



Business Analysis and Product Innovation to Improve SMEs Business Performance

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Abstract. Currently, business growth, especially small and medium-sized businesses in Bandung City, Indonesia, has experienced a fairly high increase. In this era of the COVID-19 pandemic, SME players must be able to improve their analytical skills, especially knowledge about business trends. In addition, the innovation factor is also perceived to be very important in order to survive in the face of competition. This study is aimed to understand the influence of business analysis and innovation performance in improving the business performance of small and medium enterprises. This study uses a quantitative method with an explanatory approach to determine how much influence the independent variable has on the dependent variable. Respondents in this study were SMEs in the city of Bandung, especially on Jalan Cikutra. 200 questionnaires were distributed but only 170 were returned. The results in this study are that these two variables have a fairly high influence on business performance. This shows that the variables of business analysis ability and innovation are important factors for SMEs to improve their business performance.

1. Introduction

Being a profitable company is not enough if the company itself is not growing. This is due to the fact that many companies or business organizations are currently making profits but not growing in quantity, especially in the context of SMEs. According to Singh a business that does not gain growth will not be able to sustain its profits in the long term [1-3]. According to Ngoasong, one of the benefits of business growth is increased income, employee opportunities for advancement, and expansion of distribution channels [4]. There is a strong stigma of why companies or organizations do not grow, as this is due to the reason that the market is so saturated that it is not effective for growth. However, if this stigma is true, it would be a question whether it is possible for products to be more widespread, especially in the context of online business. According to Kotler et al., growth is a mindset [5]. In the context of online business, online business strategies can be carried out in various ways, such as price cuts, price increases, market expansion, and innovation. Each of these methods has obstacles, for example, price cuts will usually always be matched by competitors. It will be difficult to increase prices, especially when economic conditions and expansion are difficult.



Technological developments and increasingly fierce competition have demanded organizations to apply various approaches through social media and develop innovations [6]. For any business, using knowledge to innovate can drive growth and revenue. In this competitive industry, innovation is key in building a sustainable business that can create value, especially for entrepreneurs. For an entrepreneur, the application of technology is the right strategy as a way to get a market. This is as stated by Glomsrød, that the application of technology, especially social media, can expand market segments for business people [7]. Purwanti et al. stated that to be able to grow every business must be able to make four segment movements, namely moving towards competitor segments, creating detailed segments, jumping into new segments, and re-segment the entire market [8]. Previous research has stated that the four segments can have an influence on growth, but there has been no research that applies this to the context of SMEs [9]. For entrepreneurs, especially in the city of Bandung, they need to adapt to technology in order to grow and be competitive, especially in the current digital era.

Transforming from a conventional business to a digital one is expected to drive growth that can generate long-term profits. Various types of SMEs in Bandung City currently have integrated their sales activities through social media. Currently, there are various kinds of products for sale ranging from banner production, food clothing needs, and the handicraft industry. Therefore, the purpose of this study is to find out the factors that can affect business performance by examining the variables of business analysis and product innovation, as well as and to find out how much influence these variables have in explaining business performance. This study is divided into five parts, in the first part is presented on matters relating to the background of the problem, the second part is presented on relevant theories, methods and types of research are presented in part three, and the discussion in the fourth and last part presented the conclusions and suggestions.

1.1. Business Analysis Ability Concept

In situations where many organizations offer products of value, the processes within the organization differ from those of competing competitors [10]. Analytical capabilities can draw potential people or organizational value from organizational processes. Analytical skills can also help organizational operational processes find the true potential of processes to support business decisions, especially in product creation [11]. Business analysis ability is a knowledge supporting factor that influences strategy by focusing on what the needs of consumers and products are, which can plan, collect data, analyze data, and present analysis results to decision makers [12]. Therefore, the determination of products and promotions is in the process of analytical ability, starting from data collection, planning, analysis and presentation [13]. To examine the factors in the organization in the process of business analysis capabilities, analyzed three important aspects, namely expertise capability, technology capability, and information capability [14]. Expertise capability is the ability of relevant people to support the strategy. These are skilled people with experience who have a clear understanding of the organization's goals [15].

They are interested in pursuing new knowledge, creative skills, the ability to share knowledge, and apply knowledge to improve or solve problems [16]. Technology capability is a basic resource of organizational information technology. Both are hardware and software, both of which are related to promotional activities, especially on social media [17]. Organizational technology must be conducive to gain access to new knowledge [18]. Technology also provides access that can facilitate between sellers and buyers [19].

Information capability is the characteristics of the ability to store or have information as a basis for decision making.

1.2. Innovation Performance

Innovation is an important tool for entrepreneurs to create competitive advantage, market opportunities, and business growth driven by change and make a difference in business [20]. In the context of organizational innovation, it is categorized into three categorizations, namely product innovation, process innovation, and strategic innovation [21]. Desyllas defined the results of the methodology developed for use in the production of goods and services using the main objectives of the innovation process [22]. The ability to innovate and develop in different organizational contexts is what many researchers contribute to research on innovation [23]. Organizational context has provided researchers with innovation categorization by bringing Schumpeter's concept to develop and categorize innovations in three categories: product innovation, process innovation, strategic innovation [24]. Herstad defined the results of the methodology developed for use in the production of goods and services, using the main objectives of the innovation process [25]. Innovative performance is the concept of innovative product and process efficiency. Innovation involves the introduction of new or improved products or services to the market and will focus on identifying new customer needs, product quality, and developing strategies that extend to the market effectively.

According to Vanhaverbeke, the focus and results of non-financial innovations are: novelty, economic benefits, and ideal creativity [26]. The process perspective is to increase the speed of product production by innovating new technologies to improve processes and accelerate production [27]. The market view is to increase customer demand and satisfaction for innovative products.

1.3. Business Performance

Performance reflects of the company's state of its activities during a certain period and is a result or achievement that is influenced by the company's operational activities. Many companies or business organizations are oriented to produce better performance. Various ways and strategies are formulated in order to optimize better returns. According to Johan and Isfianadewi, performance can be measured by two indicators, namely increased sales volume and rapid response to changes [28]. In addition, Cheah, makes it clear that company performance can be measured using a balanced scorecard approach which is divided into four perspectives, namely finance, customer, internal business processes, and learning and growth [29]. Chen stated that performance is a measure of the level of success of a company in carrying out its goals [30]. For Abbas, performance is the result of work that has a strong relationship with strategic goals [31]. Management must create a communication link to resources for the success of the company as well as assess the extent of the excellence of an organization. In order for companies to obtain good business performance, companies must always update their innovations to achieve excellence so that they can gain excellence.

1.4. The Influence of Business Analysis on Business Performance

Business analysis ability is a knowledge supporting factor that influences strategy by focusing on what the needs of consumers and products are, which can plan, collect data, analyze data, and present analysis results to decision makers [12]. Carrying out a business analysis can be started from making plans and collecting relevant data that is related to certain

events. After the data is completely collected, organization should carry out a thorough and detail analysis to help understand about the behavior. Analytical skills can also help organization to find the true potential of processes to support their business decisions, especially in product creation [11]. When the products created by companies are based on a thorough business analysis, this will make the products to be inimitable and highly valued by consumers, which is in accordance with the resource-based view or VRIO theory. This will lead to increased sales volume, which belongs to one of the measurements of performance [28].

1.5. The Influence of Innovation Performance on Business Performance

Innovation is one of the most important tools for business people to create competitive advantage, market opportunities, and business growth driven by change and make a difference in business [20]. Currently, a number of studies have discussed about the ability to innovate and develop in different organizational contexts [23] is what many researchers contribute to research on innovation. Performance reflects the company's state of its activities during a certain period. Performance can also be considered as a result or achievement that is influenced by the company's operational activities, which in this regard, is business performance. These days, many companies or business organizations are oriented to produce better performance. Various ways and strategies are formulated in order to optimize better returns. In order to achieve this goal or target, individual and organization need to realize the importance of having the capability to innovate, thus leading to innovation performance (See Figure 1).

1.6. Conceptual Framework

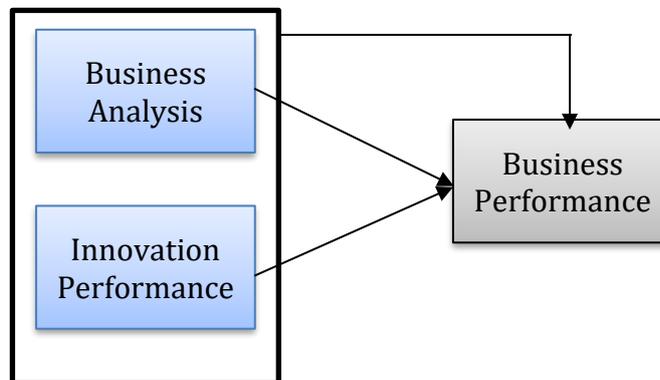


Figure 1. Conceptual Framework

H1. Business analysis ability has a positive effect on Business Performance.

H2. Innovation performance has a positive effect on Business Performance.

H3. Business Analysis Ability and Innovation Performance have a positive effect on Business Performance.

2. Method

This type of research is quantitative research with the object of this research containing the points of attention attached to the research subject. This point of concern can be assigned a value and the value will vary (different) from one individual to another. In this study, the research is focused on variables consisting of business analysis and innovation performance on business performance. The data used in this study are secondary and primary data. The

population in this study are SME business people in the city of Bandung, which is located on Jalan Cikutra. For the data collection, 200 questionnaires were distributed and only 170 were returned. Data analysis is then carried out using descriptive statistics, classical assumption test consisting of normality test, multicollinearity test, heteroscedasticity test, autocorrelation test, and multiple linear regression test consisting of hypothesis testing and coefficient test determination using SPSS 25 software.

3. Results and Discussion

3.1. Respondents' Profile

The results of the distribution of 170 respondents indicate that the results obtained are as follows (Table 1):

Table 1. Respondent profile

Respondent Profile		Percentage
Gender	Male	68%
	Female	32%
Age	20-30 year	22%
	30-40 year	20%
	40-50 year	58%
Kind Of Business	Convection	30%
	Handicraft	10%
	Processed Food	60%

The table above shows that the respondents are 68% male and 32% female. This shows that the respondents are more dominated by men when compared to women. The majority of respondents in the study were aged 40-50 years and most of them were in the type of food processing business. The city of Bandung is known as a culinary city; therefore, the majority of SMEs in Bandung are processed foods. The results of the descriptive analysis test can be seen in the table below:

Table 2 shows that the variables of business analysis, innovation performance and business performance are in the good category. This shows that the respondents give good responses to the research variables. The normality test is as follows:

Table 2. Descriptive Analysis Results

No	Variable	Percentage Average Score	Interpretation
1	Business Analysis	75,47%	Good
2	Innovation performance	75,17%	Good
3	Business performance	76,81%	Good

In Table 3 it can be seen that the significance value is $0.0058 > 0.05$. So it can be concluded that the data used is normally distributed. The multicollinearity test is as follows:

Table 3. Normality test

One-Sample Kolmogorov-Smirnov Test		
N		Unstandardized Residual
		170
Normal Parameters ^{a,b}	Mean	.000000
	Std. Deviation	1.06319280
Most Extreme Differences	Absolute	.044
	Positive	.033
	Negative	-.044
Test Statistic		.044
Asymp. Sig. (2-tailed)		.058 ^c
a. Test distribution is Normal		
b. Calculated from Data		
c. Lilliefors Significance Correction.		

In Table 4 it can be seen that the independent variable has a tolerance value of not less than 0.10. The value of Variance Inflation Factor (VIF) also shows that the independent variable has a VIF value of not more than 10. So, it can be concluded that the independent variable does not occur multicollinearity.

Table 4. Multicollinearity test

Coefficients*			
1	Model	Collinearity Statistics	
	Business analysis	Tolerance	VIF
	Innovation performance	.550	1.818
a. Dependent Variable: Business performance		.738	1.354

3.2. Regression Test Results

From the output above, it is known the intercept value and regression coefficient so that a multiple linear regression equation can be formed as follows (Table 5):

$$Y = 6.013 + 0.271 X_1 + 0.216 X_2 + e$$

Table 5. Regression test

1	Model	Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
	(Constant)	6,013	1,497		4,038	0,000
	Business analysis	0,271	0,064	0,250	3,334	0,001
	Innovation performance	0,216	0,073	0,179	2,708	0,014

The above equation can be interpreted as follows:

$a = 6.013$ means that if the business analysis and innovation performance variables are zero, the business performance variable will be worth 6.013 units, thus it can be seen that the regression lines intersect the Y axis at 6.013 points.

$b_1 = 0.241$ means that if the business analysis increases by one unit while the other variables are constant, then the business analysis variable will increase by 0.241 units.

$b_2 = 0.286$ means that if celebrity innovation performance increases by one unit while other variables are constant, then the innovation performance variable will increase by 0.286 units.

3.3. Partial and Simultaneous Hypothesis Testing

From the results of the acquisition of the values above, it can be seen that the t-count value obtained by the variable BA is $3.334 > t$ table (1.97214), in accordance with the criteria for testing the hypothesis that H_0 is rejected and H_a is accepted. This means that partially, the business analysis (BA) variable has a significant effect on business performance. The value for innovation performance was obtained at $2.708 > t$ table (1.97214), in accordance with the criteria for testing the hypothesis that H_0 was rejected and H_a was accepted. This means that partially, the variable innovation performance (IP) has a significant effect on the business performance of SMEs in the city of Bandung. The simultaneous testing is as follows (Table 6):

Table 6. Simultaneous test results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	352,657	3	117,552	28,714	0,000 ^b
	Residual	804,363	196	4,104		
	Total	1157,020	199			

a. Predictor: (Constant), Innovation performance, Business analysis

b. Dependent Variable: Business performance

Source: Processed data 2021

Based on the ANOVA test, the calculated F value was 28.714 with a significant value of 0.000. From the calculation of the F table, namely at the level of $\alpha = 0.05$, $df_1 = k - 1 = 4 - 1 = 3$, and $df_2 = n - k = 200 - 4 = 196$, the F table is 2.65. So, when compared, $F_{count} > F_{table}$, which is $22.821 > 2.65$, so it can be concluded that the business analysis and innovation performance variables simultaneously affect business performance in small and medium enterprises (SMEs) in the city of Bandung.

3.4. Coefficient of Determination Test

From the calculation results, it is obtained that the coefficient of determination is 0.712, which means that the influence of the two independent variables on the dependent variable is 71.2%. Meanwhile, 28.8% or the rest is influenced by other variables not examined in this study. These results indicate that the two variables, namely business analysis and innovation performance, have a strong enough influence on the business performance of SMEs in the city of Bandung.

3.5. The Effect of Business Analysis on the Business Performance of SMEs in Bandung City

In this study, responses to questions regarding business analysis were in the good category, meaning that small and medium-sized businesses in Bandung have the ability to conduct business analysis that includes product trends and media promotions. It can be understood given that currently the media social media has become a necessity for consumers to seek

information to fulfill their needs. According to the results of the respondents' responses that have been described previously, each of the indicators answered by respondents show positive value. Based on the results of partial hypothesis testing or the t-test that has been carried out, it can be concluded H1 is accepted, meaning that it is important for business people, especially in the context of online business to maintain relationships and expand networks to remain competitive in the face of competition. This result is also supported by Pourkhani's research, [11] that an organization's ability to conduct business analysis can improve the performance of the business itself.

3.6. The Effect of Innovation Performance on the Business Performance of SMEs

In this study, the responses regarding the performance of innovation are in the good category. This shows that respondents are well aware that in order to remain competitive in the face of competition, innovation is needed, especially in relation to the application of social media. This has become one of the strategies for business people, especially in the context of online business. It can be seen from the results of the calculation of respondents' responses that have been described previously, each of the indicators proposed is included in the good category. Based on the results of partial hypothesis testing or the t-test that has been carried out, it can be concluded that H1 is accepted. This is also supported by research conducted by Sousa-Zomer [32] that businesses that innovate can improve the performance of the business itself.

3.7. The Effect of Business Analysis and Innovation Performance on the Business Performance

Based on the results of simultaneous hypothesis testing that has been done, it can be concluded that the two independent variables, namely business analysis and innovation performance, have a simultaneous effect on business performance in SMEs in the city of Bandung. In the ANOVA results, the conclusions that can be obtained show that the innovation performance variable is a variable that has an important influence on business success, especially SMEs in building competitive advantage. These results also show a conformity with Agwu's research [12] that business analysis capabilities are one of the factors in building sustainable business performance, as well as Gallego-Alvarez's research [13] which states that innovation is important in improving business performance.

4. Conclusion

The results of this study reveal that the current business growth, especially small and medium business actors in the city of Bandung, has experienced a fairly high increase. In this era of the COVID-19 pandemic, SMEs must be able to improve their business analysis skills, especially regarding business trends. In addition, the innovation factor is also felt to be very important in order to survive in business competition. Therefore, every business actor, especially SMEs, must review the strategy they will choose. In this study, the role of business analysis skills and innovation has a high enough influence in building business performance. The development of consumer behavior models in online business is a challenge for academics that is highly expected by online marketers. However, the model tested in this study illustrates that in today's business context, the innovation variable is an important factor. Therefore, suggestions for companies or organizations to always maintain and develop their innovations in order to gain knowledge that can be used as the ability to compete. As for further researchers, the findings of this study are only limited to two variables, then future researchers

should add other variables either as independent or moderating variables to explain what factors can affect business performance.

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