Effect of Advertising and Product Innovation on the Performance of MSMEs During The Covid-19 Pandemic: E-Commerce as the Moderator

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Abstract—The background of this research is that some business operators have practiced or used e-commerce in their business activities, namely, in the Sunter Agung Village, North Jakarta. This research aims to identify the effect of advertising and product innovation on the performance of MSMEs during the Covid-19 pandemic with an e-commerce moderator. Advertising and Product Innovation are the independent variables and the performance of SMEs as the dependent variable in this research. In this research there is also a moderating variable, namely E-Commerce. Procedure for analyzing information using SmartPLS. The population in this research is MSMEs in the Sunter Agung Village, North Jakarta. Respondents in this study were taken using purposive sampling and produced 100 respondents. The analytical method in this study uses path analysis. The research results show that advertising has a positive and significant effect on MSME performance, E-commerce has a significant positive effect on MSME performance. Next, advertisements moderated by E-commerce have a negative and significant impact on the performance of MSMEs. Conversely, Product Innovation moderated by E-commerce has a positive and significant impact on the performance of MSMEs.

Keywords: Marketing Management; Advertising; MSME Performance

1. INTRODUCTION

As times are developing rapidly, a progress in the economy is getting higher and competition is getting tougher. Establishing business today requires various strategic steps to be able to participate in competition, especially in micro, small and medium enterprises (MSMEs). Referring to the data from the Central Statistics Agency of Statistics of the Republic of Indonesia (BPS), the number of MSMEs that exist is up to 64 million units and therefore can absorb 97% of the workforce from the entire workforce in Indonesia. In the economic growth, MSMEs play a very important role such as reducing poverty and unemployment due to the Covid-19 pandemic.

Table 1. The development of MSMEs in Sunter Agung Urban Village in 2017-2020

<table>
<thead>
<tr>
<th>Year</th>
<th>Jumlah UMKM</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>60</td>
</tr>
<tr>
<td>2018</td>
<td>161</td>
</tr>
<tr>
<td>2019</td>
<td>76</td>
</tr>
<tr>
<td>2020</td>
<td>21</td>
</tr>
</tbody>
</table>

Based on the table 1 it is known The graphic above shows that MSMEs in Sunter Agung Urban Village experienced a very rapid increase in performance in 2018, accounted for 161 units, an increase of 51% compared to 2017. However, due to the lack of guidance and assistance, the MSMEs lack the ability to innovate, hence in 2019, the MSMEs experienced a decline in their performance by 76 units or a decrease of 24%. With the Covid-19 pandemic at the beginning of 2020, the growth of MSMEs in the Sunter Agung Urban Village experienced a decline in MSME performance by 21 units, down 6.6% during the Covid-19 pandemic.

Here we can see that the method is considered very appropriate during the Covid-19 pandemic, which demands various things must keep working by minimizing a direct physical touch (Winarti, 2021). Previous studies from (Dewi Diah Fakhriyah, Yuni Wulandari, 2020) on the "Digital Marketing Socialization and Product Innovation in Brown Sugar SMEs to Maintain the Economy in the Covid-19 Pandemic, it was concluded that the influence of product innovation on the brown sugar SMEs to maintain the economy during the Covid-19 pandemic was significantly positive. Previous studies (Triandra et al., 2019) on the "Analysis of the Effect of E-Commerce on Improving the Performance of MSMEs in Sumbawa Regency", it is concluded that E-commerce affects the performance of MSMEs in Sumbawa Regency with a positive significance. On the research from (Wahyudiati & Isroah, 2018) indicated that performance, a measurement of the success of the business entity for the goals that have been achieved. Performance is the result of work that has a strong relationship with contributing to the economy, customer satisfaction and organizational strategic goals. Referring to the explanation of (Mutegi et al., 2015) that MSME performance, the evaluation or results of company work achieved by groups or individuals with a number of roles whose tasks are divided into activities in a certain period compared to the standards of the company itself.

Advertising is one of the most common tools that companies used to communicate persuasively to their targets and buyers. Fundamentally, advertising is a form of communication to fulfill the marketing function. The existence of advertising should be able to attract consumers to take action in such a way as to be in line with the company's
marketing strategy in order to gain profits from the sales carried out (Janna, 2016). According to (Claody Lee et al. 2017) advertising is a message that offers the company’s product using a media and its purpose is to deliver the message to the public.

Product innovation is an effort carried out by the product makers to improve, perfected, and carry out product development that has been produced until now. Product development is not always in the form of goods, it can also be in the form of increased services (Suhery et al., 2020). Product innovation is a combination of various processes that influence each other (Mandey, 2018). The high competition and empowerment of MSMEs during the Covid-19 pandemic requires MSMEs to have the ability to adapt to existing global challenges, for example the increasing service and product innovation become the main key for the MSMEs to survive (Khairani et al., 2018).

The growth of sales through online transactions or e-commerce in Indonesia from time to time continues to grow rapidly, both online transactions from large industries as well as micro, small and medium enterprises (MSMEs) or consumers (Basuki, 2020). Electronic commerce or in other words, e-commerce carries out activities related to buying and selling by utilizing internet facilities. Also carry out activities related to fund transfers, marketing services or goods. Through e-commerce activities, companies have the opportunity to get as many consumers as possible (Rosyid, 2019).

Electronic Commerce Business (E-commerce) or popularly called Online Shopping, is the implementation of trade in the form of promotional transactions, payments, orders, purchases and sales of a service or product carried out using computers and facilities or digital electronic communications (Irfan, 2020).

Based on the problems described above, the purpose of this research is to determine and analyze the effect of advertising and product innovation on the MSMEs performance during the Covid-19 pandemic with e-commerce as the moderator.

2. RESEARCH METHODS

This type of research is a qualitative research where the source of data is obtained through primary data, results of questionnaires from a number of respondents including MSMEs in the Sunter Agung Urban Village, North Jakarta. In this research, questionnaires were distributed directly and through the Google Form application where the forms were filled out by informants online. It is necessary to measure the validity and reliability of the questionnaire data so that the research data is reliable and valid.

According to Sugiyono (2015) purposive sampling is the technique of determining the sample with numbers of considerations. Purposive sampling is also known as the judgment sampling, which is the method used because the original information was collected from a specified source based on a number of established criteria, namely individual MSME actors who carry out their business activities in Sunter Agung Urban Village and those who implement E-commerce in their business environment. Apart from these criteria, the sample used is from June 2021 to July 2021. Looking at the purposive sampling method, the number of samples to be used is 100 respondents.

The data analysis method used in this research is Path Analysis, which is to analyze the effect of the independent variables on the Advertising variable (X1) and Product Innovation variable (X2). The dependent variable is UMKM Performance (Y) and the Moderating Variable is E-commerce (Z). Analysis of the research data was carried out by testing the reliability and validity assisted by Partial Least Square (PLS) software. The methods used to analyze the data were Validity Test, Reliability Test, Hypothesis Test. As for the hypothesis of this study, namely:

H1: There is effect between advertising and MSME Performance
H2: There is effect between product innovation and MSMEs Performance
H3: There is effect between E-Commerce and MSMEs Performance
H4: There is effect between advertising on MSMEs Performance with E-Commerce as the moderator
H4: There is effect between innovation on MSMEs Performance with E-Commerce as the moderator

3. RESULT AND DISCUSSION

3.1 Description of the Respondent

The respondents of this research are MSMEs in the North Jakarta area, especially the Sunter Agung Urban Village. The research was carried out by distributing questionnaires to 100 respondents from MSME entrepreneurs in the Sunter Agung Urban Village, North Jakarta. From the questionnaires distributed using either through the Google Form website or questionnaire sheets filled out by the MSMEs, 100 respondents were found to have filled out the questionnaires completely and correctly.
3.2 Data Processing

The data analysis method used in this research is Path Analysis to analyze the effect of feasibility on the model. Analysis of the research data was carried out by testing reliability, validity and testing hypotheses assisted by Partial Least Square (PLS) software.

<table>
<thead>
<tr>
<th>Item</th>
<th>MSMEs Performance</th>
<th>Advertising</th>
<th>Product Innovation</th>
<th>E-commerce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y1</td>
<td>0.87</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y2</td>
<td>0.814</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y3</td>
<td>0.865</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X1.1</td>
<td></td>
<td>0.875</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X1.2</td>
<td></td>
<td>0.856</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X1.3</td>
<td></td>
<td>0.885</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X2.1</td>
<td></td>
<td></td>
<td>0.869</td>
<td></td>
</tr>
<tr>
<td>X2.2</td>
<td></td>
<td></td>
<td>0.890</td>
<td></td>
</tr>
<tr>
<td>X2.3</td>
<td></td>
<td></td>
<td>0.821</td>
<td></td>
</tr>
<tr>
<td>Z1</td>
<td></td>
<td></td>
<td></td>
<td>0.809</td>
</tr>
<tr>
<td>Z2</td>
<td></td>
<td></td>
<td></td>
<td>0.806</td>
</tr>
<tr>
<td>Z3</td>
<td></td>
<td></td>
<td></td>
<td>0.814</td>
</tr>
<tr>
<td>Z4</td>
<td></td>
<td></td>
<td></td>
<td>0.861</td>
</tr>
<tr>
<td>Z5</td>
<td></td>
<td></td>
<td></td>
<td>0.805</td>
</tr>
</tbody>
</table>

The loading factor indicator for the MSME Performance, Advertising, Product Innovation, and E-commerce variables is 0.8, which means that all variable indicators are called valid. If all variables have been said to have passed the research validity test, then the next reliability test is carried out.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach’s Alpha</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSMEs Performance</td>
<td>0.810</td>
<td>0.888</td>
</tr>
<tr>
<td>Advertising</td>
<td>0.844</td>
<td>0.849</td>
</tr>
<tr>
<td>Product Innovation</td>
<td>0.826</td>
<td>0.895</td>
</tr>
<tr>
<td>E-commerce</td>
<td>0.878</td>
<td>0.911</td>
</tr>
</tbody>
</table>

Refering to the Table 2, it can be deducted that all variables pass the reliability test. The proof can be seen from the composite reliability value, showing data above > 0.7 and Cronbach's Alpha also showing data above > 0.6. Thus it can be concluded that all indicators are reliable and can be used to perform hypotheses test.

3.3 Significance Test

After all markers are determined to be valid and reliable, a significance test is made on the inner model. This is done to measure the significance test between constructs (variables) in the structural model to prove the hypothesis. The path coefficient score or the inner model is indicated by the value of T-Statistic ≥1.96 and P Value ≤0.05. The value of significance test Is presented in the discussion of the hypothesis:

3.4 Discussion

3.4.1 Discussion of the First Hypothesis (H₁)

The Relationship between Advertising (X₁) and MSMEs Performance (Y) is proven by T-Statistic 4.891 > 1.96 with P-Values 0.000 < 0.05. The output results show a positive effect of X₁ on Y because the original sample has a positive value of 0.156.

This is in line with the research conducted by (Rosmadi, 2021) that advertisement in the social media is significantly effect on Waroenk Jajan and previous research from (Wijaya and Suasih 2020) that direct advertising on social media has a significant positive influence on the performance of MSMEs.

In this research, it is evident that the significant value of advertising to mutually influential and significant correlation on the performance of MSMEs. By doing promotions, it can support marketing activities and as a forum to deliver information about products or services, therefore, it can increase the performance of MSMEs. It can be concluded that "H1 is accepted".

3.4.2 Discussion of the Second Hypothesis (H₂)

The relationship of Product innovation (X₂) with MSMEs performance (Y) is proven -Statistic score 3.860 > 1.96 with P-Values score 0.002 < 0.05. The Original Sample value is positive, namely 0.098 which shows that the direction of the relationship between Product Innovation (X₂) and MSME Performance (Y) is positive.
This is in line with the research from (Dewi Dia Fakhriyyah, Yuni Wulandari 2020) that Product Innovation has a positive effect on Brown Sugar SMEs as well as previous research from (Jannah et al., 2019) on “The Effect of Entrepreneurship Orientation and Product Innovation on the Performance of Batik Gedog from MSMEs in Tuban”. The key is Product Innovation has a positive and significant influence on the performance of Batik Gedog MSMEs in Tuban. Hence, it can be concluded that "H2 accepted".

3.4.3 Discussion of the Third Hypothesis (H3)
The relationship of E-commerce (Z) with MSMEs Performance (Y) is proven by the T-Statistic with a score of 3.955>1.96 with P-Values 0.000 <0.05. And the output results show a positive relationship from Z to Y because the original sample has a positive value of 0.311. This result is in line with the research from (Hesti et al., 2021) regarding the Survival Strategy using E-commerce for MSMEs in the Middle of the Covid-19 Pandemic. The key is that E-Commerce affects MSMEs significantly positive. Because making sales through e-commerce can expand sales as many people are turning to online shopping. So it can be concluded that "H3 is accepted".

3.4.4 Discussion of the Fourth Hypothesis (H4)
Advertising (X1) on MSMEs Performance (Y) with E-commerce (Z) as the moderator has a significant and negative relationship. This is proven by T-Statistic 3.302 < 1.96 with P-Values 0.000 > 0.05. With a negative value from the original sample, which is -0.045. This is in line with the research conducted by (Hesti et al., 2021) that advertising affects the performance of MSMEs with E-commerce as a moderating variable with a negative significance. This is related to the fact that the majority of MSMEs are Generation X who were born in 1965-1980 with low education and has a difficulty adapting to technology, especially during the Covid-19 pandemic which required everything to be online. E-commerce weakens the relationship between variables that have no effect on improving MSME performance. So it can be concluded that "H4 is accepted".

3.4.5 Discussion of the Fifth Hypothesis (H5)
Product Innovation (X2) on MSME Performance (Y) with E-commerce Moderation (Y) has a positive and significant relationship. This is evidenced by the T-Statistic of 3.445 < 1.96 with P-Values of 0.001 > 0.05 with a negative value from the original sample of 0.266. This is in line with the research carried out by (Yadnya & Santika, 2017) that innovation with E-commerce has an effect on the performance of MSMEs and previous researchers from (Istiqomah 2020) concluded that product innovation has an effect on the performance of MSMEs with E-commerce buy and sell. In this research, Product Innovation has an influence on the performance of MSMEs, namely the existence of E-commerce that can assist business actors in marketing their products so that they can improve the performance of MSMEs. Hence, it can be concluded that "H5 is accepted".

4. CONCLUSION
Referring to the results and discussion, it can be concluded that advertising has a positive and significant effect on the performance of SMEs. This shows that marketing products through advertising can expand product information to customers and can increase the performance of MSMEs. Product innovation affects the performance of SMEs with a positive significance. This shows that improving product quality, developing product variants, and developing product styles and designs can improve MSMEs’ performance. E-commerce affects the performance of MSMEs with a positive significance from the benefits that can be obtained from E-commerce, for example the speed of the service process using e-commerce is better than offline stores, marketing costs that are cheaper than offline stores, and technological skills that continue to develop provide convenience and effectiveness for MSME entrepreneurs. Advertising has a negative significance on MSME Performance with E-commerce. This is due to E-commerce is the implementation of trade in the form of promotions, payments, orders, purchases, or sales of a service or product that is carried out by utilizing digital electronic communication. To carry out advertising promotions, business people need to have a broader understanding on the the promotional features that exist in E-commerce so that the application of advertising will be carried out. Product Innovation on MSME Performance with E-commerce has a positive and significant effect. In this research, Product Innovation has an influence on the performance of MSMEs which is further strengthened by the existence of E-commerce which can help MSMEs in marketing their business products to improve their performance. The limitation of this research is that it only uses 100 respondents and the variables used in this study are less complex, therefore it is hoped that it can add more respondents and add variables.

REFERENCES


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