantage that can determine company performance, either directly or indirectly.

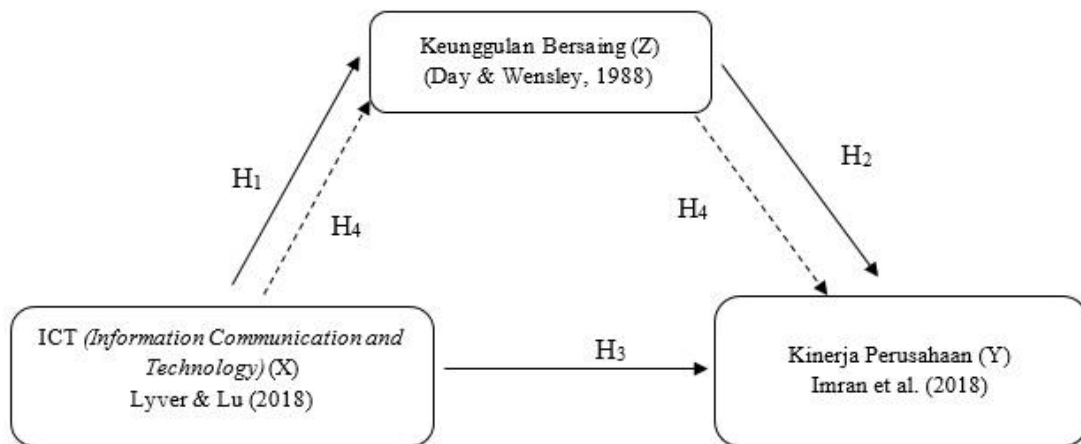


Figure 1 – Research framework

Hence the paper proposes the following hypothesis:

- H1: ICT (Information Communication and Technology) has a significant effect on Competitive Advantage;
- H2: Competitive Advantage has a significant effect on Firm Performance;
- H3: ICT (Information Communication and Technology) has a significant effect on Firm Performance;
- H4: ICT (Information Communication and Technology) has a significant effect on Firm Performance through Competitive Advantage.

METHODS OF RESEARCH

This research uses quantitative methods that can explain the causal relationships between the variables studied. Source of primary data comes from the questionnaire given to the respondents, while the secondary data comes from the result of previous studies and the related theories. The analysis model uses Path Analysis. Population in this paper is 37 Cosmetics Industry Companies in Bandung, Indonesia. All respondents were chosen by using probability sampling using the cluster sampling method. To calculate the number of samples using saturated samples.

Malhotra (1981) stated that the Likert scale submitted to respondents should use a 5-point scale, namely 5 = Strongly agree, 4 = Agree, 3 = Neither agree nor disagree, 2 = Disagree, 1 = Strongly disagree. The construction of the questionnaire came from four variables, based on theoretical studies reduced to dimensions and indicators of research with 45 items of research questionnaire.

The data analysis is used to see the influence and hypothesis testing by using Path Analysis. Path Analysis is used to describe and test the model of relationships between variables in the form of cause and effect (not the form of interactive / reciprocal relationships) (Sugiyono, 2010: 294). Path analysis model is used to analyze the pattern of relationships between variables with the aim to determine the direct or indirect influence of a set of independent (exogenous) variables on the dependent variable (endogenous) (Riduwan & Kuncoro, 2012: 1-2). Through this path analysis will be found which path is the most appropriate and brief on an independent variable through the last dependent variable.

In this paper, ICT as a latent variable is a second-order reflective construction formed by a first-order reflective such as ICT facilities with three indicators, ICT management capability with three indicators, and proactive on ICT with three indicators (Lyver & Lu, 2018).

Competitive advantage is a second order reflective construction formed by reflective first order such as sources of excellence with three indicators and positioning superiority with three indicators (Day & Wensley, 1988).

Table 2 – Number of population and research sample

Kota Bandung		Name of Industries	
No.		No.	Kab. Bandung
1	Baniar, CV	22	Bina Citra Karya, PT
2	Beauty Essence, CV	23	Combiphar, PT
3	Calista Jaya, CV	24	Dian Indah Abadi, CV
4	Candra Nusantara Jaya, PT	25	Marga Jasa Mekar, PT
5	Continental Cosmetic, PT	26	Merlindo Rekatama, PT
6	Fortuna, CV	27	Miracle Bio Cosmetica Laboratories, CV
7	Kaizen Aesthetic Medicore, PT	28	Mitra Lida Lestari, PT
8	Kartika Tirta Hema, PT	29	Ocean Fresh, CV
9	Mahkota Rizky, PT	30	Otto Pharma. LTD, PT
10	Marizk Mahkota Rizky, PT	31	Pharma Health Care, PT
11	Meprofarm, PT	32	PK Tecacin, CV
12	Ossa Cosmetic, CV	33	Tohedy, CV
13	Prapta Rekayasa Buana, PT	34	Afiat Pharmaceutical. LTD, PT
14	Qiara Mulia Sakti, CV	35	Aura Cemerlang Cosmeceutial, CV
15	Seger Surya, PT	36	Perseroan Dagang dan Industri Farmasi Afiat, PT
16	Sistar Indonesia, PT	37	Vetera, CV
17	Surya Permata, CV	Total: 37 Industries	
18	Beauty Essence, PT		
19	Jati Daya Ciptarasa, CV		
20	Rohto Lab, PT		
21	Skin Solution, CV		

Company performance is a second-order reflective construction formed by reflective first-order employees such as three indicators, resources with four indicators, processes with three indicators, and strategies with four indicators (Imran et al., 2018).

RESULTS AND DISCUSSION

This research uses the Path Analysis technique following the steps of path analysis testing based on Riduwan & Kuncoro (2012) to analyze the pattern of relationships between variables with the aim to determine the direct or indirect influence of a set of independent (exogenous) variables on the dependent variable (endogenous). The first step is testing the validity and reliability. The validity test is done by the Spearman rank correlation and the reliability test uses the Spearman Brown method. The second stage is conducting a classic assumption test with several tests, namely the normality test, the autocorrelation test, and the heteroscedasticity test. The next step is to test the path analysis of the variables studied in accordance with the initial hypothesis. The testing phase is path coefficient analysis, determination coefficient, and hypothesis testing. Because in this study there are intervening variables, so an intervening test is performed. The last step is to do a simultaneous test to find out whether ICT (X) and Competitive Advantage (Z) have a simultaneous effect on Company Performance (Y)

Descriptive statistical results in this study were conducted based on descriptive statistics which include the Mean value of the ICT variable (X), Competitive Advantage (Z), and Company Performance (Y), and based on respondents' responses to each statement in the variables ICT (X), Competitive Advantage (Z), and Company Performance (Y). This analysis is needed to know in depth from every aspect of the variable regarding the opinions of respondents in the variables that can affect the performance of the company.

ICT tools in companies are the development of efficient process and governance activities that reduce production costs for companies (Lyver & Lu, 2018). According to Acar, Koçak, Sey, & Arditi (2005) the development of ICT facilities helps companies achieve internal efficiency. Based on the table 3 the results of the distribution of questionnaires to

respondents obtained an average value of 4.57 which was considered very high. This shows that the use of ICT facilities in the cosmetics industry is optimal. Based on observations in the field researchers found that the use of computers, the internet, social media had been carried out, such as the cosmetics industry PT. X who already used the website as a marketing medium and used technology for marketing activities.

Table 3 – ICT Variable Descriptive Test (X)

No	Dimension	Average	Category
1	ICT Facilities	4,36	very high
2	ICT Management Capability	4,41	very high
3	Proactive on ICT	4,24	very high

Source: Data Processing Results, 2019.

ICT management capabilities in companies include making business plans and information technology planning that is used in an integrated manner, managing and adopting information technology to facilitate employees' sharing of information between employees (Lyver & Lu, 2018). Based on the table 3, the results of the distribution of questionnaires to respondents obtained an average value of 4.41 which was considered very high. This shows that the cosmetics industry in Greater Bandung already has good ICT management capabilities. Based on data obtained in the field, the application of ICT management such as implementing business planning by utilizing the internet as a tool for finding new market share information, or using social media as a tool to receive criticism and suggestions from consumers. The application of good management capabilities is felt by the company to be able to facilitate employees in sharing information.

Proactiveness in ICT is the use of ICT to find innovation in companies (Sarshar & Isikdag, 2004). It can also provide a constant rotation of information, resulting in better learning and research opportunities in its business (Venkatraman, 1994). Based on the table 3, the results of the distribution of questionnaires to respondents obtained an average value of 4.24 which was considered very high. This shows that the cosmetics industry in Greater Bandung has followed the development of communication technology and applied it to the company. Based on the data obtained, the cosmetics industry in Bandung Raya has updated their social media from the beginning using Facebook media, now it has changed to using Instagram. The features on their website have also been updated to make it easier for consumers to make transactions. Changes in information technology can also be obtained from the company's internal evaluation results on a regular basis.

Table 4 – Descriptive Test of Competitive Advantage Variables (Z)

No	Dimension	Average	Category
1	Sources of excellence	4,21	Very High
2	Positioning Excellence	4,41	Very High

Source: Data Processing Results, 2019.

Sources of competitive advantage according to Day & Wensley (1988) show differences and uniqueness among competitors. Sources of competitive advantage are superior skills (superior skills) and superior resources (superior resources). Based on the table 4, the results of the distribution of questionnaires to respondents obtained an average value of 4.21 which was considered very high. This shows that the cosmetics industry in Greater Bandung already has sources of excellence that will distinguish the company from its competitors. The majority of the cosmetics industry in Bandung Raya has a pharmacist, and some companies even have a master's degree in cosmetics. So that it becomes a superior value for the company.

Positioning excellence is directly in line with the constraints of competitive mobility that can prevent a company from changing its strategic position (Day & Wensley, 1988). Based on the table 4, the results of the distribution of questionnaires to respondents obtained an

average value of 4.41 which was considered very high. This shows that the cosmetics industry in Greater Bandung has implemented a strategy that can maintain the company's position in the eyes of consumers. Based on the data obtained and the results of observations in the field, the majority of companies implement personal communication systems with their suppliers. So there really is a special staff that handles suppliers, so one supplier will be handled by the same staff. This is to establish good relationships with suppliers. Sometimes suppliers also visit the industry or vice versa. It is expected to be able to strengthen relations between companies and suppliers.

Table 5 – Descriptive Test of Company Performance Variables (Y)

No	Dimension	Average	Category
1	Employee	4,43	Very High
2	Resource	3,91	High
3	Process	3,84	High
4	Strategy	4,41	Very High

In this study, employees become resources in companies that have their main tasks and functions. Resources used in industrial activities aim to produce goods as well as in the context of creating high added value or benefits (Lestari et al., 2013; Smith, 2008). Based on the table 5, the results of the distribution of questionnaires to respondents obtained an average value of 4.43 which was considered very high. This shows that the cosmetics industry in Bandung Raya has implemented several ways to improve the ability of its employees. For example, in company X employee training is carried out for all new employees, and for division heads training is conducted every 3 months. This is done by the company to have employees with superior capabilities and experts in their fields.

According to Smith (2008) Industrial resources are resources used to create the value of products produced by industry. Resources consist of factors that produce the value creation process of a product. Resources used in industrial activities aim to produce goods as well as in the context of creating high added value or benefits (Lestari et al., 2013; Smith, 2008). Based on the table 5, the results of the distribution of questionnaires to respondents obtained an average value of 3.91 which was considered high. This shows that the cosmetics industry in Bandung Raya has good employees and raw materials so that it can improve the company's performance. Based on the data obtained in the field, the company does not only focus on the quality of its employees, but they also think about how to maintain a good relationship with suppliers to how to process waste products so as not to damage the environment.

According to Imran, et al (2018) the process includes all industrial activities that refer to the SOP, which means the company has skilled human resources in their field and has good relations with stakeholders. Based on the table 5, the results of the distribution of questionnaires to respondents obtained an average value of 3.84 which was considered high. This shows that the cosmetics industry in Greater Bandung has implemented a preparation process, a production process, to a good product marketing process. Field results indicate that companies prefer to use good raw materials, rather than using production machines with sophisticated technology. The selection was made because it considered the cost factor, given the high price of production machines. Companies also market their products, often highlighting the raw materials used, not the production machines used.

According to Quinn (1990) strategy is a pattern or plan that integrates the main objectives, policies and actions in industrial relations. Based on the table 5, the results of the distribution of questionnaires to respondents obtained an average value of 4.41 which was considered very high. This shows that the cosmetics industry in Bandung Raya has owned and implemented a clear business plan, and is always evaluating its actions. At company X, the business model created at the outset is not always applied, but still follows the real conditions on the ground. But all that is not a problem because it is evaluated every month in the form of monthly reports.

Heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another. To test the presence or absence of heteroscedasticity, the Glejser method is used to do a regression of the independent variables to the absolute value of the residuals.

Table 6 – Heteroscedasticity Test Table

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	,260	,093		2,808	,008
¹ ICT (Information Communication and Technology) (X)	-,003	,049	-,015	-,058	,954
KEUNGGULAN BERSAING (Z)	-,024	,049	-,131	-,495	,624

a. Dependent Variable: absres2.

Source: Data Processing, 2019.

From the above output there is no significant correlation, namely variable X has a significance value of 0.954 and Z has a significance value of 0.624. Then it can be concluded that there is no violation of heteroscedasticity in the regression model.

Inferential statistical analysis aims to draw conclusions and test hypotheses. In this analysis, the sample is analyzed to determine the degree of relationship of organizational communication climate variables, communication satisfaction and employee performance so as to produce research results that can be generalized to the population. This research uses Path Analysis technique. The path analysis model is used to analyze the pattern of relationships between variables with the aim to determine the direct or indirect influence of a set of independent (exogenous) variables, namely ICT (X) to the dependent variable (endogenous), namely company performance (Y) through latent mediation variables, namely competitive advantage (Z).

RESULTS AND DISCUSSION

ICT has a positive and significant relationship to competitive advantage. This is indicated by the value of the path coefficient of 0.767 with a significance below 5% which is indicated by the value of the t-count 7070 greater than the t-table value of 2030. A positive path coefficient indicates that the ICT variable has a positive effect on competitive advantage. Then the t-value of 7.707 which is greater than the t-table indicates that the ICT variable has a significant effect on competitive advantage. Based on calculations through the R-Square generated, ICT variables affect the competitive advantage variable by 58.8%. The conclusion is that ICT has a positive and significant effect on competitive advantage in the Cosmetics Industry in Greater Bandung with a magnitude of influence of 58.8%. The remaining 41.2% of the Competitive Advantage variable (Z) can be explained by other variables not examined.

Table 7 – Hypothesis Test Results the Effect of ICT on Competitive Advantage

Hypothesis	Path coefficient	t value	t Table	R ²	Conclusion
ICT has a significant effect on Competitive Advantage	0,767	7,070	2,030	0,588	H1 accepted

Source: Data Processing Results, 2019.

The cosmetics industry in Bandung Raya, the company is constantly updating the technology used, such as social media that has been used has begun to shift from facebook to Instagram, the look of the website that is constantly updated, the use of laptops for several divisions, the replacement of production machines, the use of desktop systems. The company updated social media, which originally used Facebook to change to using

Instagram. The change was made because currently Facebook users have started to move using Instagram as a medium to interact with friends on social media.

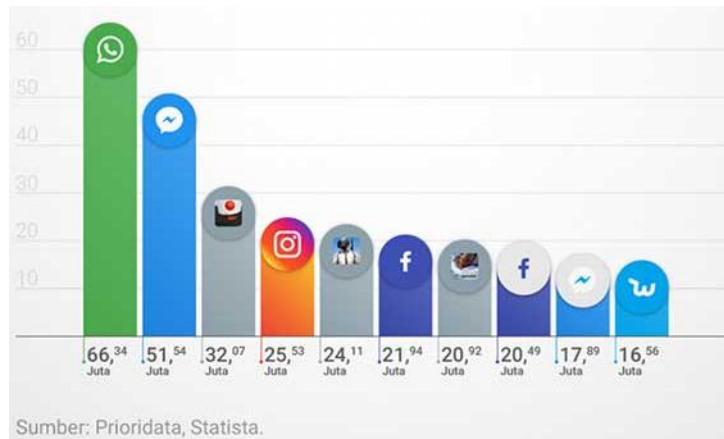


Figure 1 – Top 10 Great Android Applications Globally

Cosmetics industry companies in Greater Bandung have been able to read these changes, so they changed the promotional and communication media to Instagram. Social media as a resource owned by the company can be used properly. This is in accordance with the theory of Resource Base View (RBV) which states that resources as an organization's competitive position in the industrial environment (Hoskisson, Hitt, Wan, & Yiu, 1999). Based on this, the cosmetics industry company in Greater Bandung has been able to compete by utilizing the social media they have.

Competitive advantage has a positive and significant relationship to company performance. This is indicated by the value of the path coefficient of 0.767 with significance below 5% which is indicated by the value of t-count 7070 is greater than the value of t-table of 2.032. A positive path coefficient value indicates that the ICT variable has a positive effect on company performance. Then the t-value of 5.862 which is greater than the t-table indicates that the ICT variable has a significant effect on company performance. Based on calculations through the R-Square generated, the ICT variable affects the competitive advantage variable by 88.2%. The conclusion is that ICT has a positive and significant effect on company performance in the Cosmetics Industry in Greater Bandung with a magnitude of influence of 88.2%. The remaining 11.8% of the Competitive Advantage variable (Z) can be explained by other variables not examined.

Table 8 – Hypothesis Test Results the Effect of ICT on Competitive Advantage

Hypothesis	Path coefficient	t value	t Table	R ²	Conclusion
Competitive Advantage has a significant effect on Company Performance	0,767	5,862	2,032	0,882	H2 accepted

Source: Data Processing Results, 2019.

In the cosmetics industry in Bandung, the company already has sources that make them superior and able to compete with its competitors. The resource in question is that they already have employees who experts in their fields are, such as pharmacists, Research and Development, marketing, accounting, and purchasing. Pharmacists and RnD play an important role in determining company performance. That is because according to Nu Angle, a consulting company in the UK which focuses on technology development and innovation management, stated that one of the functions of RnD is to create quality and product choices that are tailored to the company's conditions, also able to increase access to partners to expand innovation and make the most of innovative technology. This is in line with the thinking of Barney (1991); Eisenhardt and Martin (2000); Powell (2001) which states that companies in an industry can develop resources and capabilities that are different, heterogeneous both in terms of value and scarcity and therefore allow companies to build

competitive advantage, by utilizing this competition enables the development and improvement of company performance in the short term and long.

ICT has a positive and significant relationship to company performance. This is indicated by the value of the path coefficient of 0.767 with a significance below 5% which is indicated by the value of the t-test of 5.021 greater than the value of the t-table of 2.032. Positive path coefficient values indicate that the variable competitive advantage has a positive effect on company performance. Then the t-value of 5.021 which is greater than the t-table indicates that the competitive advantage variable has a significant effect on company performance. Based on calculations through the R-Square produced, the variable competitive advantage affects the competitive advantage variable by 88.2%. The conclusion is that competitive advantage has a positive and significant effect on company performance in the Cosmetics Industry in Greater Bandung with a magnitude of influence of 88.2%. The remaining 11.8% of the Competitive Advantage variable (Z) can be explained by other variables not examined.

Table 9 – Hypothesis Test Results the Effect of ICT on Competitive Advantage

Hypothesis	Path coefficient	t value	t Table	R ²	Conclusion
Competitive Advantage has a significant effect on Company Performance	0,767	5,021	2,032	0,882	H2 accepted

Source: Data Processing Results, 2019.

In the Greater Bandung cosmetics industry, all employees understand how to use good social media. For example, all employees must enter the Whatsapp group. The group functions as a joint communication medium between employees. This is done because if you have to talk about technical issues face to face, it will spend more time. But if you use the group, there will be no time constraints. Employees will have more time to do other work. This is consistent with the statement of Gërguri-Rashiti, et al (2017) who found that companies with greater use of ICT had higher sales per employee.

ICT has a positive and significant relationship to company performance through competitive advantage as a mediating variable. This is indicated by the value of 58.8% the direct influence of ICT (Information Communication and Technology) (X) on Competitive Advantage (Z). The direct effect of Competitive Advantage (Z) on Company Performance (Y) is 29.0%. The direct effect of ICT (Information Communication and Technology) (X) on Company Performance (Y) is 21.3%. The indirect effect of ICT (Information Communication and Technology) (X) on Company Performance (Y) through Competitive Advantage (Z) is 41.3%.

Table 10 – Direct and Indirect Effects

Order of Sub Structure	Relationship	Path coefficient	Direct effect	Indirect effect through Z	Total effect
1	X -> Z	0,767	58,8%	-	58,8%
2	Z -> Y	0,538	29,0%	-	29,0%
	X -> Y	0,461	21,3%	41,3%	62,6%

Source: Data Processing Results, 2019.

This shows that the Competitive Advantage (Z) variable as a mediating variable can increase the influence of ICT (Information Communication and Technology) (X) on Company Performance (Y) by 41.3%. So that the total influence of ICT (Information Communication and Technology) (X) on Company Performance (Y) is 62.6%.

CONCLUSION

The results of research from Lacovone, et al (2017) states that companies facing competitive pressures are showing an increase in their performance as a result of more intensive use of ICT. For companies that face low competition, there seems to be no relationship at all. From this research it means to improve company performance, it is

necessary to go through competitive advantage. Based on previous research (Kim et al., (2016); Davis et al., (2016); Rauch et al., (2016); Yang et al., (2015)), the importance of ICT to improve company performance to be able to be effective achieve company goals. The company's efforts to optimize company performance are influenced by competitive advantage so that ICT is suitable to be one of the factors forming good company performance (Lacovone, 2016).

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