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# The Effect of Product Innovation and Financial Literacy on MSME Performance with Digital Marketing as a Mediating Variable

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#### Abstract

Digital marketing is something that can improve the performance of MSMEs. This study aims to identify direct and indirect influences on product innovation and financial literacy on MSME performance through digital marketing as a mediating variable. The approach in this study is to use a research approach that is descriptive and quantitative. The population and sample used are 250 MSME actors in Deli Serdang Regency. Data analysis used in this research uses a SEM based on PLS. The results of this study show that product innovation and financial Literacy directly have a positive and significant effect on digital marketing. Furthermore, product innovation, financial Literacy, and digital marketing also positively and significantly impact the performance of MSMEs in Deli Serdang Regency, North Sumatra. The research also found that digital marketing fully mediates product innovation and financial literacy variables on the version of MSMEs in the Deli Serdang Regency.

**Keywords:** Product Innovation, Financial Literacy, Digital Marketing, MSME Performance, Small and Medium Enterprises.

In the strategy to improve the economy in Indonesia, one of the efforts that need to be made by the government is to develop existing MSMEs. It is known that micro, small, and medium enterprises (MSMEs) are the lifeblood that significantly influences the economy regionally and nationally (Irawati & Purnomo, 2019). MSMEs are said to be the lifeblood because they can significantly contribute to creating jobs, creating new markets in the economy, as a source of innovation, and contributing to the gross domestic product (GDP). Furthermore, GDP, or gross domestic

product, is an essential indicator of a country's economic condition. With GDP, you can find the total added value that all business units in a country can generate. The higher the GDP value, the better a country's economic growth level.

Data from the Ministry of Cooperatives and Small and Medium Enterprises from 2018-2022 shows that MSMEs have significantly contributed to the country's gross domestic product development (Kemenkopukm, 2023). The following is data on the contribution of MSMEs to GDP development from 2018-2022:

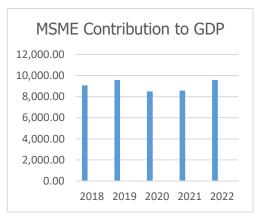


Figure 1. MSME Contribution to GDP

The data above shows that from 2018-2022, MSMEs have contributed to increasing Indonesia's GDP. In 2018, MSMEs contributed 9,062.6 trillion to GDP; in 2019, it increased by 9,580.8 trillion. In 2020 and 2021, there will be an economic downturn; it is known that it is due to the Covid-19 pandemic, so the contribution of MSMEs to GDP has also decreased to 8,500 trillion, but in 2022 it has increased again with a value of 9,580 trillion. From these data, it is clear that the existence of MSMEs benefits economic development in Indonesia.

The role of MSMEs in the economy is so significant that, in practice, they still experience various obstacles. Constraints faced by MSMEs include a lack of competence in human resources, difficulties in carrying out product innovations, difficulties in marketing products or services, and difficulties in managing business finances (Murnieks, 2019). These obstacles can certainly affect the development of MSMEs and their existence. This obstacle must be overcome so that the performance of MSMEs is maximized.

Innovation is the key to success that MSMEs need to pay attention to in order to achieve superior performance. Innovation in products or services will undoubtedly increase competitiveness and impact the performance of MSMEs in the future. Research involving

product innovation variables on MSME performance has been carried out before, but the results are still different. Research conducted by (Bouwman et al., 2019; Saridakis et al. 1., 2019) proves that product innovation carried out in SMEs has a positive impact on sales made; there is an increase in sales by implementing product innovation. In contrast to research conducted by (Ferreira et al., 2018), product innovation did not find a significant effect on the performance of MSMEs

An equally important factor in improving the performance of MSMEs is Financial Literacy. Sound financial literacy can provide much knowledge about obtaining and managing funds for MSME activities. Based on data from the OJK in 2022, the results of the 2022 national financial literacy inclusion and experienced an increase of 49.68%. However, this figure is still relatively small compared to other developed countries such as Singapore (OJK, 2022). This problem needs attention so that MSME actors can know about the business's finances.

Advances in digital technology that are currently taking place are strategies that can be implemented to improve the performance of MSMEs. At present, it is known that many business actors carry out sales or marketing processes using digital marketing (Wibowo, 2020). Of course, this cannot be denied because of the rapid developments in the field of technology. Research using digital marketing variables on the performance of MSMEs still needs to be done, especially for developing countries.

#### LITERATURE REVIEW

#### 2.1 Performance of SMEs

Measuring the success of a business or business activity can be done by measuring the performance carried out during a specific period. Performance is critical to assess the level of success of the business that has been done. MSME performance can also be interpreted as a picture or condition of all the achievement of

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MSME activities to realize all the goals mutually agreed upon. The performance of MSMEs must be able to show success in all areas of activity, such as finance, marketing, or the production of goods and services that are carried out (Nor et al., 2022). The performance of MSMEs will be able to describe how these businesses can meet the needs of customers or consumers (Hendratmoko, 2021). The performance of MSMEs needs to be measured to know the business development that has been carried out. In addition, monitoring or information on steps or strategies will be developed with performance measurement to achieve maximum results.

#### 2.2 Digital Marketing

Digital marketing is a form of delivering information related to products or services produced by a business activity by utilizing digital technology (Hasa, 2017). Digital marketing is a form of development of all traditional marketing activities, which are usually carried out face-to-face, but now it is different by using communication devices that are connected to the internet network to be able to market the products or services produced. Current developments also note that more and more people prefer digital shopping because it is practical and saves time. Research on digital marketing on its effect on MSME performance variables has been carried out previously such as (Adiasri et al., 2022; Nor et al., 2022; Hasa, 2017), with results proving that digital marketing has a positive and significant effect on the performance of MSMEs.

H1: Digital marketing has a significant effect on MSME performance

#### 2.3 Product Innovation

Product innovation is a form of economic and social success by finding a new strategy or a combination of old strategies for products or services produced to obtain maximum profit. Product innovation can be marked by the emergence of new ideas or forms from the refinement of old forms to meet consumer demand. In product innovation, of course, it also utilizes technology to maximize the results and

satisfy MSME actors (Nor et al., 2022). With product innovation, all the changing desires of consumers will be fulfilled by prioritizing the value of customer satisfaction. Previous research has been conducted to prove that the performance of MSMEs can increase if product innovation is carried out (Potolau & Safriansya, 2022; Putri, 2022). Likewise, good product innovation will directly and digitally improve marketing (Fitri et al., 2018).

H2: Product innovation has a significant effect on digital marketing

H3: Product innovation has a significant effect on MSME performance

# 2.4 Financial Literacy

Financial Literacy is a form of sound and correct understanding or knowledge about the benefits of strategic financial management activities in carrying out financial activities. Financial Literacy can also be interpreted as basic knowledge about financial strategy, choosing investments related to financing, or managing finances in business activities. With sound financial Literacy, it is hoped that business will know funding actors or financial management methods for their business activities. Many business actors ultimately fail in running their businesses due to a lack of knowledge about financial management. Proper and good financial literacy activities are hoped to help business actors run their businesses. Much research has been conducted on financial Literacy on financial performance (Iko, 2019; Susanti et al., 2016; Zahro, 2019), proving that financial Literacy has a positive and significant effect on the performance of MSMEs. Likewise, research on the effect of financial Literacy on digital marketing has been carried out (Suindari & Juniariani, 2020), proving that the better the financial Literacy of business actors, the better they will be in doing digital marketing.

H4: Financial Literacy has a significant effect on digital marketing

H5: Financial Literacy has a significant effect on the performance of MSMEs

H6: Product innovation has a significant effect on MSME performance through digital marketing

H7: Financial Literacy has a significant effect on the performance of MSMEs through digital marketing

#### **METHODOLOGY**

This research is quantitative; that is, all the data obtained is primary data. Primary data, namely the data needed in the research, were all obtained by distributing questionnaires. All statements in the questionnaire are compiled based on the indicators of each research variable. The variables in this study consist of MSME performance, digital marketing, product innovation, and Financial Literacy. Furthermore, the population is all of the respondents who are the object of this study, while the sample is 250 respondents. The respondents were MSME actors in Deli Serdang Regency, North Sumatra. The research was conducted for approximately three months from the beginning of 2023.

The data in this study was carried out using Structured Equation Model (SEM) analysis based on Partial Least Square (PLS). Furthermore, the Partial Least Square (PLS) method is a method that can analyze data with several stages of conditions. The initial PLS method stage tests the outer model measurement model. The Outer Model was carried out to test construct validity and measure the reliability of the questionnaire used. Using the PLS method, the next step can measure the structural model or the Inner Model. The inner model was carried out to determine the effect of each variable in the research (Aghili & Amirkhani, 2021).

#### RESULTS AND DISCUSSION

The following are the results of the analysis of the convergent validity test research model in this study, namely:

Table 1 Validity Test Results

Variable	Indicator	Results
Product Innovation	IP1	0.765

	IP2	0.843
	IP3	0.754
	IP4	0.721
Financial Literacy	LK1	0.711
	LK2	0.765
	LK3	0.845
	LK4	0.832
Digital Marketing	DM1	0.789
	DM2	0.823
	DM3	0.865
	DM4	0.789
	DM5	0.753
MSME Performance	KU1	0.743
	KU2	0.823
	KU3	0.834
	KU4	0.798
	KU5	0.733

Based on the results of the validity test, the results of which can be seen in the table above, all indicators in the research model are more significant than 0.70. Furthermore, these results indicate that all of the research variables are valid and that further testing can be carried out.

#### 4.1 Reliability Test Results

The following data test is to test the reliability of the data from the research. The following are the results of testing the reliability of the data in this study:

Table 2. Reliability Test Results

Variable	Alfa Cronbach		
Product Innovation	0,883		
Financial Literacy	0,834		
Digital Marketing	0,812		
MSME Performance	0.854		

The results of the data reliability test in this study, the results can be seen in Table 2; it can be seen that the average composite reliability value is more significant than 0.50. This certainly indicates that the indicators in this study are all reliable.

- 4.2 Measurement Model Analysis (Inner Model)
  - 4.2.1 Coefficient or Value (R2)

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Table 3. R-Square Value

Variable	Value R	R Square Adjusted
Digital Marketing	0,451	0,432
MSME Performance	0,560	0,520

Based on the data from Table 3 above, it is known that the R Square Adjusted value for MSME performance is 0.520 or 52.0%; other variables influence the remaining 48.0%. Other variables are certainly not the variables studied in this study, while for the digital marketing variable, the value of R Square Adjusted is 0.432 or 43.2%, and while on the contrary, 56.8% is influenced by other variables not included in this study.

# 4.2.2 Predictive Value of Relevance (Q2)

The next step is to test the value of Q2. The Q2 value has the same meaning as the coefficient of determination, where if the value of Q2 is greater than 0, it indicates that the model has predictive relevance. Conversely, if the value of Q2 is smaller when compared to 0, it indicates that the model has less predictive relevance. In

other words, if all Q2 values are higher than 0, the model can be considered a better fit. The results of calculating the predictive value of relevance in this study are as follows:

$$Q_2 = 1 - (1 - R_1^2) (1 - R_2^2) ... (1 - R_n^2)$$

$$Q_2 = 1 - (1-0.520) (1-0.432)$$

$$Q_2 = 1-(0.480)(0.568)$$

$$P_2 = 1-0,272$$

$$Q2 = 0.728$$

Based on the calculation results in this study, the Q2 value is 0.728. This certainly indicates that overall, the variables in this study, namely, product innovation, financial Literacy, digital marketing, and MSME performance, can contribute 72.8% to the authenticity of the data in the structural model. Then the remaining 27.2% needs further research other than the variables in this study.

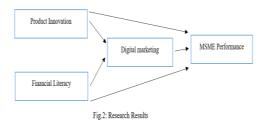
### 4.3 Hypothesis Test Results

The following are the results of hypothesis testing in this study. The results can be seen in Table 4 below:

Table 4. Research Hypothesis Test Results

	Original Sample (O)	Sample Mean (M)	Statistic T ( O/STDE V )	Standard Deviation (STDEV)	P Value	Information
Digital marketing -> MSME Performance	0,234	0,213	3,429	0,289	0,001	Significant
Product Innovation -> > Digital marketing	0,321	0,378	9,174	0,234	0.000	Significant
Product Innovation -> MSME Performance	0,243	0,345	3,234	0,389	0,002	Significant
Financial Literacy -> Digital marketing	0,453	0,453	3,210	0,189	0,001	Significant
Financial Literacy ->> MSME Performance	0,367	0,367	9,132	0,276	0,000	Significant
Product Innovation -> > Digital marketing -> MSME Performance	0,451	0,332	3,430	0,089	0,001	Significant
Financial Literacy ->> Digital marketing -> MSME Performance	0,378	0,353	9,110	0,098	0,000	Significant

Source: Smart PLS Processing Results (2023)



H1: Digital marketing has a significant effect on MSME performance

Based on the results of the data analysis conducted in this study, the results prove that digital marketing has a significant effect on the performance of MSMEs. The results of testing this data show that the hypothesis is accepted. Proper and correct digital marketing will improve the performance of the business being carried out. Digital marketing is essential and cannot be separated because most consumers make purchases digitally.

H2: Product innovation has a significant effect on digital marketing

From the results of hypothesis testing and the results shown in Table 4 above, it is known that product innovation significantly affects digital marketing. This can be seen from the significance value of 0.000 <0.05. This indicates that the second hypothesis is accepted. It is known that the products or services produced in an MSME certainly need to be marketed better digitally. Paying attention to products and creating excellent and correct innovations will increasingly require digital marketing.

H3: Product innovation has a significant effect on MSME performance

The results of testing the hypothesis in this study show that product innovation significantly affects SMEs' performance. This can also be seen in Table 4 above by looking at a significance value of 0.002 <0.05, proving that the third hypothesis is accepted. It is known that products or services need to be innovated in order to answer the constantly changing consumer needs. Products or services that are

increasingly innovating will certainly be liked by consumers so that they can directly improve the performance of MSMEs.

H4: Financial Literacy has a significant effect on digital marketing

The results of testing the hypothesis show that financial Literacy significantly affects digital marketing. This means that it indicates that the fourth hypothesis is accepted. Furthermore, a business actor has good financial literacy skills. In that case, it will undoubtedly increase the ability to manage finances, which will positively impact the ability to manage a business. Finance is essential to manage so that all activities run smoothly. With sound financial Literacy, you can make the right strategic decisions, such as doing digital marketing, which is necessary for business development.

H5: Financial Literacy has a significant effect on the performance of MSMEs

The test results in this study can undoubtedly be seen in Table 4 above. The test results prove that financial Literacy significantly affects the performance of MSMEs. This certainly proves that the better one's knowledge of the financial management of a business, the better the performance of the business being run. Financial Literacy and knowing correctly about financial management will help manage finances properly so that business performance can be maximized.

H6: Product innovation has a significant effect on MSME performance through digital marketing

From the research results, it was found that product innovation has a significant effect on the performance of MSMEs through digital marketing. The research results, which can be seen in Table 4 above, prove that the significance value is 0.001 <0.05; this states that the sixth hypothesis is accepted. Innovating products or services, of course, will improve the digital marketing of products or services that are marketed to improve the performance of MSMEs.

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H7: Financial Literacy has a significant effect on the performance of MSMEs through digital marketing

From the research results, it was found that financial Literacy has a significant effect on the performance of MSMEs through digital marketing. The research results, which can be seen in Table 4 above, prove that the significance value is 0.000 <0.05; this states that the seventh hypothesis is accepted. With sound financial Literacy, business actors can manage finances properly. They will be able to improve the digital marketing of products or services being marketed to improve the performance of MSMEs.

#### DISCUSSION AND IMPLICATIONS

Product innovation cannot be separated from every business activity because innovation can significantly impact the performance of the business. Product or service innovation will help business activities become more dynamic and keep abreast of existing developments so that consumers will remain loyal customers and, of course, further improve business performance (Nor et al., 2022). This study proves that product or service innovation carried out by business activities will undoubtedly positively and significantly affect performance. This states that the better product innovation is carried out, the performance of MSMEs will also increase; conversely, if business activities do not innovate, it can be said that the product or service produced becomes tedious and can undoubtedly be left behind by existing developments, so it also reduces performance.

Financial Literacy is an activity that provides excellent benefits for developing MSME performance (Zahro, 2019). Financial literacy adds insight and the ability of business actors to manage finances in the business activities carried out. This study also proves that financial Literacy has a positive and significant effect on the performance of MSMEs. This proves that a better person's financial Literacy will help carry out business activities to improve the

performance of the business, and vice versa. A person needs to be able to manage finances to ensure the business runs smoothly and maintains its performance.

Digital marketing is an activity that markets products or services using the internet or information technology in the marketing process. Consumers increasingly favor digital marketing because consumers are free to make purchases without coming directly to where the product or service is sold. You can make shopping transactions using a cellphone or a communication device connected to the internet. The results of this study prove that digital marketing has a positive and significant effect on the performance of MSMEs. Digital marketing that is getting better will improve the performance of MSMEs and vice versa. If MSMEs implement digital marketing, performance will stay the same.

Product innovation also affects digital marketing. Products or services produced must be innovated to produce products or services under the wishes of consumers. Products or services that have been correctly and adequately innovated must be digitally promoted or marketed to produce even better business performance. Good financial Literacy also affects digital marketing. Business actors who can manage finances will know how crucial digital marketing is to improving the performance of their MSMEs.

# CONCLUSIONS, SUGGESTIONS, AND LIMITATIONS OF RESEARCH

This study stated that all hypotheses in the study were accepted or proven. Product innovation affects the performance of SMEs. Financial Literacy affects the performance of MSMEs. In carrying out business activities, it is indispensable to pay attention to product innovation, the ability of business actors to manage finances, and promotion in a triple way. These factors can be considered so business or business performance can run smoothly.

Based on the conclusions above, suggestions can be given to improve the performance of MSMEs even better; namely, for MSME actors, it is necessary to educate them about the benefits of financial Literacy, innovation in products or services, and the importance and knowledge of how to do digital marketing. This is done to run the business more correctly to maximize the performance obtained. The use of technology is important to be able to carry out digital promotions in order to reach consumers without time and space limits.

A study has limitations and needs attention from other researchers who want to conduct research in the same field. This research has limitations in the research sample, which was only carried out in one MSME sector, namely the MSME sector related to food, so future research can take research samples from other sectors.

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