

IDENTIFICATION OF MICRO, SMALL, AND MEDIUM ENTERPRISE TECHNOLOGY (MSMEs)

Dian Prihardini Wibawa

*Faculty of Economics, University of
Bangka Belitung, Indonesia*

Muhammad Tanggung

*Faculty of Economics, University of
Bangka Belitung, Indonesia*

Maya Yusnita

*Faculty of Economics, University of
Bangka Belitung, Indonesia*

Christianingrum

*Faculty of Economics, University of
Bangka Belitung, Indonesia*

Abstract– Micro , Small, and Medium Micro Enterprises (MSMEs) in Pangkalpinang still have a low competitiveness. One of the causes of low competitiveness due to low utilization of information technology. In order to improve the competitiveness of MSMEs, it is necessary a study to identify the condition of information technology usage. The results of identification is expected to be an input for the Government of Pangkalpinang City in encouraging the acceleration of information technology among MSMEs.

The research methods used are descriptive qualitative and quantitative analysis. Descriptive analysis is used to map the real condition about the utilization of information technology of MSMEs. Objects in this study are the perpetrators of MSMEs Pangkalpinang City.

The results of research include; (1) The condition of MSMEs in Pangkalpinang is not objectively optimal in improving the economy of society, this is due to the quality and hygiene of products, packaging, price competition, halal certification and the use of information technology; (2) The condition of utilization of MSMEs information technology of Pangkalpinang City is still very limited to local marketing. In fact there are still MSMEs who have not utilized information technology in running their business; (3) Several inhibiting factors on the level of use of information technology in Pangkalpinang City MSMEs include lack of awareness and mastery of MSMEs actors on the importance of technology, low levels of education, attitudes of traditional communities, lack of confidence, low investment, and lack of support from local governments.

Keywords: *MSMEs, Information Technology, Economic Empowerment*

I. INTRODUCTION

Micro, Small and Medium Enterprises (MSMEs) are one of the most important sectors in the Indonesian economy which are different from the National Gross Domestic Product (GDP) and in terms of employment. MSMEs are also the only economic sector that can survive in the context of the financial crisis in Indonesia. Along with the ASEAN economic era (the Association of Southeast Asian Nations) today, MSMEs are required to make improvements so that they can improve their competitiveness. One of the efforts made by UMKMagar is able to compete using information technology (IT).

Throughout 2016, according to data from the Official Gazette of Statistics (KBLI) of the Province of Bangka Belitung Islands (Babel), the production of Micro and Small Industries (IMK) in the Bangka Belitung Islands Province experienced a somewhat fluctuating growth. Figure 1.2, shows that in the first quarter to the third quarter of 2016 (q-to-q), the growth of IMK production experienced negative growth. Positive growth in the fourth quarter which reached 10.97 percent cannot be said to be a good enough growth for the Micro and Small Industries in Bangka Belitung, because in the previous quarter (Tw III) there was a more significant decline in production, namely -14.41 percent. Compared to the same quarter of 2015 (y-on-y), negative growth occurred in all quarters. Good production in the fourth quarter (q-to-q) was inseparable from the cost of industry goods, goods from other than furniture which was quite significant (Figure 1.3). Even though it was only three months ago, but with the growth of wood industry production, wood furniture that reached 38.23 percent was enough to make the production of IMK of Bangka Belitung Islands Province in the fourth quarter Positive growth (10, 97 percent).

Based on the data described above, one of the negative

causes is the lack of mastery of technology, especially information technology in the UMKM activities (Roosdhani, Wibowo, Widiastuti, 2012; Effendi and Subandi, 2010; Mopangga, 2015). very important for UMKM institutions in Pangkalpinang City. The authority of information technology can improve the ability of Pangkalpinang City UMKM to compete with large businesses and also allow Pangkalpinang City MSMEs to operate in international scales. Information technology for MSMEs in Pangkalpinang City can also be used to be more effective, improve communication, collect information and look for potential business partners. Serving information and communication technology for MSMEs in Pangkalpinang City can be used for cheaper and easier costs, reducing teaching resources and developing and creating new markets. Market expansion using internet-specific information technology is important for MSMEs in Pangkalpinang City.

Pangkalpinang City is the capital of the Bangka Belitung Islands Province which has a large business growth, it is seen from the temporary Economic Census in 2016 which reported that the number of businesses in the City of Pangkalpinang amounted to 22,000 business units with a growth of 70.5% (BPS Economic Census, 2016). In dealing with free markets, especially related to the application of the ASEAN Economic Community (AEC), the strength of the business world in Pangkalpinang City needs to be mapped. the use of information technology among Pangkalpinang City UMKM players, the obstacles faced. Based on these results, it is expected that strategy recommendations can be produced in an effort to accelerate the adoption and use of information technology by MSMEs in Pangkalpinang City.

II. LITERATURE REVIEW

A. Definition of MSMEs

The definition of Micro, Small and Medium Enterprises (MSMEs) according to the Law of the Republic of Indonesia Number 20 of 2008 in General Provisions article 1, are as follows: (1) Micro Micro Enterprises are productive businesses owned by individuals and / or individual business entities that fulfill criteria for Micro Enterprises as stipulated in this Law. (2) Small-scale enterprises are independent productive economic enterprises, carried out by individuals or business entities that are not subsidiaries or not branches of companies that are owned, controlled or become a direct or indirect part of a Medium or Large Business that meets the Small Business criteria as intended. in this Act. (3) Intermediate Business is a productive economic enterprise that is independent, carried out by individuals or business entities that are not subsidiaries or branches of companies that are owned, controlled, or become part of directly or indirectly with Small Businesses or Large Companies with net assets or annual sales proceeds as stipulated in this Law. also provides a definition of the UMKMB and the Republic of Indonesia Statistics Center (BPS) based on the number of workers. Small businesses are business entities that have a workforce of 5 to 19 people, while medium-sized companies are business entities that have a workforce of 20 s.d. 99

people. According to the European Community Commission on May 6, 2003, the category of micro, small and medium enterprises (MSMEs) consists of companies that employ fewer than 250 people and have an annual turnover not exceeding EUR 50 million, and / or the annual balance sheet does not exceed EUR 43 million . Then, in the category of SMEs, small businesses are defined as companies that employ fewer than 50 people and annual annual turnover and / or balance sheets do not exceed EUR 10 million. Meanwhile, in the SME category, micro business is defined as a company that employs less than 10 people and annual turnover and / or balance sheet does not exceed EUR 2 million.

B. Definition of Information Technology

According to Bambang Warsita (2008: 135) information technology is a means and infrastructure (hardware, software, useware) systems and methods for obtaining, sending, processing, interpreting, storing, organizing, and using data meaningfully. The same thing also expressed by Lantip and Rianto (2011: 4) information technology is defined as science in the field of computer-based information and its development is very rapid. Hamzah B.Uno and Nina Lamatenggo (2011: 57) also suggest information technology is a technology used to process data. The processing includes processing, obtaining, compiling, storing, manipulating data in various ways to produce quality information, which is relevant, accurate and timely information. Another theory also expressed by Williams in Suyanto (2005: 10) information technology is a general form that describes every technology that helps produce, manipulate, store, communicate, and / or convey information. Another supporting theory according to Behan and Holme in Munir (2009: 31) information and communication technology is anything that supports recording, storing, processing, obtaining, transmitting / receiving and receiving information From the opinions of the experts above it can be concluded that information technology is a technology in the form of (hardware, software, useware) that is used to obtain, transmit, process, interpret, store, organize, and use data meaningfully to obtain quality information

C. Relations of Information Technology with MSMEs

In the Age that develops so fast that can affect the way of thinking and behavior of a person in the business world competition. Every business actor grows and develops following the rapid development of information technology. The influence of information technology today cannot be underestimated, because the development of information technology can affect one's business. By utilizing technology in conducting MSME activities, it will bring positive impacts to the MSME players. The following are the important benefits of information technology in UMKM (Adves.net, Accessed 2017) including:

1. Communicate Easily, Quickly and Exactly. Today has entered the age of the internet. The facilities on the internet prove a lot of the speed of communicating

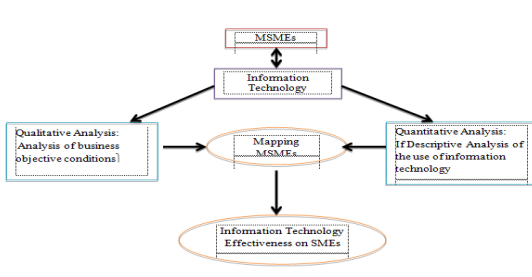
with the intended person. A small example is sending via e-mail that can send documents, images, videos, or other files quickly. In addition to E-mail there are also internet-based applications that exist on every smartphone such as WhatsApp or BBM, the application can help communicate easily, quickly and precisely by chatting, voice calls or video calls.

2. Facilitate the Employee Monitoring Process. Almost the same as the first point, business people can use the internet to host their employees. By utilizing the internet the businessman can find out the movement of his business and can monitor the work done by his work with reports daily, weekly, even monthly. This can make work more practical.
3. Reducing Production and Operational Costs. With the development of information technology that shows changes every day, companies can control the costs they spend every day. This can help companies in making decisions to reduce the costs that must be incurred for the product so that the company will get a large profit, of course with careful consideration, assisted by information technology.
4. Open Access to Information and Information Dissemination Easily.

Publish information in the form of news, advertisements, knowledge, product promotions, exhibition locations, and other information via the internet can be spread out quickly compared to using conventional methods such as using newspapers, or advertising on a megatron or videotron. Of course, with little expense compared to the dissemination of information in a conventional way, it can cost a lot of time

D. Framework

The research thinking framework is adjusted to the formulation of the problems that have been described previously :



III. RESEARCH METHODS

A. Location and Time

The study was conducted in the city of Pangkalpinang. The sampling site follows a database from the Cooperative, Small and Medium Enterprises Office of the Bangka Belitung Islands Province. This research was conducted from January to July 2018.

B. Data Type

In identifying the use of information technology by MSMEs, the data used in this study are primary data and secondary data. Primary data obtained through the

distribution of questionnaires that have been prepared by interview techniques directly to the SMEs involved. This data is then processed for further analysis. Secondary data is supporting data for primary data, secondary data obtained from relevant agencies, such as: Cooperative Offices, Small and Medium Enterprises, Bangka Belitung Province and Pangkalpinang, Central Bureau of Statistics and other related institutions. Secondary data was obtained from several references in the form of previous research results.

C. Data Collection Method

Determination of respondents who conduct MSMEs is based on information obtained from the Office of Cooperatives, Small and Medium Enterprises of the Province of Bangka Belitung Islands. Sampling was then carried out using the purposive sampling method, which is the technique of determining the sample with certain considerations (Sugiyono, 2016), where the consideration is considered to have a close connection with the characteristics of the population that has been known in advance, in other words the sample unit contacted is adjusted with certain criteria applied based on research objectives.

D. Data Analysis Method

Data analysis techniques in this study used descriptive qualitative and quantitative approaches both descriptively and inferentially. In addition, to map the conditions of the problems faced and design appropriate strategies, several suitable analytical tools are used, including:

1. Qualitative Descriptive Analysis is a research procedure that uses descriptive data in the form of written or verbal words from people and actors that can be observed (Ferdinand, 2014). This analysis is used to identify MSMEs based on objective conditions of several types of leading businesses in Pangkalpinang City.
2. Quantitative Descriptive Analysis, according to the name, descriptive will only describe the state of a symptom that has been recorded through a measuring instrument and then processed according to its function (Ghozali, 2016). The processing results are then presented in the form of numbers so as to give an impression that it is easier to capture the meaning by anyone who needs information about the existence of these symptoms. This analysis is used to determine the use of information technology by MSMEs in Pangkalpinang.

TABLE 1. THE NUMBER OF MSMEs IN PANGKALPINANG

NO.	Sub-district	Number of SMEs	Percentage (%)
1	Rangkui	2708	21.21
2	Gerunggang	2168	16.98
3	Girimaya	1913	14.98

4	Taman Sari	1622	12.71
5	Gabek	1554	12.17
6	Bukit Intan	1487	11.65
7	Pangkal Balam	1315	10.30
	Total	12767	100

Source: Disperindagkop UMKM, 2018

IV. RESULTS

A. The Conditions of MSMEs in Pangkalpinang

The condition of MSMEs in Pangkalpinang is not objectively optimal in improving the economy of society, this is due to the quality and hygiene of products, packaging, price competition, halal certification and the use of information technology.

TABLE 2. THE CHARACTERISTICS OF RESPONDENTS

Characteristics	Category	Number
Age (Years Old)	<25	3
	25-30	7
	31-35	13
	36-40	14
	>40	33
Total		70
Gender	Male	41
	Female	29
Total		70
Education	SD	4
	SLTP	12
	SLTA	42
	University	12
Total		70
Business Duration (Year)	<5	30
	5-9	25
	10-14	13
	15-19	2
The Ownership of Capital	<20	23
	20-39	17
	40-59	7
	>60	5
Total		70

Source: Primary Data, 2018

B. The conditions of Utilization of Information Technology in MSMEs Pangkalpinang

The indicators used in looking at the use of information technology in this study include ownership of

computers/laptops, the ability to operate the computers/laptops, reasons for not having a computer/laptop, the desire to have a computer / laptop, computer programs controlled and the use of computers / laptops.

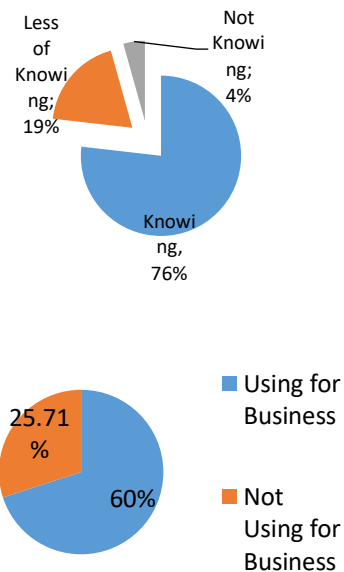
C. Ownership, Ability, and Use of Computers

Based on computer ownership, only 45.71% of MSMEs have had a computer and use it to support the business activities carried out. While 54.29% of MSMEs do not have a computer. Basically, the ability of MSME players to operate computers is relatively good. This is shown from the results of data processing it can be found that 57.14% of MSMEs stated that they could operate the computer properly. This shows that even though some MSMEs do not have computers, they are able to operate computers. 45.71% of MSMEs stated that they did not need a computer to run their business, this also resulted in a number of 44.28% of MSMEs having no desire to buy a computer / laptop.

The number of processing program is a computer program that is controlled by 25.71% of MSMEs, while the use of computers is the most widely used for the production of financial statements, namely 27.14%.

D. Knowledge and Use of the Internet

The next indicator that used by researcher as a reference to the utilization of information technology of MSMEs entrepreneurs is about the knowledgement of internet, and then how the internet is used to run their businesses. Based on the data obtained through the questionnaire, it can be seen that the majority of respondents (76%) have known the internet, but there are still some of MSMEs entrepreneurs in Pangkalpinang who don't know about the internet (4%). Even the knowledge of the internet's good, but only around 60% of MSMEs use the internet to run their businesses.



In addition to the magnitude of the level of knowledge of MSMEs entrepreneurs on the internet, the

type of internet knowledge of MSMEs entrepreneurs in Pangkalpinang is also relatively diverse. It can be seen that there are 77.14% who know about social media, as many as 7.14% know how to chat, and only 1.42% know that know about browsing. Meanwhile, there are no MSMEs entrepreneurs who know about the using of e-mail and online business.

Furthermore, the MSMEs entrepreneurs in Pangkalpinang currently mostly use the internet as a social media for promotion (57.14%), only around 1.42% of MSMEs entrepreneurs who use the internet to send an e-mail to the suppliers and do browsing to improve the quality of their products. Meanwhile, there are no MSMEs entrepreneurs in Pangkalpinang who use the internet to send an e-mail to consumers, browse to see the strengthness of the other products and browse to find the strategies that carried out by the competitors.

This research also tried to examine the reasons of MSMEs entrepreneurs who the knowledgment of the internet well, but didn't use the internet to run and develop their businesses. Based on the data obtained, as many as 25.71% of MSMEs entrepreneurs felt that the scope of their business was still local. Whereas, no respondent said the reason for not knowing the benefits of the internet and who considered that the benefits generated from the internet were not in accordance with the costs that would be incurred. Furthermore, related to the desire of MSMEs entrepreneurs to use the internet, it was found that around 10% of MSMEs entrepreneurs in Pangkalpinang did not have a plan to use the internet in running their business.

V. CONCLUSION

The condition of MSMEs in Pangkalpinang is not objectively optimal in improving the economy of society, this is due to the quality and hygiene of products, packaging, price competition, halal certification and the use of information technology; The condition of utilization of MSMEs information technology of Pangkalpinang City is still very limited to local marketing. In fact there are still MSMEs who have not utilized information technology in running their business; Several inhibiting factors on the level of use of information technology in Pangkalpinang City MSMEs include lack of awareness and mastery of MSMEs actors on the importance of technology, low levels of education, attitudes of traditional communities, lack of confidence, low investment, and lack of support from local governments.

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