

# The Role of Innovation and E-Commerce in Small Business

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**Abstract**—Micro, Small and Medium Enterprises (MSMEs) in Indonesia are developing and becoming popular. In this case, efforts are needed to improve the performance of MSMEs to be able to contribute to society and improve the economy. This research aims to see how the role of innovation and e-commerce can help improve the marketing performance of small businesses. It can be seen that the development of MSME is an advantage as well as a challenge for small businesses to be able to compete and survive in existing business competition. The research method used is a mixed method, with a sample of small businesses in the culinary in Pekanbaru. The research results show that innovation plays an important role for small businesses to improve their marketing performance, because of the many competitions and similar culinary businesses that continue to grow in the city of Pekanbaru, demanding small businesses to be able to innovate starting from the input, process and output of their businesses. Furthermore, e-commerce plays a role in improving marketing performance, but the impact of increasing e-commerce in small businesses in Pekanbaru is relatively small.

**Keywords**—*Innovation, E-Commerce, Marketing Performance, Small Business.*

## I. INTRODUCTION

The increasing development of MSMEs in Indonesia is an opportunity as well as a challenge for business people. Based on data from the Ministry of Cooperatives and Small and Medium Enterprises of the Republic of Indonesia, the number of business units from 2012 to 2017 has increased, amounting to 13.98%. Pekanbaru has a fairly high development of MSMEs. Data from the Riau Cooperative & SME Office in 2016 showed that the number of MSMEs in Pekanbaru was the highest compared to other districts/cities in Riau Province with a total of 68,728 units. The small business sector that is in high demand is the culinary that is growing rapidly and is very popular among businesses. Therefore, business and marketing strategies are needed to be able to maintain and expand existing businesses. Culinary efforts cannot only depend on the taste of food, but

also must pay attention to the implementation of marketing strategies given the very high level of competition in the culinary sector [1]. Business actors must develop concrete marketing plans and detail marketing strategies to continue developing [2].

Marketing performance is a measure of the success of the implementation of marketing strategies. Marketing by the marketing team is the most important component in a company. To find out how the implementation of marketing functions in the company, it can be seen from marketing performance [3]. Marketing performance is a factor that is often used to measure the impact of the strategies implemented [4]. The marketing strategy adopted by the business person making a business and the products produced to be considered by consumers.

The small business actors must make an innovation starting from the process input to the output produced. The innovation will be the difference between one business actor and the other. The existence of innovation in a business will increase brand awareness to create customer loyalty. In addition to the development of innovation, businesses can also use technology as an online marketing medium or called e-commerce which is a new commercial strategy that leads to improving the quality of products and services while reducing costs incurred in direct sales [5]. By using e-commerce, the process of communication and buying and selling becomes easier and faster with the existence of the internet network. E-commerce provides assistance to small businesses that have limited capital to keep innovating and improving marketing performance.

Not many studies have seen directly the role of innovation and e-commerce in improving marketing performance. This research aims to look directly at the role of innovation and e-commerce in improving the marketing performance of small businesses.

## 1. Conceptual Framework and Literature Review

### 2.1 Innovation on marketing performance

Innovation is a company's mechanism to adapt in a dynamic environment [6]. Innovation is a big idea or change that is obtained from a collection of related information ranging from input, process and output [7]. From this understanding, it is concluded that innovation is carried out to produce something of value and make a change to be able to adapt to existing competition. In relation to marketing performance, innovation is one of the strategies undertaken by businesses to improve marketing performance. The innovations made are expected to have a significant impact on profit growth, market expansion and increase in sales volume.

Several studies have examined the role of innovation in improving marketing performance. Research conducted by [6] states that innovation has a positive effect and plays a significant role in marketing performance in small and medium business actors. The same research results were obtained in research [8] and [9] which concluded that small and medium businesses must innovate to improve the marketing performance of their products in order to win the competition in the market. Different results obtained in research [10] which states that innovation does not play a significant role in the performance of marketing. Because most do not get difficulty to find ideas to innovate but difficult to realize the ideas that have been designed, the innovations made by MSMEs are not optimal and play a less role in improving marketing performance. Based on empirical studies and the gap of research results above, the research hypothesis can be made, namely:

**H1: Innovation has a positive and significant effect on marketing performance.**

### 2.2 E-Commerce on marketing performance

E-commerce is the process of buying, selling, transferring or exchanging products, services or information through a computer network through the Internet [11]. The most significant function of e-commerce according to [11] is the ability to get many consumers quickly and by using cost effectively regardless of differences in their geographical location. This is very helpful for small businesses to expand their markets, without the difficulty of thinking about the finances and resources owned. E-commerce has several indicators, namely online purchases, sales, services and business processes. The use of e-commerce can expand the reach of SME marketing, establish direct relationships with customer distributors and suppliers effectively and efficiently [12].

Several studies have been conducted to examine the role of e-commerce in improving marketing performance. Farida 2017 research states that e-

commerce has a positive and significant effect on marketing performance in SMEs, which means that the use and utilization of e-commerce for businesses can improve marketing performance. Accurate research is also stated in [12]. In contrast to the previous one, research by [13] states that e-commerce has an effect but is not significant in improving marketing performance due to the lack of education for traders in utilizing e-commerce. Based on empirical studies and the gap of research results above, a research hypothesis can be made as follows: **H2: E-Commerce has a positive and significant effect on marketing performance.**

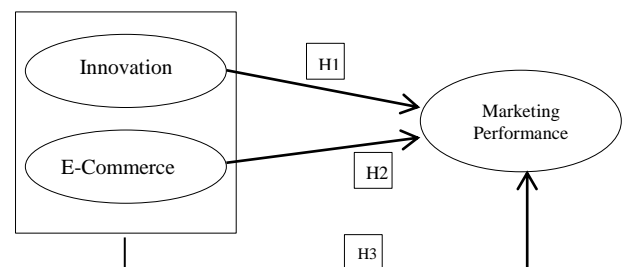
### 2.3 Marketing Performance

Marketing performance is the core of modern marketing related to how to understand, create, communicate, and provide value to consumers, and marketing is a process of giving satisfaction to consumers to provide profit [14]. Marketing performance measurement according to [4] is divided into four indicators namely Sales Growth, Number of Customers, Product Demand and Increased Profit. The research conducted by [3] looked at the performance measurement of three indicators namely customer growth, sales volume growth and profit growth.

Based on previous empirical studies looking at the effect of each independent variable on the dependent, an analysis can be made whether the innovations carried out by small businesses and e-commerce simultaneously play a role in improving marketing performance. Therefore, research hypotheses can be made as follows:

**H3: Innovation and E-Commerce simultaneously have a positive and significant effect on marketing performance.**

### Conceptual framework



## II. RESEARCH METHOD

This study uses a quantitative research method approach. Based on the research objectives, this study is included in the explanative research. Explanative research is research that explains the causal relationships between variables using hypotheses [15].

The data in this study use secondary data obtained from the Agency of Cooperatives and SMEs in the city of Pekanbaru, and primary data

obtained through surveys by distributing questionnaires to respondents. The object of this research is the culinary small scale business actors in the city of Pekanbaru. The reasons for choosing a small business in the culinary sector is because the culinary business is currently popular and is in demand by new and current business actors.

The populations in this study are all small businesses in the culinary sector in Pekanbaru. The number of Small Businesses in Pekanbaru is 84 Small Businesses. Sampling in this study is carried out with the saturated sampling method in which the total sample is the entire population [15].

Before conducting the data analysis process, the researchers measure the reliability and validity of the data. Measurement of reliability in this study was done by one shot (measurement only once). Here the measurement is only done once and then the results are compared with other questions or measure the correlation between questions answered. A construct or variable is said to be reliable if it gives a Cronbach Alpha value > 0.60. The measurement of validity in this study was done by using the Pearson Correlation coefficient by calculating the correlation between the scoring of each question item with total score (Ghozali, 2011). The results of testing the validity and reliability stated that all variables have been reliable and all statements have been valid.

Furthermore, before conducting the analysis using regression techniques, testing the classical assumptions was done first through the normality test, multicollinearity test and heterokedasticity test. Regression analysis is used to measure the strength of the relationship between two or more variables, and to show the direction of the relationship between the dependent variable and the independent variable. The form of multiple linear regression equations used in this study are:

$$KP = \alpha + \beta_1INO + \beta_2ECOM + e \dots\dots\dots (1)$$

Description:

- KP : Marketing Performance
- INO : Innovation
- ECOM : E-commerce
- $\beta_1 - \beta_2$  : Regression Coefficient

**III. RESULTS AND DISCUSSION**

This study uses multiple linear regressions to find the relationship or influence between the independent variable and the dependent variable. The variables used are Innovation (INO) and E-commerce (ECOM) while Marketing Performance (KP). The results of the regression test can be seen in Table 2. Variable depending on this regression is Marketing Performance (KP), while the independent variables are Innovation (INO) and E-commerce (ECOM).

**Table 1.** Test Results of Multiple Linear Regressions

Variable	Unstandardized Coefficients	Standardized Coefficients	T	Sig.	Description
(Constant)	1.644		5.01	.000	
Innovation	.344	.373	3.490	.001	Significant
E-commerce	.091	.115	1.079	.284	Not Significant
R	= 0,427				
Rsquare	= 0,182				
Adjusted Rsquare	= 0,162				
F <sub>table</sub>	=				
F <sub>count</sub>	= 9,032				
Sig F	= 0,000				

Source: Data processing (2019)

Based on the test results in Table 1, the regression equation of this research is as follows:

$$KP = 1,644 + 0,344INO + 0,091ECOM \dots(2)$$

Based on the regression equation, of the three independent variables of the study, the Innovation variable (INO) gives the highest contribution of influence as a consideration for improving Small Business marketing performance. This can be seen from the independent variable coefficient value of 0.344 compared to other independent variables that have a coefficient value of 0.091. This shows that the Small Business actors in Pekanbaru in improving their marketing performance are based on innovation as the most important consideration, compared with the consideration of the application of e-commerce in the marketing activities.

**Results of Model Feasibility Test**

The feasibility test of the model in this study used 2 two methods, namely the Coefficient of Determination and the F Test. The coefficient of determination test or R<sup>2</sup> test was used to show how much the contribution of the influence of the dependent variable on the dependent variable. In this research, the value of Adjusted R<sup>2</sup> is 0.162. This shows that the independent variable, namely the innovation and e-commerce variables contributed regarding the influence of marketing performance variables of 16.2%. The contribution of the remaining influence of 73.8% (100% -16.2%) is influenced by variables or other factors outside this research model.

Based on the results of the model goodness test, the Adjusted R<sup>2</sup> value in this study is still low in representing observations (below 50%). The F test is basically used to find out whether all the independent variables in this research model have a joint influence on the dependent variables. In this model goodness test, Sig. value can be used in the F test to

determine whether all the independent variables (Innovation and E-commerce) together affect the dependent variable (Marketing Performance).

Based on the table, Sig. F value is 0.000 smaller than the significant level of 0.05, so the regression model in this study can be said to be good to be used to predict the effect of the independent variable on the Small Business marketing performance variable. In other words, the Innovation and E-commerce variables can simultaneously influence the Small Business marketing performance variable.

### **Hypothesis Testing**

This test uses the t test to find out how far the influence of one independent variable on the dependent variable. The t test can be used to test the hypothesis, namely whether the hypothesis proposed in this study was rejected or accepted. Based on the regression results in Table 2, the following is a discussion of the results of the hypothesis test:

#### **Hypothesis Test 1**

$H_{01}$ : There is no effect of innovation on marketing performance

$H_{a1}$ : There is an influence of innovation on marketing performance

Based on the regression results in Table 2, it is known that innovation has a significant value of 0.001 less than the critical limit value of 0.05. In addition, the beta value and the value of t is positive, which is 3.490. Thus  $H_{01}$  is rejected and  $H_{a1}$  is accepted, meaning that there is a positive influence between the innovation variables on the marketing performance of Small Enterprises.

This is in line with the results of research [16] which reveals that innovation has a positive and significant effect on improving marketing performance. To ensure business continuity, small businesses need to be responsive and make changes and innovate in facing a very dynamic business development.

Thus, it can be concluded that one of the factors that influence marketing performance is innovation in every operational activity, product innovation, marketing innovation, and service innovation. The more frequent innovations are carried out by small business actors, the marketing performance of these businesses will increase.

#### **Hypothesis Test 2**

$H_{02}$ : There is no effect of e-commerce on marketing performance

$H_{a2}$ : There is effect of e-commerce on marketing performance

Based on the regression results in table 2, it is known that e-commerce has a significant value of 0.284 greater than the critical threshold value of 0.05. In addition, the beta value and t value is

positive, which is 1.079. Thus  $H_{02}$  is accepted and  $H_{a2}$  is rejected, meaning that there is a positive but not significant effect between e-commerce variables on the marketing performance of small businesses.

The results of this study are in line with research [13] which states that e-commerce has an effect but is not significant in improving marketing performance. This can occur due to the lack of utilization of small businesses about e-commerce so that the use of e-commerce is not carried out correctly and periodically. Therefore, the results are insignificant.

Thus, one of the factors that influence marketing performance is marketing products and services through e-commerce that is currently popular in use. The better the application of e-commerce in marketing activities is carried out by small business actors, the marketing performance of these businesses will increase. However, the impact of increasing e-commerce on the marketing performance of small businesses in Pekanbaru is relatively small.

### **IV. CONCLUSION AND SUGGESTION**

Based on the results of the previous analysis and discussion, it can be concluded that innovation has a very good role in improving the marketing performance of Small Businesses. The more frequent innovations are carried out by small business actors, the marketing performance of these businesses will increase. On the other hand, e-commerce has a positive but not significant effect on the marketing performance variables of small businesses. The better the application of e-commerce in marketing activities is carried out by small businesses, the marketing performance of these businesses will increase. However, e-commerce does not have a significant impact on improving marketing performance, due to the lack of education for businesses to be able to use e-commerce in their businesses. Another factor is that quite a number of business actors are still hesitant to use e-commerce because they do not want to be bothered and prefer selling outline only.

This certainly can be input to the government or related entrepreneurs to be able to provide education and training in e-commerce and the use of technology to be able to support the marketing performance of small businesses so that they can compete with similar business actors or new comers.

Other suggestions that can be given in connection with the results of the analysis and discussion in this study are that this research produces a coefficient of determination below 50%, so it is necessary to develop other variables besides the innovation and e-commerce variables to produce a better regression model. Furthermore, the

respondent as research samples can be developed for students and lecturers.

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