Utilization of e-commerce in marketing SMEs products in Manado

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ABSTRACT

Small and Medium Enterprises (SMEs) are one of the micro-enterprises that empower home-based industries. Indonesian SMEs have a contribution of 15.8% to the global production supply chain at the ASEAN level. The development of MSMEs from year to year is influenced by the use of information technology and information systems. E-commerce is one of the technologies that support the development of SMEs and trade today. Advances in technology, computers, and telecommunications support the development of E-Commerce in Indonesia. With the internet, business actors no longer need to experience difficulties in obtaining any information. The beauty of nature makes the city of Manado synonymous with tourism. The growth of the tourism sector encourages other economic sectors to also develop, namely culinary and handicrafts. In Manado, culinary and handicraft businesses are mostly run by Micro, Small and Medium Enterprises (M SMEs) through the #TerusUsaha program pioneered by Grab For Good which is a concrete step from Grab to increase the ability, capacity, and reach for MSMEs and individuals in welcoming the future ahead of the digital economy. The purpose of this study was to find out more about the factors that influence the participation intention of MSME actors through the #Keep Business program initiated by Grab. The four variables used in this study are Perceived Usefulness, Perceived Ease of Use, Perceived Risk, and Perceived Trust. This study uses multilinear regression to analyze the effect of the variables perceived usefulness, perceived convenience, perceived risk, and perceived trust as independent variables. The results of this study indicate that perceived usefulness and perceived risk have no significant effect on the Grab for Good program, while perceptions of convenience and perceptions of trust have a significant and positive effect on the Grab for Good program.

Key words: UMKM, E-Commerce, technology acceptance model, perceived usefulness, perceived convenience, perceived risk, and perceived trust, grab for food.

INTRODUCTION

Electronic-based commerce or e-commerce is a tangible form of the many lifestyle changes caused by advances in information technology. The year 2019 became a momentum for Indonesian e-commerce after President Joko Widodo ratified Presidential Regulation No. 74 of 2017 concerning the Road Map of the Electronic-Based National Trading System (Road Map of E-Commerce) for 2017 – 2019. The Presidential Regulation serves as a reference for the management of electronic commerce which is guarded and guaranteed by the Government. With the support of the Government, the growth rate of electronic commerce in Indonesia can increase both in quality and quantity.

This is supported by the Head of East Indonesia Grab Indonesia Halim Wijaya in a written statement received by Kompas.com Thursday (9/7/2020) which stated in a written statement "We will encourage small and traditional
businesses to embrace technology and go digital, to ensure they are not left behind in the digital age.” He also added, to ensure that MSMEs in Manado can survive and continue to advance in the midst of the Covid-19 outbreak, Grab provides various platforms and technology so that SMEs players can learn and start digital transformation. As a result, Grab is collaborating with the Manado City Industry and Trade Office (Disperindag) to bring hundreds of assisted Small and Medium Industry (SMI) partners into the digital platform. This is considered important because SMEs and workers in the informal sector are the backbone of Manado’s economy. Marketers need to know the needs and wants of their customers and relate them to the products and services they offer.

**Perceived Usefulness (PU)**

Perception of usability is one of the independent constructs in the Technology Acceptance Model (TAM). Perceived usefulness is defined as an individual’s perception that using a new technology will enhance or enhance his or her performance (Davis, 1989; Davis et al., 1989). It is defined as the degree to which a person believes that using a particular system will improve his or her job performance. Referring to Davis (1989) perceived usefulness is defined as "the degree to which a person believes that using a particular system will improve his/her task performance".

**Ease of use**

Ease of use is defined as the degree to which a person believes that using a particular system will be effort-free (Davis, 1989; Davis et al., 1989). PEOU is also significantly correlated with current use and future use. The extent to which one believes that using certain information technology systems will be effortless. Applications that are considered easier to use than others are more likely to be accepted by users (Davis, 1989). While perceived usefulness refers to consumers’ perception of the outcome of the experience, ease of use refers to their perception of the process leading to the final outcome (Monsuwe et al., 2004).

**Risk**

The risk perceived by consumers is related to the concern of suffering losses caused by social pressure, such as negative comments from family, friends or coworkers about a product purchased online. The perceived risk of consumers is related to the concern of suffering losses caused by social pressure, such as negative comments from family, friends or colleagues about a product purchased online. Perceived risk is “uncertainty about the outcome of using an innovation” (Gerrard and Cunningham, 2003; Laforet and Li, 2005)

**Trust**

Credibility or Perceived Trust is defined as the extent to
which users using the system must conduct transactions securely and safeguard the privacy of personal information against unauthorized access. According to Hanudin (2007), the perception of credibility is a determinant of the intention to behave using an information system. Perceived trust is a key component in technology adoption and helps merchants to build strong customer relationships (Reichheld and Schefter, 2000).

**Technology Acceptance Model (TAM)**

This is a model to predict the use and acceptance of information systems and technology by individual users. Technology Acceptance Model is a framework that aims to explain consumer system acceptance of and explain user behavior towards technology use.

The Technology Acceptance Model is explained by five different related constructs including external variables, first is Perceived Ease of Use (PEOU), second is Perceived Usefulness (PU), third is Attitude Toward Technology. The research model was developed to determine user acceptance of information technology. The technology acceptance model (TAM) was first introduced by Davis in 1989 to determine computer usage behavior. Technology Acceptance Model developed by Davis (1989) is one of the most widely used research models, as Behavioral Intention to Use and Actual System Use are fourth and fifth, respectively (Davis et al., 1989). Between constructions, PU and PEOU form the end user’s belief in a technology.

**PROBLEM FORMULATION**

One of the efforts to improve the economy of the people in Manado City is through the empowerment of micro, small and medium enterprises (MSMEs). The existence of MSMEs has been proven to have contributed to the national economy. According to Bank Indonesia (2012), there are three things related to the role of MSMEs in the national economy. First, the number of industries is large and exists in every sector of the economy. Second, the huge potential in employment, and third, the contribution of MSMEs in the formation of GDP is quite significant, amounting to 56% of the total GDP in 2010. The presence of Information Technology (IT) changes the way in business by providing new opportunities and challenges that are different from those of others (conventional way). IT is one of the main pillars of the development of human civilization today which must be able to provide added value to the wider community. IT, according to Haag and Keen (1996), is a set of tools that help you work with information and perform tasks related to information processing.

The problem that then emerged was the IT gap (digital dividend), especially for small and medium business actors in the city of Manado, which was relatively high. First, the understanding of SME players was relatively good with the number of SME players who were able to use computers but their use in supporting businesses was still low. Second, the use of computers is still limited in making reports and business administration. Third, the level of internet adoption among SMEs is still very low. Fourth, the use of internet technology by SMEs in the Manado City area is high for the purpose of finding information that supports business activities in the form of market information and information about the design/packaging for their products/services. Fifth, the main obstacle to the use of information technology in the form of computers and the internet among SMEs in the Manado City area is the limited support of human resources.

Utilization of information technology in running a business or often known as e-commerce for small companies can provide flexibility in production. This enables faster delivery to customers of software products, sends and receives offers quickly and cost-effectively, and supports fast, paperless transactions. Utilization of the internet allows SMEs to do marketing with the aim of global markets, so that the opportunity to penetrate exports is wide open, therefore it is necessary to have an understanding from business actors about the use of E-commerce service applications (Grab) through the TAM (technology acceptance model) approach by using approach to perceived usefulness, perceived convenience, perceived risk, and perceived trust. The main purpose of this study is as a means for the research team to identify the determinant factors with the TAM (technology acceptance model) approach aimed at improving the performance of MSMEs in Manado City. The specific purpose of this research is to socialize the advantages of using E-Commerce (GRAB) in order to open up space for SMEs to transform and adopt IT advancements in Manado City and secondly to explore and analyze the impact of information technology on SMEs performance in Manado City. One of the focal points in empowering SMEs based on IT is increasing competitiveness. In today’s competitive era, the role of IT is very decisive in empowering MSMEs. It is conceivable that if a business is not supported by the current use of information and communication technology, then it is certain that SMEs will be difficult to develop. Moreover, the Asean Economic Community (AEC) has been enforced on. Therefore, SMEs should prepare themselves to compete in the Asean single market because Indonesia, as the largest market, is definitely contested by all business actors in this region. This is one of the important efforts prepared by MSMEs in order to face a single market.

The objectives of this research are: What are the ideas that encourage companies to use eCommerce in business interests and how much benefit has been obtained if companies have implemented e-Commerce in their business interests:

- To find out the results of the analysis of the effect of the
ease of information technology on operational performance of micro enterprises in Manado City, North Sulawesi.

- To find out the results of the analysis of the effect of the benefits of information technology on operational performance of micro enterprises in Manado City, North Sulawesi.
- To find out the results of the analysis of the operational benefits of influential information technology on the benefits of micro business information technology in Manado City, North Sulawesi.

**RESEARCH METHODOLOGY**

The research method used in this study is AHP to determine the biggest supporting factors for the use of E-Commerce in encouraging SME sales in Manado City. AHP is a decision-making method developed by Thomas L. Saaty. It is able to analyze multi-factor criteria arranged hierarchically. The AHP method assigns weights to each criterion and alternative that has been arranged hierarchically, then the weights between criteria will be compared with a certain scale to ensure that the calculated results have high consistency. Still according to Thomas L. Saaty, AHP is a theory of decision making based on the results of pairwise comparisons whose sources come from expert judgments to find the priority scale of a decision consideration. After reviewing the AHP research method as a decision-making method, next is the analysis and system design method that uses Object Oriented Analysis and Design (OOAD) and United Modeling Language (UML) as languages, as described in Alan Dennis and colleagues' book entitled System Analysis Design, UML Version 2.0, an Object-Oriented Approach, Fourth Edition.

**RESULTS AND DISCUSSION**

Based on the research stages, the first stage is to develop multi-criteria factors supporting the success of MSMEs in the city of Manado using E-Commerce. The multi-criteria factors are arranged hierarchically, starting from the objectives, level 1 criteria, level 2 criteria, and alternatives. In addition to appearing in a hierarchical form, processing respondent data for the AHP method can also be done with the help of Expert Choice software. This tool simplifies the process of calculating pairwise comparisons and is able to present results with an attractive appearance so that they are easy to observe for decision makers.

From the results of the analytical hierarchy of factors that support the successful use of E-Commerce in SMEs, it turns out that there are still many obstacles in mastering information technology. And the most chosen business is the business of producing food typical of the city of Manado which generally utilizes marine products as the main raw material. After getting the results of the AHP analysis, the second stage of this research is to design a web-based information system to expand market share and increase the sales volume of SMEs in Manado City.

The rapid development of E-Commerce and the large amount of government support for the progress of SMEs are great capital and opportunities for SMEs, especially SMEs in the city of Manado to develop their businesses into businesses that have electronic sales facilities. In the city of Manado, small and medium enterprises are engaged in various business fields, both in the production of goods and services. However, most of the SMEs produce typical food from the Manado city area, which is generally made from fish, shrimp, squid, and several other marine products. This study uses the AHP method in the first stage to obtain the results of an analysis of what factors are most important in an effort to encourage SMEs to use E-Commerce. The results of data processing with AHP showed that the technological constraint factor with a weight of 33.2% was the largest factor and the most dominant business sector was the typical food production business sector of 38.8%. Based on the results of the AHP, the second stage of this research is to design a web-based information system that aims to support electronic sales for SME business actors in the city of Manado. This research takes a case study at Aneka Citra Snack which is located in Pangkalpinang as the capital of North Sulawesi Province. The selection of Aneka Citra Snack as a case study place to represent the results of the AHP which stated that there were quite a number of business actors involved in the production and specialties of the city of Manado.

System analysis and design is carried out with object-oriented methodology. This method was chosen because of its flexibility and ease of development. The system for selling snacks or snacks at Aneka Citra Snack is designed to be web-based to support electronic sales. With a web-based sales system, the system involves three actors, namely administrators as system managers, customers or customers, and owners. The web-based system allows customers to view products, place orders, pay bills according to orders. Meanwhile, from the administrator's point of view, a web-based system makes it easier for promotions of new products or superior products along with other additional promotions to be disseminated to customers. Admin can monitor transactions by verifying orders, then printing proof of orders, then confirming payments, inputting delivery receipts, and printing sales reports. With a web-based system, Aneka Citra Snack can expand its market share, increase sales of Manado food products, and at the same time promote the culture of Manado residents. The output of this research is in the form of publications in international journals with ISSN which are in process. The rapid development of E-Commerce and the amount of government support for the progress of SMEs are great capital and opportunities for SMEs, especially SMEs in Manado City to develop their business into a business that...
has electronic sales facilities. In the city of Manado, small and medium enterprises are engaged in various business fields, both in the production of goods and services. However, most SMEs produce local specialties in the city of Manado, which are generally made from fish, shrimp, squid, and several other marine products. This study uses the AHP method in the first stage to get the results of an analysis of what factors are most important in an effort to encourage SMEs to use E-Commerce. The results of data processing with AHP show that the technological constraint factor with a weight of 33.2% is the largest factor and the most dominant business field is the typical food production business sector of 38.8%. Based on the results of the AHP, the second stage of this research is to design a web-based information system that aims to support electronic sales for SMEs in Manado City. This research takes a case study at a food and beverage outlet located in Manado as the capital of North Sulawesi Province. The selection of Aneka Citra Snack as a case study site to represent the results of the AHP which stated that there were quite a number of business actors involved in the production and specialties of Manado City. System analysis and design is carried out with object-oriented methodology. This method was chosen because of its flexibility and ease of use.

CONCLUSION

In this study resulted in a design of an e-commerce application (grab) for UMKN in the city of Manado. This e-commerce application will be one of the applications of technology as a marketing medium for various products in the Manado city area. For the government, as well as the community, especially the Manado City Industry Office, to continue to provide training, especially training on the use of technology for producers so that they can continue to develop their businesses and increase sales turnover and to continue to love and help promote MSME products in the Manado city area so that they are known by tourists. From outside the region, and for academics as well, with the results of this research, it is hoped that it can be used as a reference material to add insight and be used as material for courses related to business management so that in the future it can give birth to new entrepreneurs who are more innovative in the city of Manado and other areas.

This research is not perfect, at the stage of system analysis and design, there are still gaps that need to be improved. The loophole in the system is like a transaction payment pattern which is still limited to only ATM transfers. In the next stage of development the system will be designed to have various payment options, this is to make it easier for customers. In addition, the development of a system from a conventional sales system to a web-based electronic sales system is actually a fairly large change, whether it is a change in the way of working, working tools, or work methods. With drastic changes in the way things work, there are several things that owners need to pay attention to in order to ensure smooth online sales transactions. Among them are preparing tool resources including hardware, software, local networks, and internet connections to support the implementation of web-based systems. In addition to preparing tools, the owner must also prepare human resources. Based on the results of AHP, it turns out that one of the biggest obstacles in utilizing E-Commerce is technological constraints, including mastery of information technology. By accommodating the factors that support the success of using E-Commerce by SMEs in the city of Manado, a good synergy between the Central Government as a provider of regulations, Regional Governments, SME business actors, and information system developers, will facilitate the digitization of SMEs.

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