

# The Effects of Business Model Innovation, Efficiency Growth, and Revenue Growth on MSME Performance in Tangerang City, Banten Province, Indonesia

Rodhiah Rodhiah<sup>1\*</sup> Nur Hidayah<sup>1</sup>

<sup>1</sup>Faculty of Economics and Business, Universitas Tarumanagara, West Jakarta – 11470, Indonesia

\*Corresponding Author. Email: rodhiah@fe.untar.ac.id

## ABSTRACT

In the recent business context, Business Model Innovation (BMI) can be considered as a key to enhance the company performance. BMI can create the company's competitive advantage and increase its performance, even though there are still many Micro, Small, and Medium Enterprises (MSMEs) failing to generate the expected result when innovating their business models. This research aimed to reveal the effect of BMI on company performance. BMI also affects the efficiency growth and revenue growth. The efficiency growth affects the company performance. In this research, 100 MSMEs located in Tangerang were observed. The sampling activities were done by using the purposive sampling technique. Data was collected by distributing the questionnaire to MSMEs that became this research samples. Data was then analyzed by using the Smart PLS Program. This research results show that BMI positively and significantly affect the MSME performance, efficiency growth, and revenue growth. Meanwhile, efficiency growth and revenue growth also positively and significantly affect the MSME performance.

**Keywords:** Business Model Innovation (BMI), MSME Performance, Efficiency Growth, Revenue Growth

## 1. INTRODUCTION

Since the existence of the Internet, the ideas on Business Model (BM) and Business Model Innovation (BMI) have attracted many attentions among the practitioners and academicians (Aspara, 2010) [1]. BM describes the logic how companies create, provide, and capture the values (Teece, 2010) [2]. Meanwhile, BMI refers to the change and adaptation to the continuously-changing market (Hartmann, M., Oriani, R., Bateman, H., 2013) [3]. The well-designed BM can create and provide the attractive value proposition to customers. This can help create the revenue stream and competitive advantage, and enables to capture the substantial values by the business that can provide the innovative and distinguished products and services portfolios (Teece, Range Plan, 2010) [2]. A business model can be defined as "a design or architecture of value creation, delivery, and capturing mechanism" of a company (Foss, N.J., Saebi, T., 2017) [4]. Business model has acquired the increased attention, either in entrepreneurship or innovation management (Bouncken, 2016) [5]. For being competitive, companies can change and enhance their business models from time to time.

BMI is perceived as a special innovation that can help enhance the business performance (Bucherer, 2012) [6]. Because all companies want to enhance their performance,

BMI's contribution to business performance has acquired many attentions (Karimi, 2016) [7].

Christensen (2016) [8] exposed that more than 60% of the efforts related to BMI in their companies do not generate the expected results, which means that, if this matter is not managed properly, the best formulated BM may not create the intended effect (Chesbrough, 2010) [9]. BMI can be viewed as either a very positive or a very negative consequence, either a company can face a substantial growth or collapse, all depends on whether the BM can be implemented properly. Therefore, to find out how and when to innovate the BM becomes a serious challenge for company managers or owners (Hartmann, 2013) [3].

Nowadays, MSMEs are facing a strict competition due to the globalization and digitalization. The phenomenon of this global competition becomes a big challenge for MSMEs to maintain their superiority and competitive performance. The sustainable business performance can be depicted as a process and practice of a healthy management performance (Saunila, 2014) [10]. The key success factor to business performance enhancement and competitiveness, lies on the effective implementation of main managerial practice leading to the organizational innovation. Besides, literature exposed that MSMEs are facing difficulties when adopting a new and innovative managerial practice. There is an obvious necessity to stimulate the development of

managerial skills in order to develop the operational skills for supporting the MSMEs' innovation.

This research aimed to reveal the relationship among the variables of BMI, efficiency growth, revenue growth, and MSME performance located in Tangerang area, Banten Province, Indonesia.

## **2. THEORETICAL REVIEW**

### **2.1. BMI and MSME Performance**

In a more basic level, scholars and practitioners agree that BMI is very important in supporting the success of an organization, especially for those that are still growing (Terrenghi, 2017) [11], to enhance their long-term performance or to act as a source of new innovation (Zott, 2011) [12]. However, researchers have reported that they cannot develop a significant relationship between BMI and company performance under several assumptions (Velu, 2015) [13]. Thus, in order to test whether BMI can affect the MSME performance in Indonesian context, the research hypothesis could be developed as follow:

H<sub>1</sub>: BMI positively and significantly affects the MSME performance.

### **2.2. BMI and Efficiency Growth**

BMI can help settle the transaction process efficiently, such as by reducing the transaction cost between a company and its external parties (Ben, 2015) [14]. BMI can enhance a company performance, not only by lowering the production cost, but also by utilizing the available resources more effectively. For example, by adopting a new partnership model, such as outsourcing, an organization can increase its operation-scale by more effectively. BMI affects a company's efficiency, which in turn will affect a company performance positively. Therefore, we argued that the efficiency growth can mediate the path between BMI and company performance. Based on this phenomenon, the second hypothesis could be developed as follow:

H<sub>2</sub>: BMI positively and significantly affects the efficiency growth.

### **2.3. BMI and Revenue Growth**

Several researchers revealed a positive connection between BMI and revenue growth (Pang, 2019) [15], while others concerned that even though BMI can direct to a bigger value creation, it does not result in revenue growth automatically (Desyllas P, 2013) [16]. BMI can represent a useful opportunity to support the product innovation (Kastalli, 2013) [17], because both processes to create and add the values followed by the company to compete, have an effect on the success of new product, which finally can increase the revenue (Evanschitzky, 2012) [18]. Thus, the next hypothesis could be developed as follow:

H<sub>3</sub>: BMI positively and significantly affects the revenue growth.

### **2.4. Efficiency Growth and MSME Performance**

The more efficient a company operates, the better the performance will be (Hult, G.T.M., Hurley, R., Knight, G.A., 2014) [19]. A quick and transparent transaction enables the management to make a right decision. (Gronum, 2016) [20] also found that efficiency enhances the company performance by reducing the inventory cost. Thus, this can advantage the customers and suppliers, as well as reducing the expenses in marketing, selling, communication, and others. Next, the increase of business scale may cause the reduction of operational expenses (Hu, 2014) [21].

H<sub>4</sub>: Efficiency growth positively and significantly affects the MSME performance.

### **2.5. Revenue Growth and MSME Performance**

When a business model becomes innovative, it can provide some benefits to customers, such as a new distribution solution (Velu, 2015) [13] concluded that when a company can show a growth in revenue, it can enhance its performance. Thus, revenue growth in turn will affect the company performance. Therefore, the next hypothesis could be developed as follow:

H<sub>5</sub>: Revenue growth positively and significantly affects the MSME performance.

## **3. RESEARCH METHODOLOGY**

The population of this research is all MSME located in Tangerang City. This research used a purposive-sampling technique by applying the criteria as follows: a). Running the business of handicraft; b) Running the business for more than three years when this research was conducted; and c). Having employees at least 3 people. The sample size was 100 MSMEs. In measuring the research variables, several indicators were used. The variables of Business Model Innovation (BMI) was adopted from Zott (2011) [12], efficiency growth from Gronum, 2016 [20], revenue growth from Chesbrough, H. (2010) [9], and MSME performance from Saunila (2014) [10], whereas each of them used 5 items of indicators. Data was acquired by distributing the questionnaire physically or by visiting the MSMEs one by one, including the visits to MSMEs Gallery where the craftsmen gather. The scales used to measure the responses through questionnaire consisting of: 5 (Very Agree), 4 (Agree), 3 (Neutral), 2 (Disagree), and 1 (Very Disagree). For data analysis, Structural Equation Modeling was applied by using the Smart PLS software.

The specification of PLS Model that would be developed in this research, is as follow:

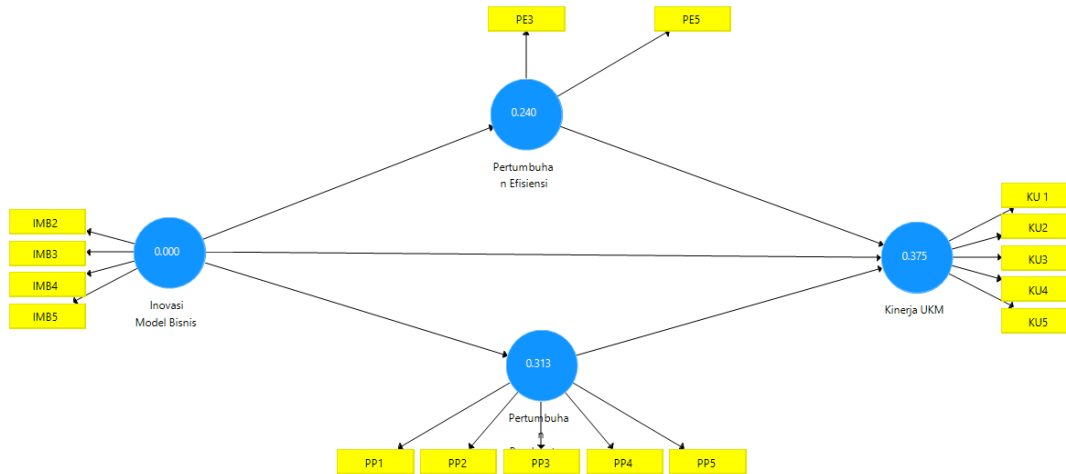


Figure 1 PLS Model Specification

## 4. RESULTS

### 4.1. Respondents' Profile

Among 100 respondents used in this research, the majority are female (79%), aged between 25-50 years old (60%), having the S-1 degree of education (50%).

### 4.2. Data Analysis

Data analysis in this research used the PLS-SEM software

Table 1 The Results of AVE

	Average Variance Extracted
Business Model Innovation (BMI)	0.640
MSME Performance	0.616
Efficiency Growth	0.736
Revenue Growth	0.649

Source: Data Analysis Results by Using the PLS-SEM software

Based on Table 1, the AVE value of each variable is greater than 0.5, which has met the criteria of convergent validity.

consisting of two types of analysis, which are outer model dan inner model.

### 4.3. Outer Model

Based on the outer-model analysis results, all indicators are valid dan reliable, thus they can represent the research variables.

#### 4.3.1. Convergent Validity

This result means that all indicators in this research are valid.

#### 4.3.2. Discriminant Validity

Table 2 Discriminant Validity

	Business Model Innovation (BMI)	MSME Performance	Efficiency Growth	Revenue Growth
Business Model Innovation (BMI)	0.800			
MSME Performance	0.696	0.785		
Efficiency Growth	0.581	0.631	0.858	
Revenue Growth	0.706	0.758	0.606	0.805

Source: Data Analysis Results by Using the PLS-SEM software

Based on Table 2, the value of Heteroit-Monotrait Ration in each variable is less than 0.90, thus all indicators in the research variables have met the criteria of discriminant validity.

#### 4.3.3. Composite-Reliability Test

The reliability test was conducted by observing the values of composite reliability and Cronbach's Alpha. If each item

used to measure the variable has the composite reliability greater than 0.60, then the variable is considered reliable. In addition, if each item used to measure the variable has the Cronbach's Alpha greater than 0.60, then the item is considered reliable (Malhotra, 2020) [22].

**Table 3** Cronbach's Alpha and Composite Reliability

	Cronbach's Alpha	Composite Reliability
Business Model Innovation	0.809	0.876
MSME Performance	0.843	0.889
Efficiency Growth	0.642	0.848
Revenue Growth	0.864	0.902

Source: Data Analysis Results by Using the PLS-SEM software

Based on Table 3, the value of *Cronbach's Alpha* and *Composite Reliability* in each variable is greater than 0.60, hence all indicators in each variable have met the criteria of reliability.

caused by the variation in the dependent variables. The value of R-Square has 3 criteria, which are: The values between 0.75 and 1 indicates strong influence; The values between 0.5 and 0.74 indicates moderate influence; And the values between 0.25 and 0.49 indicates weak influence.

#### 4.4. Inner Model

##### 4.4.1. Coefficient-of-Determination ( $R^2$ ) Test

R-Square ( $R^2$ ) or the coefficient of determination is used to measure the level of variation in the independent variable

**Table 4** R-Square Values (The Coefficient of Determination)

	R-Square	Adjusted R-Square
MSME Performance	0.651	0.640
Efficiency Growth	0.338	0.331
Revenue Growth	0.499	0.494

Source: Data Analysis Results by Using the PLS-SEM software

Based on the results in Table 4, the R-Square value of MSME Performance variable is 0.640, meaning that 64% of variation in MSME Performance can be explained by the dependent variables in this research, while the remaining 36% of variation in MSMSE Performance is explained by other variables out of the scope of this research.

4.4.2. Inner-Model Test

The results of *bootstrapping* is as follow:

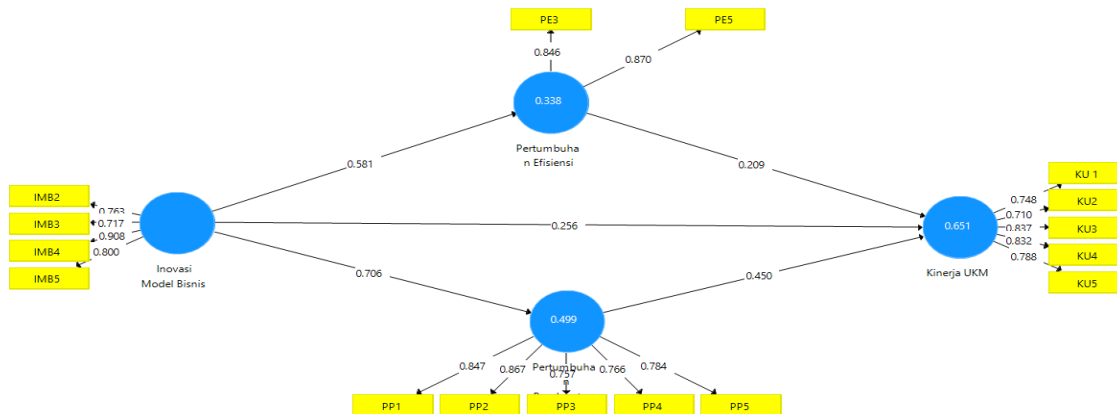


Figure 2 The Result of Bootstrapping Test

Based on Figure 2, the results of *bootstrapping* can be further displayed in Table 5 below.

Table 5 The Results of Path-Coefficient Test

	Original Sample	t-Statistics	p-Values
Business Model Innovation → MSME Performance	0.256	2.557	0.011
Business Model Innovation → Efficiency Growth	0.581	7.591	0.000
Business Model Innovation → Revenue Growth	0.706	12.029	0.000
Efficiency Growth → MSME Performance	0.209	2.293	0.022
Revenue Growth → MSME Performance	0.450	3.900	0.000

Source: Data Analysis Results by Using the PLS-SEM Software

Based on the results of hypotheses tests in Table 5, the explanations can be provided as follows:

1. On the path showing the effect of BMI on MSME Performance, the p-value is 0.011, the t-statistics is 2.557, and the beta coefficient is 0.256. Thus, H<sub>1</sub> was supported. This means that BMI positively and significantly affects the MSME Performance.
2. On the path showing the effect of BMI on Efficiency Growth, the p-value is 0.000, the t-statistics is 7.591,

- and the beta coefficient is 0.581. Thus, H<sub>2</sub> was supported. This means that BMI positively and significantly affects the Efficiency Growth.
3. On the path showing the effect of BMI on Revenue Growth, the p-value is 0.000, the t-statistics is 12.029, and the beta coefficient is 0.706. Thus, H<sub>3</sub> was supported. This means that BMI positively and significantly affects the Revenue Growth.

4. On the path showing the effect of Efficiency Growth on MSME Performance, the p-value is 0.022, the t-statistics is 2.293, and the beta coefficient is 0.209. Thus, H<sub>4</sub> was supported. This means that Efficiency Growth positively and significantly affects the MSME Performance.
5. On the path showing the effect of Revenue Growth on MSME Performance, the p-value is 0.000, the t-statistics is 3.900, and the beta coefficient is 0.450. Thus, H<sub>5</sub> was supported. This means that Revenue Growth positively and significantly affects the MSME Performance.

## 5. DISCUSSIONS

In this research, BMI positively and significantly affects the MSME performance. This result is in line with the previous research, concluding that BMI is very important to support the success of an organization, especially the one in the growing stage (Terrenghi, 2017) [11] to enhance its long-term performance or to act as a new source of innovation (Zott, 2011) [12]. Business Model Innovation (BMI) is perceived as a special form of innovation to help enhance the business performance (Bucherer, 2012) [6].

In this research, BMI positively and significantly affects the efficiency growth. This result is in line with the previous research, revealing that BMI has an orientation toward the efficiency, as introduced by (Hu, 2014) [21] providing a positive effect on the efficiency growth, in which the sooner the implementation of BMI occurs, the sooner the company can enhance its products and services. BMI can also help business actors settle their transactions more efficiently, by reducing the transaction cost between their companies and the external parties (Ben, 2015) [14].

In this research, BMI positively and significantly affects the revenue growth. This result is similar to the previous research, mentioning that BMI can represent an advantageous opportunity to support the product innovation (Kastalli, 2013) [17], because creating and adding the values to compete has an effect on the success of new product, and finally can increase the revenue (Evanschitzky, 2012) [18].

In this research, efficiency growth positively and significantly affects the MSME performance. This result is similar to the previous research, mentioning that the more efficient a company operates, the better the performance will occur (Hult, G.T.M., Hurley, R., Knight, G.A., 2014) [19]. A quick and transparent transaction enables the managers / owners to make the right decisions. (Gronum, 2016) [20] also found out that efficiency can enhance the company performance.

In this research, revenue growth positively and significantly affects the MSME performance. This result is in line with the previous result, mentioning that revenue growth can enhance the business performance (Velu, 2015) [13].

## 6. CONCLUSIONS

The conclusions of this research can be provided as follows:

1. BMI positively and significantly affects the MSME Performance.
2. BMI positively and significantly affects the Efficiency Growth.
3. BMI positively and significantly affects the Revenue Growth.
4. Efficiency Growth positively and significantly affects the MSME Performance.
5. Revenue Growth positively and significantly affects the MSME Performance.

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