Journal of Reseacrh in Business, Economics, and Education Volume 2
E-ISSN 2686-6056 Issue 4
August Edition 2020

++++++++++++++++++++++++++++++

COMPETENCES OF MSME ACTORS IN UTILIZING ICT IN WEST JAVA PROVINCE

Vera Agustina Yanti* & Danny Ong

Universitas Bina Sarana Informatika
**e-mail: vera.vay@bsi.ac.id*

Abstract

The purpose of this study is to analyze the level of competence of business actors in utilizing the means of Information and Communication Technology. This study was conducted in the district of Bandung, Bogor district Bogor city and the city of Bandung from November 2019 to february 2020. Sampling respondents amounted to 358 Based on the results of the overall selection of population 3479. Data analysis using SPSS version 21. The research results showed based on the test results individually or partially that the competence of business actors in utilizing ICT tools that competence is directly influenced by the profile of business actors, the perceptions of business actors, and the utilization of ICT facilities and 1 variable has little influence on the competence of the perpetrators business. Based on the test results simultaneously that the profile of business actors, support the external environment, the perceptions of business actors and the utilization of ICT facilities. Based on the regression equation model shows that the higher the competence of business actor profile of business actor, the higher the perception of business actors the higher the utilization of ICT facilities will affect the higher competence of UMKM business actors.

Keywords: Utilities ICT, competency, Actor business.

1. Introduction

Micro, Small and Medium Enterprises (MSMEs) are the largest group of economic actors in the Indonesian economy. The Ministry of Cooperatives and Small and Medium Enterprises in 2012-2013 shows that data on the development of SMEs reached 56,539,560 with a growth of 9.5 percent. In line with its development, the UMKM sector is facing increasingly competitive competition, the swift flow of goods entering the land due to the implementation of an open economic system, requiring business actors to be able to face global challenges and adapt. The results of APEC's research (2006) (Tambunan, 2010) show that in the global environment, MSMEs in the country still have low competitiveness, the MSME performance score index in Indonesia based on data from the APEC MSME Innovation Center is below four. According to data from the Ministry of Trade (2013), the contribution of the Indonesian SME sector to export activities is still low, from 670 thousand units only 5,000 UMKM units export their products abroad, so that UMKM products are unable to penetrate the free market. Products made by business groups at the domestic market level have not

been able to compete with imported goods. This is because the quality of goods is not yet competitive, and technological limitations.

The disadvantage of micro, small, and medium enterprises in terms of the potential benefits of information technology for business development is the limited use of information technology. MSMEs in the country still use technology in manual form in each of their business activities. To support competitive advantage, it is necessary to apply information technology in business development. Based on the data above, MSMEs in the country have low competitiveness values, only business actors have the ability to utilize technology information, able to face global challenges exist today. This is in line with Tambunan's (2013) research that companies that apply information technology in their business development will increase high competitiveness. Along with this, technological development is increasingly rapid and the growth of ICT facilities continues, various software, hardware and internet programs. growing. Based on international data from Nielsen (2015), it is stated that the number of Android-based smartphone users reaches 52.6 percent, 2.8 percent for Microsoft, 0.7 percent for Blackberry Messenger (BBM), and 1.2 percent for users of other brands.

The description above shows that global technology development is getting more agile, but the ability of business actors to use ICT is still low. Data from BPS (2006) shows that SMEs with low education are less proficient in information technology. Lack of understanding of information technology has resulted in limitations in its use (Indarti 2007). The use of ICTs among business actors is limited because the ability to control ICT for business actors in the country is still low. Based on the results of a daily survey by Tribun News (2012) of seventeen million SMEs in Indonesia, only 75,000 have a web. This requires awareness of the benefits of technology mastery for small and medium enterprises in order to increase sustainable competitiveness. Increasing awareness and arousing the interest of the UMKM business community towards mastery of ICT with the aim of achieving optimal ICT competence in its utilization, efforts are made to foster changes as desired, need to be carried out gradually and continuously.

In order to mobilize the community of MSME business actors to be able to achieve optimal ICT competence in its utilization, the importance of fostering changes as desired, needs to be carried out gradually and continuously. Research Mata et al. (1995) found that in order to have competitive abilities and competencies, the most important factor is increasing the use of information technology by business actors through education and training. Mastery of information technology for business actors needs to be applied in every activity of business activities. This has a positive impact on increasing efficiency, speed, service quality in the business transformation process and expanding product access. The role of information technology is expected to support the readiness of business actors to face free market situations and as a tool capable of supporting the creation of optimal productivity performance and maximum profitability (Ristek 2005). For the group of business actors engaged in the agricultural and non-agricultural sectors, to have competence in the field of information technology in the management of their business activities, one of which is through extension activities as an empowerment effort. According to the results of Aang's research (2001), empowerment programs through the use of ICTs by assisting Small and Medium Enterprises (MSMEs) are a step to increase the ability or competence of ICT for business actors so that they have an impact on the quality of production, marketing and business profits as well as improving welfare for the community actors. education and counseling as an alternative in increasing competence. Referring to the results of research by Hubeis (2011) it is also stated that competence and performance can be achieved influenced by education / training factors. High competence will have an impact on the high frequency of management and utilization of ICT facilities among MSME business actors.

Based on the competence of MSME business actors in utilizing Information and Communication Technology facilities, it must continue to be developed, along with the increasing rapid development of technology, the continued growth of ICT and the development of internet

networks which have an impact on the emergence of an information revolution in the digital era. This study aims (1) to analyze the level of competence of MSME business actors in utilizing ICT facilities and (2) to analyze factors affecting the competence of MSME entrepreneurs in utilizing ICT facilities."

2. Literature Review

A Capacity is the ability that exists at present whilst capability refers to the higher level of ability that could be demonstrated under the right conditions. According to Pary, competency is a set of knowledge and skills and attitudes relate to one another the effect on individual jobs that correlate with the performance can be improved through training. Technical competence according to Government Regulation No. 19/2005, personal competence is competence according to personality and behavior attitude capable of developing potential, according to SANKRI technical competence is the individual ability in a particular technical field for each task.

Competence is required not only in business and management ability in basic, as the development of information and communication technologies, ICT revolution has marked the time when the information becomes a commodity or the power to control it, that the ability of technological competence is essential for improving the quality of products as well as taking opportunities and chances. The role of ICT gives significant benefits to all areas of social, economic and business. On the other hand, the role of ICT supports the implementation of knowledge-sharing processes by sharing knowledge through ICT facilities that use virtual meetings such as email, mailing list, web conference. According to Gaynor, the application of the technology in the business on distribution, administrative aspects, the rise of products and manufacturing. Therefore, the mastery of skills in utilization of ICT facilities is required.

The technical competence of the utilization of ICT facilities that must be controlled by businessmen currently is as follows (1) a basic level of competency in operating a computer both hardware and software, (2) competency in digital marketing, (3) the competency in using browser to access pricing information, access to information on raw materials and finding business partners, (4) competency in running the application of e-commerce/e-business, and (5) competency in understanding the seven elements of the media literacy . This is becoming important due to the development of internet networks that affect the onset of the revolution of information in the digital age and have to adapt to the conditions of the digital economy

3. Methodology

The research used a quantitative approach, carried out from December 2016 to May 2017. The survey was conducted in 4 research locations, Bandung Regency, Bogor Regency, Bandung City and Bogor City. The study population was 3479 with a research sample of 358 MSME business actors. Respondent requirements from a predetermined population. Respondents were determined by using proportioned random sampling technique. The sample size was determined using the Slovin method using a precision of 5%. Data collection techniques for MSME business actors were collected using interview techniques, questionnaires, observations and FGDs on MSME business actors, Head of Business Communities, local government staff of the local UMKM Service carried out during the research. Interviews with resource persons related to MSME business actors on the UMKM Service Staff at the Regional Government of Bandung Regency, Bogor Regency, Bogor City and Bandung City were carried out during the study. The qualitative data were analysed using descriptive statistics and inferential statistical tests, namely SEM analysis. The data collected are: Profiles of MSME business actors (X1); External environmental support (X2); Perceptions of MSME business actors

(X3); Utilization of ICT facilities (X4); Y1 (Competency of MSME entrepreneurs); Y2 (Business sustainability). Processing and data analysis using descriptive and inferential statistics.

4. Result and Discussion

Level of Utilization of Information and Communication Technology Facilities for MSME entrepreneurs

Today's technological advances have penetrated into various fields in all aspects of human life. One of them is the internet network, this network is able to make interconnection between humans very fast and appear in a fraction of nano seconds. Easy access to information and low cost make technology facilities play an important role in every activity. The current information age is also called the digital era. Each individual UMKM business actor has different characteristics in using and utilizing ICT facilities. The characteristics of business actors in utilizing ICT facilities are a description of business actors in operating ICT facilities in each of their daily business activities. The description of the characteristics of MSME business actors at the level of utilizing ICT facilities, hardware and software is presented in Figure 1.

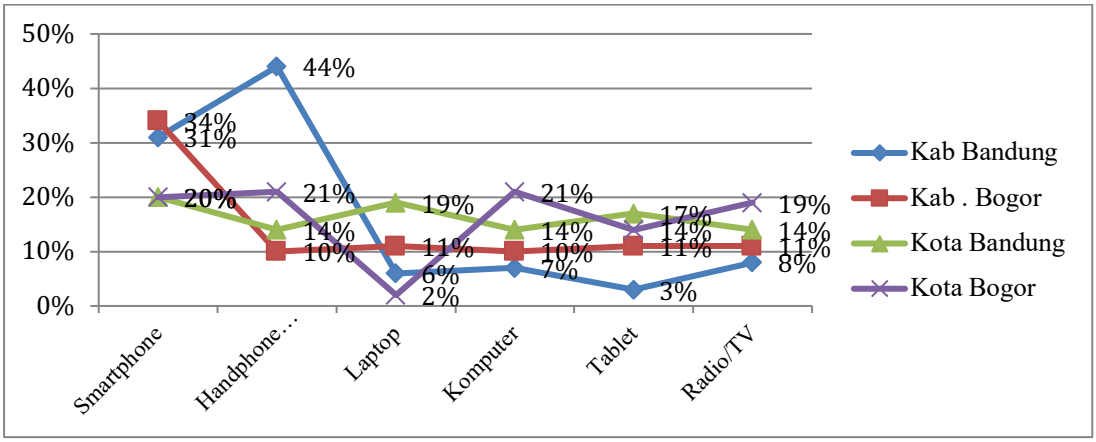

Figure 1 Level of Utilization of ICT facilities

UMKM business actors in utilizing ICT facilities

Based on the composition, in Bandung Regency the highest was 74 percent of MSME business actors in the productive adult age category (20-46) followed by Bogor Regency with 66.7 percent. The average level of formal education of MSME entrepreneurs in utilizing ICT facilities is high school graduates because most of the respondents have long graduated from 12 years (SMP-SMA). Based on the results of the study, it shows that the level of education is sufficient to support business actors to be able to use ICT facilities, even though it is conventional to seek, receive and send information. The high category average in urban areas is Bandung City 90 percent and Bogor City is 80 percent. In Bandung Regency 60 percent and the frequency of MSME business actors attending non-formal education classified as rare is 1-5 times a year, due to the low intensity of counseling or assistance from the Government regarding the use of ICT facility applications in business activities. The number of ownerships of ICT facilities, in average, MSME business actors are still in the low category, less than 5 units of ICT facilities owned by MSME business actors in ownership of ICT facilities. For the Cosmopolitan Level, the average category is high for MSME business actors in the City of Bandung and Bogor City and in the low category in MSMEs in Bogor Regency and Bandung

Regency, the level of motivation of MSME entrepreneurs is in the high category on average for MSME business actors living in urban areas. cosmopolitan is a capital for business actors to improve competence in utilizing ICT facilities.

Table 1. Descriptive Profiles of MSME Business Actors in utilizing ICT facilities

Sub Actors	Category	Bandung District(%)	Bogor District(%)	Bandung City(%)	Bogor city (%)
Age	Youth(<20)	0.0	0	10	0.0
	Adult(20-46)	74.1	66.7	40	40
	Elderly >47	25.9	33.3	50	60
Formal Education	Basic(0-6)	20.9	11.1	0.0	20
	Intermediate(9-12)	18.7	11.1	10	0
	Continue >12	60.4	77.8	90	80
Non Formal Education	Rarely (<3)	94.6	85.2	90	100
	Moderate(3-5)	3.8	3.7	10	0
	Often (>5)	1.6	11.1	0	0
Long	LONG(1-11)	100	100	100	100
	Long Enough(12-16)	0	0	0	0
	Often (<3)	0	0	0	0
Total	Low (1-6)	100	100	27	80
	Moderate (12-16)	0	0	0	0
	High (17)	0	0	0	20
Cosmopolitan	Low	61.7	40.7	10	0
	Moderate	24.7	22.2	10	60
	High	13.6	37.0	80	40
Motivation Level	Low	36.4	33.3	10	0
	Moderate	44.9	44.4	60	100
	High	18.7	22.2	30	0

Source: data processed in 2019

External environmental support, Perceptions of MSME business actors, Utilization of ICT facilities External environmental support at the quality level of mentoring support and empowerment program support for business actors in utilizing ICT is classified as being in the medium category. and its application in the business world is classified as low in one year <5 times the frequency of extension, this is based on information, material and extension methods related to the use of ICT, the material that has been submitted is online marketing through the internet and the use of basic computerized financial applications, and extension methods simulation, practice, and in class, while the support for empowerment programs in the form of facilitating learning and procurement of ICT facilities for ICT utilization activities in business activities is classified as low. Only business actors who have a group or are affiliated with a business community group receive priority support or assistance from the government. The agencies currently providing support are from higher education institutions and local UMKM agencies. Support for empowerment programs is the most dominant sub indicator in the environmental and external support variable, with the highest loading factor value of 9.37 compared to other sub indicators, it is better if counseling or assistance regarding the use of ICT facilities is carried out in a sustainable manner so that the competence of MSME entrepreneurs can be improved.

For information access and availability of adequate infrastructure networks in the four research areas, Bandung Regency, Bogor Regency, Bogor City and Bandung City. Signal access, ICT facilities as a means of access to information in urban and rural areas in the district are quite adequate, this is indicated by the percentage score of the level of access to information and infrastructure on average> 80 percent. The infrastructure network in the four research areas is also quite available, including physical buildings, transmission towers, roads, and other physical facilities. The level of perception of

UMKM business actors on the characteristics of ICT innovation is on average high in the perception of business actors towards conformity to the needs of both urban and rural business actors, namely in the Bandung and Bogor areas. Based on the results of community research, the MSME business community as respondents currently have an assessment that the use of ICT facilities is in accordance with the needs of business actors in each of their business activities, including business actors assessing that other ICT facilities have been utilized by business actors. is suitable and suitable for all business activities including marketing communications and accelerating customer service. The level of business actors' perceptions of the characteristics of ICT innovations, namely ease of use, relative advantage and ease of viewing results and to try out, is on average high in the perceptions of business actors in urban areas. This can be shown in the percentage score> 60 percent. Because in terms of education level of MSME business actors is higher than business actors in the district, so that the level of awareness, assessment of the use and benefits of ICT is higher.

The level of utilization of ICT facilities includes the level of intensity of use and level of information management of ICT. The level of intensity of utilization of ICT facilities for business actors in urban and regency areas is classified as moderate. The observations of researchers in the field that most MSME business actors do not routinely use computer facilities for every business activity, but overall use ICT facilities in the form of cellphones with frequency levels of use> 10 (times) in one week, both conventional and Android-based cellphones or smartphones with various applications controlled by business actors. The level of management of information on average is high. MSME business actors in urban areas, in terms of population demographics, include consumers / customers who have a fairly high level of mobility towards the use of ICT and the average urban community tends to be cosmopolitan, so that it affects most MSME consumers who are in urban areas. There tends to be a very high level of information management on ICT facilities, thus encouraging business actors to actively use a variety of applications both through cellular and PC computers, both selecting information, managing and disseminating information. The results of the study are in line with Suaib (2013) which states that the ability to process data and utilize the resulting information is a vital requirement for organizations. Basic processing into information can be done more efficiently and effectively using computer assistance with a computer-based information system (Computer Based Information System). Information generated by using technology (computer). Based on field observations on cellular facilities, the Whats up and Blackberry applications are mostly used on Android-based cellular facilities, while sms applications are mostly used on conventional cellphones. The social media application is used by a small proportion of respondents in the district to interact with customers.

Personal Competence and Technical competence of MSME business actors

Competency in the use of ICT is very important in the era of digitization because currently there is a shift in the economy from offline to digital or online. It requires optimal mastery among business actors in its utilization. ICT use skills and assistance are needed for MSMEs in the learning process of ICT facilities (Mata, 1993; Aang, 2011). Starting with mastery of the personal competence of the business actor. The average level of personal competence is in the high category of business actors in urban areas and in districts with a percentage score of> 70 percent. The personal abilities of business actors who have persistent fighting power and high enthusiasm and responsibility in their business activities are classified as good. Meanwhile, the level of technical competence of business actors in the 4 research areas is in the medium category with a percentage score above> 75 percent. This is because business actors in Bogor Regency, Bogor City, Regency and Bandung City, because the average business actor has technical skills in the use of ICT facilities, they do not optimally master various software applications available on computers and cellphones. On average, business people

generally master the use of cellular means to communicate and manage information, namely downloading images, copying images via cellphone media with certain applications, from the observation that only WA and blackberry applications are capable of managing information, while computers are very rarely used besides reasons business actors are too big and not easy to carry anywhere.

Factors Affecting the Competence of MSME entrepreneurs in utilizing ICT facilities in the Bandung and Bogor areas

In the initial hypothesis, the business continuity of MSME business actors in Bandung Regency and Bogor Regency, Bandung City and Bogor City is thought to be influenced by the profile of MSME business actors (X1), external environmental support (X2) perceptions of MSME entrepreneurs (X3) and utilization of ICT facilities (X4) and (Y1) Competencies of MSME entrepreneurs in utilizing ICT facilities. Not all of the factors described affect the competence in utilizing ICT facilities. The significance of the profile of business actors, the perception of the characteristics of ICT innovation and the use of ICT facilities on the competence of business actors means that the higher the factors that contribute to the competence of business actors in utilizing ICT facilities, especially from the intensity level of utilization of the level of ICT information management, and the level of perception of the characteristics of innovation. ICT, and the level of motivation, cosmopolitan of business actors will increase the competence of business actors in utilizing ICT facilities. From the results of in-depth interviews, observations in the field show that the importance of technically using ICT facilities for every business activity is an aspect that must be considered, its application is implemented to increase competitiveness and business sustainability, this occurs because some respondents do not realize the importance of the benefits of optimal use of facilities. ICT for business activities, especially in the current digitalization era. Based on the facts in the field, the business world has now switched to digital media.

According to Hartarto (2017) research results from Deloitte Access Communications suggest that Indonesia will become a middle-income country by 2025, if the level of economic growth is good, it will encourage the involvement of SMEs in the use of digital technology through technology, business actors will gain significant profits of up to 80 percent to be 17 times more innovative, and Indonesia is predicted to play a significant role controlling around 52 percent of the e-commerce market in Southeast Asia. Meanwhile, Setiono (2017) explains that business actors who are active online and social media applications with a good package of content will attract potential buyers outside country, government support has a vision of making Indonesia to position Indonesia as the country with the largest digital economy capacity in Southeast Asia in 2020. This is a promising opportunity for the MSME sector. However, referring to the results of research by The Asia Foundation in 2002, the number of MSMEs utilizing e-commerce in MSMEs in the Bandung and Bogor areas was only 18 percent. Based on interviews in the field, the West Java Business Daily explained that the use of ICT among MSMEs in the Bandung area was still sporadic due to the low ability of mastery of ICT in MSME business actors. The results of Nurul's research (2007) showed that the impact of a less strategic understanding of national technology led to limitations in the use of ICT facilities.

Based on interviews in the field, extension activities and empowerment programs related to outreach regarding the importance of ICT facilities for business activities and the use of ICT facilities, both software and hardware applications, have not reached widely evenly and are not sustainable for business actors. Efforts that must be made are intensive education and counseling as an alternative in increasing competence. Referring to the results of research by Hubeis (2011) it is also stated that competence and performance can be achieved are influenced by education / training factors. High

competence will have an impact on the high frequency of management and utilization of ICT facilities among MSME business actors.

Results of Data Analysis

The data analysis technique in this study uses multiple linear regression analysis, or the SPSS version 21 test. To perform multiple linear regression analysis must meet the requirements, namely passing the classical assumption test consisting of normality test, multicollinearity test, heteroscedasticity test and data in the form of interval data is said normal if the Sig (2-tailed) value is greater than the level of significance used (5%). The results of the data validity and reliability test in this study indicate the value of r with a total score> 0.30 and the reliability test> 0.60.
Classical assumption test results.

Table 1 Test the Classical Assumptions

Variables	Classsical Assumptions			
	Normality	Multicollinearity		Heterokedacity
	Sign 2 tailed	Tollerance	VIF	Sig
Business actor profile external (X1)	0.087	0.486	2.057	0.605*
environmental support (X2)		0.862	1.160	0.186*
Perceptions of business actors (X3)		0.380	2.634	0.690*
Utilization of ICT facilities (X4)		0.459	2.177	0.762*

The results of multiple regression analysis are presented in Table 2.

Table 2. Multiple Regression Analysis Test

Variabel	*Unstandar coefficient*		*Standardized coefficient*	*t*	*Sign*
	B	Stand Error	*Beta*		
constant	*46.362*	5.246		8.838	0.000
Business actor profile external (X1)	0.306	0.114	0.128	2.687	0.008
environmental support (X2)	-0.24	0.029	-0.030	-0.833	0.405
Perceptions of business actor (X3)	0.197	0.037	0.288	5.345	0.000

Utilization of ICT facilities (X4)	0.753	0.080	0.459	9.367	0.000
Adjusted R 2					0.605
F hitung					137.92
Sign F					0.000

Based on the description of the results of the data processing above, the regression model equation is obtained as follows

Y= 46.362+0.306 X1-0.024X2+0.197X3+0. 754X4

For the Bandung and Bogor areas, the results of multiple linear regression analysis show that competence is significantly influenced by the profile of MSME business actors (β = 0.306; p = 0.000), external environmental support β = -0.024; p = 0.405), Perceptions of MSME entrepreneurs (β = 0.197; P = 0.000), utilization of ICT facilities β = 0.753; p = 0.000), meaning that the competence of MSME business actors will be higher with the higher the intensity of ICT utilization, the higher the profile of the business actor, the higher the perception of the business actor, and the lower the support of the external environment. Overall the variables studied had a significant effect on the competence of MSME business actors in utilizing ICT facilities. With the coefficient of determination R2 in the equation model (R2) = 0.609 it means that the variables studied were profiles of business actors, external environmental support, perception and utilization. ICT facilities affect the competence of MSME business actors by 60 percent, while the remaining 40 percent is influenced by other variables. Based on the table above, individual testing shows that not all exogenous variables have a real influence on the competence of business actors, but there are three variables that have an individual / partial effect on the competence of business actors in utilizing ICT facilities. Each variable has an individual effect on the competence of MSME business actors, while the other independent variable supports the external environment does not have an individual influence on variable Y, namely the competence of MSME entrepreneurs in utilizing ICT facilities. Simultaneous testing shows that by using the F test in the SPSS program the value of F count = 137.9 while the value of F table> 2.39 because the value of Fcount < Ftable, it can be said that all independent variables have a simultaneous influence on the Y variable of the competence of MSME business actors

5. Conclusion

From the results of the descriptive analysis, it can be explained that the level of competence of MSME business actors in utilizing ICT facilities includes personal competence and technical competence in the areas of Bandung Regency, Bogor Regency, Bogor City, and Bandung City on average in the medium and high categories. Medium category competence is technical competence, because the average percentage score is> 50 percent, it requires support from the government related to increased counseling for MSME business actors to increase awareness about the importance of using ICT facilities for business activities, as well as strengthening perceptions and providing motivation. for business actors to increase the intensity of using ICT facilities. Meanwhile, the average personal competence in the high category, the personal ability of business actors is classified as good, with an average score of> 80 percent. Based on the results of the multiple regression analysis test, it is described that from the four independent variables, there are 3 variables that must be prioritized, namely perception, utilization of ICT facilities and the profile of business actors because these factors affect the competence of MSME business actors.

All independent variables have a simultaneous influence on the competence of MSME business actors, this can be seen from F count > F table, based on individual testing there are three independent variables that have a significant effect, and one independent variable does not have a significant effect on the competence of MSME business actors. namely profile, perception and utilization, the entire independent variables X1-X5 affect competence by 60 percent, the remaining 40 percent is influenced by other variables that have not been included in the model.

References

Aang A. 2001. Get to know E Commerce. Jakarta: [ID] PT.Elex Media Komputindo BPS]. Central Statistics Agency, 2006. Survey of Micro, Small and Medium Business Oil Fuel Needs. Final report, December in collaboration with the Central Bureau of Statistics with the Business Support System Development program for MSMEs, Ministry of Cooperatives and SMEs, Jakarta

Ghozali, Iman. 2007. Multivariate Analysis Application with SPSS Program. Mold IV. Semarang: Diponegoro University Publishing Agency

Hartarto.2017. Minister of Industry: Small Industry Needs Benefits of Internet Marketing [internet]. [Downloaded 2017 October 23]. Available at: http: // Finance detik.com

Hubeis M. 1997. Towards a Small Professional Industry in the Era of Globalization through Empowering Industrial Management, Scientific Oration of Professor of Industrial Management Science, Bogor [ID], IPB Press

.Indarti, N., 2007, *Rendah, Adopsi Teknologi Informasi oleh UKM di Indonesia*, http://nurulindarti.wordpress.com/2007/06/23/rendah-adopsi-teknologi- Informasi-oleh- ukm-di-indonesia/, (25 April 2015).

Mata, F., W. Fuerst, dan J. Barney. 1995. *"Information Technology and Sustained Competitive Advantage: A Resource-Based Analysis".*

Nielsen.2013. Smartphone User Profile. [internet].[diunduh 2015 Juli 5].Tersedia pada:[http;/handle.net/123456789/1099] Research and Technology (Ministry of Research and Technology of the Republic of Indonesia). 2005. Strategic Policy for the National Development of Science and Technology (Jakstranas IPTEK 2005-2009)

Setiono.2017.*Ini Tips UKM Go International[*Internet].[Diunduh 2017 Oktober 21]. Tersedia pada :http://finance.detik.com

Suaib.2008. The Influence of Environment, Behavior, Organizational Structure, and Implementation of Computer-Based Information Systems.

Tambunan T.2013.*Masyarakat Ekonomi ASEAN 2015:Peluang dan Tantangan bagi UMKM*

Indonesia.Policy Paper, Number 15 March 2013. Active Program Advocacy Team Thought KADIN Indonesia Jakarta.

Tribunnews, 2015. Number of Indonesian Internet Users.