Role of Product Innovation and Market Orientation on Business Performance

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***Abstract*— Micro Small Medium Enterprises (MSME) give the big impact and the main power of many countries include Indonesia. They contribution of Gross Domestic Product (GDP) is bigger than large companies, has a large market share and has a high labour absorption. That fact is a trigger for academics and professionals to conduct research on it, to get more information, understanding and look for what influences the MSME business performance. This study aims to analyse the role of product innovation and market orientation toward business performance of micro small enterprise in food and beverage sector in Jakarta. Data collected through questionnaire and filled by 390 owners of micro small enterprise in food and beverage sector in Jakarta. Meanwhile, for data analysis using Statistical Package for the Social Science (SPSS). This study is quantitative study. The results are both of product innovation and market orientation has a positive effect on business performance**

***Keywords*—** micro small enterprise, product innovation, market orientation, business performance

1. Introduction

Micro Small Medium Enterprises (MSME) give the big impact and the main power of many districts even countries include Indonesia [27], [4], [25]. That statement also agreed by Ministry of Cooperative and SMEs, Imam Pribadi. The number of MSME in Indonesia continues to increase every year. In 2017, micro enterprises reach more than 62 million, small enterprises around 757 thousand and medium enterprises more than 58 thousand unit. Meanwhile, large enterprises only more than 5 thousand unit. In Jakarta itself, the number of micro small enterprises reached more than 37 thousand unit in 2018. In addition, the number of micro small enterprises in food and beverage sector in Indonesia is around 1,8 trillion unit in 2018. MSME also contribute to Indonesia Gross Domestic Product (GDP) bigger than large companies. Food and beverage are basic needs, have a consistent and significant level contribution to Indonesia GDP from around 360 trillion in 2010 and became around 690 trillion in 2018. In addition, MSME has a large market share and a high labour absorption. That fact is a trigger for academics and professionals to conduct research on it, to get more information, understanding and look for what influences the MSME business performance.

Business performance is a reflection of an organization's ability to manage its resources. One of the important things to get successful business performance is innovation product which includes an understanding of the product, customer perceptions, competitors, processes, and the changes in business environment [24],[2],[19],[12],[3].

Amin et all identified the success factors of MSME and the problem they faced. One of the success factors is market orientation [1]. In a survey of MSME performance in India, it is known that companies with a more solid market orientation will be able to produce higher profit margins than companies with weaker market orientation. That means, market orientation influences business performance [17], [23].

Therefore, this study aims to analysis the relationship between product innovation on business performance and market orientation on business performance of micro small enterprises in food and beverage sector in Jakarta. In the end, the result of this study will help entrepreneurs in developing strategies to get successful business performance, increase sales and profitability of their business; contribute to the development of science especially regarding product innovation, market orientation and business performance; and as a reference for further research.

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2. Literature Review

Based on the Indonesia Law (number 20 of 2008), that the criteria for micro small enterprises are based on nominal of assets or annual income. Micro has ≤ 50 million of assets or ≤ 300 million of annual income; small has > 50 million to ≤ 500 million of assets or > 300 million to ≤ 2.5 billion of annual income.

Product innovation is the activity of renewing a product to be new or significantly changed due to its characteristics or uses and customer expectations [28],[7], [5] in order to dominate the market and this effort has proven effective [18]. [10] explains that there are seven types of product innovation that are commonly done, cost reductions, product improvements, line extensions, new markets, new uses, new category entries, and new to the world products. [22] state that there are five indicators used to measure a product innovation which are use of technology, new product, product line, product quality, product flexibility. Several previous studies revealed that product innovation has a positive effect on SME business performance in Japan [24],[8],[20]. Based on the description, the provisional estimates as follows:

Hypothesis 1: Product innovation has a positive effect on business performance

Market orientation is a marketing management concept that facilitates a company's ability to provide superior products and services to internal and external customers [13]. Market orientation has proven to be an excellent tool for companies to support successful product launches for consumers [6]; help the company's long-term growth [11]; create competitive advantage [13]. Based on the theory [16] explains that there are three dimensions found in market orientation which are customer orientation, competitor orientation and internal coordination. Several previous studies revealed that market orientation has a positive effect on SME business performance in Thailand [14]; market orientation which has the biggest influence on the performance of pharmaceutical companies in Jordan [15]; market orientation has a positive relation on the business performance of the hospitality industry business in Portugal [21]. Based on the description, the provisional estimates as follows:

Hypothesis 2: Market orientation has a positive effect on business performance

Business performance refers to the results of the arrangement, the maximum utilization of available resources with the aim of generating profits that support the company's growth [9]. Business performance is divided into two, namely financial performance such as turnover, profitability, sales growth and non-financial performance such as product quality, customer satisfaction, market share, and customer loyalty [26].

Based on the description above, the research model is as follows

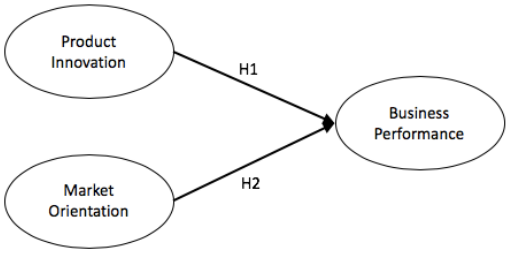

Figure 1. Research Model

Source: Authors (2020)

3. Research Method

The main purpose of this study is to determine the causal relationship of two or more variables involved and the level of dependency between these variables (Sekaran & Bougie, 2016).This study consists of 2 (two) exogenous variable which are product innovation and market orientation and 1 (one) endogenous variable which is business performance. This study aims to analyse the role of product innovation and market orientation toward business performance of micro small enterprise in food and beverage sector in Jakarta. Data collected through questionnaire and filled by 390 owners of micro small enterprise in food and beverage sector in Jakarta. After that the data is tested for validity, reliability, normality, multicollinearity, heteroscedasticity, hypothesis testing partially, simultaneously and the coefficient of determination test. Meanwhile, for data analysis using Statistical Package for the Social Science (SPSS). This study is quantitative study.

4. Result and Discussion

Based on data collected from the questionnaire the profile of respondents was obtained as follows

Table 1. Respondent Profile

Gender	Male	63%	Business Location	East Jakarta	12%
	Female	37%		Central Jakarta	18%
Age of Business Owner	< 25 years old	23%		West Jakarta	44%
	25 – 34 years old	44%		South Jakarta	15%
	35 – 44 years old	30%		North Jakarta	11%
	45 – 55 years old	4%	Number of Employee	< 10 (micro)	69%
	>55 years old	0%		10 – 30 (small)	31%
Education Level	Junior High School	0%	Type of F&B Business	Restaurant	39%
	Middle High School	1.28%		Canteen	7%
	Senior High School	39.74%		Bakery	14%
	Diploma / bachelor's degree	57.95%		Coffee shop	17%
	Master's degree	0.77%		Stall	23%
	Doctoral Degree	0.26%			
Annual Income	≤ 50 million of assets or ≤ 300 million (micro)	39%			
	> 300 million to ≤ 2.5 billion (small)	61%			
	> 2.5 billion to 50 billion (middle)	0%			

Source: Data Processing Result (2020)

First, validity and reliability test. Validity test is done to find out the level of validity of something you want to study (Taherdoost, 2018), valid if value of r count > r table and confidence level of 95%. Meanwhile, reliability shows how consistent an instrument is in measuring a particular concept or the extent to which the test score is free from measurement errors. Based on the result (table 2) shows that all of the indicators are valid dan reliable.

Table 2. Results of Validity Test.

Variable	Questionnaire statement	r count	r table	r alpha	Provision of Reliability Standards	Result
Product Innovation	PI-1	0,809	0,1	0,832	0,7	Valid and reliable
	PI-2	0,737				
	PI-3	0,803				
	PI-4	0,701				
	PI-5	0,812				
Market Orientation	MO-1	0,571	0,1	0,899	0,7	Valid and reliable
	MO-2	0,634				
	MO-3	0,672				
	MO-4	0,626				
	MO-5	0,710				
	MO-6	0,728				
	MO-7	0,695				
	MO-8	0,664				
	MO-9	0,698				
	MO-10	0,755				
	MO-11	0,653				
	MO-12	0,719				
	MO-13	0,676				
Business Performance	BP-1	0,752	0,1	0,893	0,7	Valid and reliable
	BP-2	0,701				
	BP-3	0,736				
	BP-4	0,691				
	BP-5	0,746				
	BP-6	0,784				
	BP-7	0,751				
	BP-8	0,781				
	BP-9	0,712				

Source: Data Processing Result (2020)

Second, normality test is performed to determine whether the research data follows the normal distribution or free distribution. The research data is normally distributed if the significance value (sig) > the alpha value (α) of 0.05. Based on the results of data processing (figure 2), the significance value (sig) of the residual value, which is 0.105, is greater than the alpha value (α) of 0.05, it can be concluded that the residual data follows the normal distribution and meets one of the classic assumptions in multiple regression statistical methods.

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		390
Normal Parameters[a,b]	Mean	0E-7
	Std. Deviation	1.91368397
Most Extreme Differences	Absolute	.062
	Positive	.040
	Negative	-.062
Kolmogorov-Smirnov Z		1.215
Asymp. Sig. (2-tailed)		.105

a. Test distribution is Normal.

b. Calculated from data.

Figure 2. Residual Value Normality Test Results

Source: Data Processing Result (2020)

Third, multicollinearity and heteroscedasticity test. Multicollinearity test is used to determine whether or not there is a deviation from the classic assumption of multicollinearity, namely the existence of a linear relationship between the independent variables in the regression model. If the Variance Inflation Factor (VIF) < 10.00 and the Tolerance value > 0.100, the conclusion is that the regression model does not have a multicollinearity problem (Daoud, 2017), (Lavery, Acharya, Sivo, & Xu, 2017). Meanwhile, heteroscedasticity test is a test that assesses whether there is a variance in residual variance for all observations in the linear regression model. If Sig value > the alpha value (α) of 0.05, then heteroscedasticity does not occur. Based on data processing result (table 3), shows that multicollinearity and heteroscedasticity do not occur.

Table 3. Result of multicollinearity and heteroscedasticity test

Variable	Tolerance value	VIF	Sig value	Result
Product Innovation	0,403	2,479	0,826	multicollinearity and heteroscedasticity do not occur
Market Orientation	0,403	2,479	0,132	

Source: Data Processing Result (2020)

Fourth, hypothesis test partially and simultaneously. If significance value ≤ alpha of 0,05 and t count ≥ t table, it's means there is an influence between variable. Simultaneous test is conducted to find out whether there is an influence between 2 independent variables namely product innovation and market orientation on business performance when tested simultaneously. If significance value ≤ alpha of 0,05 and f count ≥ f table, it's means there is an influence simultaneously. Based on data processing result (table 4) shows there is an influence of product innovation variables on business performance partially, there is an influence of market orientation variables on business performance partially and there is an influence of product innovation and market orientation on business performance simultaneously.

Table 4. Result of hypothesis test partially

Hypothesis	Significance value (Sig)	Alpha	t count	f count	t table	f table	Result
H1: Product innovation has a positive effect on business performance	0,000	0,05	24,514		1,65		Sig value < alpha and t count > t table
H2: Market orientation has a positive effect on business performance	0,000	0,05	39,153		1,65		Sig value < alpha and t count > t table
H3: Product innovation and market orientation has a positive effect on business performance	0,000	0,05		868,991		3,02	Sig value < alpha and f count > f table

Source: Data Processing Result (2020)

Fifth, Coefficient of determination test. The test is conducted to find out how strong the independent variables are product innovation and market orientation explains the variation of the dependent variable that is business performance. Based on the SPSS output (figure 3), R Square is 0.608 so it can be concluded that 60.8% of the product innovation (independent variable) can explain variations in business performance (dependent variable) and the remaining 39.2% is explained by other variables.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.780[a]	.608	.607	2.81247

a. Predictors: (Constant), Total_X1

b. Dependent Variable: Total_Y

Figure 3. Determination Coefficient Test Results, Product Innovation on Business Performance

Source: Data Processing Result (2020)

Based on the SPSS output (figure 4), R Square is 0.798 so it can be concluded that 79.8% of the market orientation (independent variable) can explain variations in business performance (dependent variable) and the remaining 20.2% is explained by other variables.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.893[a]	.798	.797	2.01796

a. Predictors: (Constant), Total_X2

b. Dependent Variable: Total_Y

Figure 4. Determination Coefficient Test Results, Market Orientation on Business Performance

Source: Data Processing Result (2020)

Based on the SPSS output (figure 5), R Square is 0.818 so it can be concluded that 81.8% of the product innovation and market orientation (independent variable) can explain variations in business performance (dependent variable) and the remaining 18.2% is explained by other variables.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.904[a]	.818	.817	1.91862

a. Predictors: (Constant), Total_X2, Total_X1

b. Dependent Variable: Total_Y

Figure 5. Determination Coefficient Test Results, Product Innovation and Market Orientation on Business Performance

Source: Data Processing Result (2020)

Implications

Based on the results, can be seen that all data from each variable meets the requirements of validity, reliability, and classic assumptions. The following

conclusions of the results of multiple linear regression (figure 6)

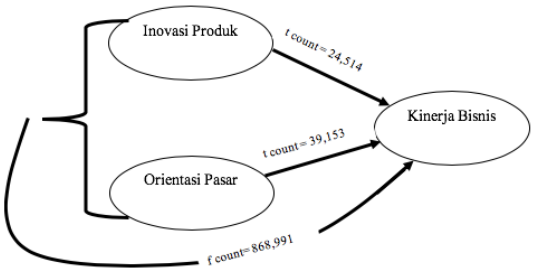

Figure 6. Conclusions of the results of multiple linear regression

Source: Data Processing Result (2020)

The results of this study also provide managerial implications for micro and small-scale food and beverage businesses in Jakarta in terms of business performance by maximizing product innovation and optimizing market orientation.

5. Conclusion

Based on the research and discussion that has been done, it can be concluded that product innovation and market orientation have a positive and significant effect on the performance of micro and small business businesses in the food and beverage industry sector in Jakarta.

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