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Marketing intelligence: Innovation ability to anticipate global competition

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ABSTRACT

Making strategic decisions in a dynamic business environment has become a challenge for business people, especially in small and medium-sized enterprises (SMEs). Contextual knowledge gained in understanding the external environment is a factor that must be owned by every business person so that they gain a competitive advantage in increasing competition. This study aims to test the Entrepreneurial Performance model. The research was conducted on SMEs in West Java, in the city of Bandung. The sample selection was determined using purposive sampling method and obtained 170 respondents as a sample. The analysis was carried out using the Structural Equation Model (SEM). The results of the study indicate the fit model after modification and produce an alternative model in the form of a correlation between Marketing Intelligence and Entrepreneurial Performance. Marketing Intelligence, Product Innovation and Competitive Advantage have a direct significant influence on Entrepreneurial Performance. Product Innovation partially has no significant effect on Competitive Advantage. This research is expected to contribute to SMEs in the city of Bandung to always have good knowledge before making a decision. This knowledge includes an understanding of trends, media, competitors, and suppliers. The limitation in this study is also in its scope, which is only limited to a few SMEs in the city of Bandung. It is expected that future researchers will add samples and use other variables that can improve entrepreneurial performance.

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Introduction

Making strategic decisions in a dynamic business environment is a challenge faced by many organizations (Popovič, 2019). Although most organizations have provided good performance in implementing management, they are still not considered effective (McAdam, 2017). This is because the level of global competition demands that every company or organization has a competitive advantage (McAdam, 2017; Udriyah, 2019). Management practices at the organizational level can determine success for the organization itself. However, it cannot be realized if managers do not have an in-depth understanding of changing market trends (Falahat, 2020). Therefore, an important point in developing effective strategic planning is scanning the environment to find opportunities and threats (Noviyanti, 2020). Currently, companies are required to continuously update information in order to be able to compete. The importance of understanding the market is an important part of building a competitive advantage so as to increase revenue growth (Rodrigues, 2019; Davenport, 2020). Analysis of the market is considered a special form of research that can form the basis for decision making. Due to the volatile business environment and the increasingly strong influence of globalization, new challenges arise for every business organization (Wirth, 2018; Paschen, 2019; Bruyn, 2020). To enter new markets, companies must maximize their market intelligence capabilities to differentiate themselves from others through providing innovative products in the market.

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However, despite the maintenance and encouragement of various technology-based knowledge, many companies do not effectively utilize their technology and knowledge in gaining competitive advantage (Al-Weshah, 2017). Almost all owners and managers in organizations want their business to perform well. Revolutionary advances in technology and rapid changes have created serious challenges for organizations (Ramos, 2017). To maintain sustainable growth, organizations must innovate both in terms of products, processes, and marketing strategies, but this cannot be realized if the organization does not have an understanding of the market that is currently always evolving (Hussein, 2020). Since the advent of the Internet, every idea of a business model has changed, as all activities that were originally carried out traditionally have now entered the digital era (Kotler, 2019). Marketing intelligence has shaped the logic in which companies must seize opportunities in the external environment (Braasch, 2020). The concept of marketing intelligence (MI) is a strategy that can be carried out by all parties to obtain information by collecting market data and analysis in accordance with current market conditions (Nghia, 2018). Previous research has stated that MI can contribute to organizations in marketing decision making (Kanwal, 2017a). In West Java, the development of SME business is increasing day by day. According to the data from the Central Bureau of Statistics, there are five types of SMEs in West Java that shows a quite significant growth since 2020 to 2021. The first one is convection and advertising, which has grown 25 percent, indicating an increase from 56 to 81 SMEs in a year. The food industry has grown 37 percent, as the number increases from 67 to 104 SMEs in 2021. Printing and screen-printing SMEs in West Java show similar growth, namely 11 and 12 percent. The largest growth is from home industry SMEs, which increases 42 percent, and reached 113 SMEs in 2021.

From this data, it can be known that there is an increase in the growth of SMEs from various industries in the city of Bandung. However, this growth is not accompanied by the ability to expand by expanding its market. This means that the growth of SMEs in can only competes in the national realm or in the regional city of Bandung. Therefore, this research is proposed to develop entrepreneurial performance and to examine the factors that can influence it. Previous studies stated that to obtain good performance, several variables were applied as factors that could drive the performance itself. Thus, the formulation of the problem in this study is whether the independent variables, namely, marketing intelligence, product innovation, and competitive advantage affect entrepreneurial performance? Does the designed model fit the field data? Specifically, in the empirical model, can the variables of marketing intelligence and product innovation have a role in entrepreneurial performance through competitive advantage?

Literature Review

Conceptual Background, Empirical Review and Hypothesis Development

Marketing Intelligence, Product Innovation, and Competitive Advantage

Intelligence in the context of marketing is an important factor for organizations in responding to competitive changes, especially in the era of globalization (Kanwal, 2017a). Hendar (2020) stated that organizational success can be obtained if it is consistent in providing its needs so that it is better than its competitors. This is why marketing intelligence plays an important role in facing increasing competition. The need for related marketing information in an organization's marketing environment is an issue that has been widely discussed by researchers (Pinarbasi, 2019; Hendar, 2020). To analyze and absorb changes in the external environment, organizations must be able to collect data and information with the aim of being the basis for decision making (Konishi, 2020). According to Serdari (2020), this information can direct organizations to create innovative products before the competition begins. Zikmund (1996) defined marketing intelligence as the ability to find sources of information, or the process of gathering information (Hegdepatil, 2021), about changes in the business environment, including product trends or competitors as a basis for making marketing decisions. This process will help the company or organization to have a better understanding of what is happening in the market, and what opportunities can be obtained to determine current and future needs and preferences. Kanwal (2017b) described marketing intelligence as a structure of people interaction, analyzing and distributing relevant, timely, and accurate information to be used by marketing decision makers to improve their marketing planning. According to Al-Hashem (2020), marketing intelligence is seen as a set of procedures and methods designed to generate, analyze, disseminate, and store anticipated informed marketing decisions on a regular basis. Daabes (2017) explained that given the growing competition, managers face an urgent need to have updated intelligence for effective strategic decision making. Eleter (2019) also argued that intelligence analysis with planned monitoring, scanning, and the use of multiple methods to collect and analyze information, is necessary not only to function but also to prevent challenges, risks, and threats. Groothuis (2020) stated that in order to adapt effectively to the environment, managers must collect more information as an effort to improve business performance. In addition, the information obtained must focus on what is actually needed (Hussein, 2020). In the concept of marketing intelligence, analytical skills will determine the quality of the information obtained where these skills come from cognition. In marketing research, the role of marketing intelligence is considered very important (Ramos, 2017). The information received will be material for managers in dealing with problems in the field. A more recent study by Seidlova, (2019) highlighted that in today's wave of changing business world, companies are faced with unpredictable environmental changes, which are so fast that constant readiness is essential. Against this background, marketing intelligence serves as a key input, because the quality of marketing information affects the effectiveness of decision-making in all industries and each industry must design the means to survive and compete, thereby producing innovative products (Jarek, 2019). Kanwal (2017a) measured the dimensions of marketing intelligence with four factors, namely customer information, products, competitors, and analytical skill. Namely innovation and risk-taking. All this while, employees have been encouraged to be innovative and dare to take the trial.

H1. Marketing intelligence has a positive effect on product innovation

H2. Marketing intelligence has a positive effect on competitive advantage

Product Innovation and Competitive Advantage

According to Lee (2017), the ability of an organization to understand the external environment can have a relevant effect on growth and innovation. Among the many definitions put forward, innovation is described as a process, namely the activity of creating new products or services, new technologies, or improving existing products or services using existing technological processes and organizations (Schubert, 2020). Innovation can be classified according to Zhang (2018) as product innovation (providing new or better goods or services); process innovation (providing new ways to organize and incorporate inputs in the production process); and organizational innovation (providing new or improved company resources). However, this study focuses on product innovation, where Jugend (2018) defined that product innovation is the introduction of new goods or services in order to meet market or user needs. In addition, product innovation can help protect organizations from market threats and competitors (Falahat, 2020). Charterina (2018) concluded that 80% of innovations carried out by organizations have a positive and significant impact on business performance. Currently, companies are faced with strong competition where there are many products/services that are the same or similar in the market. As a result, companies need to continuously provide new products/services or improve existing ones to gain an edge. Bustinza (2019) stated that innovation is described as a future building block that can be used to gain competitive advantage, especially in the global market. Companies that do not innovate will not be able to face competition or even fail (Cozzarin, 2017; Marshall, 2019). Aksoy (2017) mentioned that innovation indicators are divided into three, namely product innovation, process innovation, and organizational innovation. Song (2020) in his research on manufacturing companies in Turkey, found that companies that design and implement a clear innovation strategy have improved their financial performance, customer performance, internal business process performance, as well as gaining a competitive advantage over the competition. When a company loses its market, innovation is considered a solution to enter new markets that can gain profitability and gain a competitive position. Two studies conducted in different countries by Zhang (2018) and Snihur (2019) showed a positive relationship between product innovation and competitive advantage and organizational performance. Mahmud (2017) has discovered how organizations can map innovation. This framework is called “The 4Ps of innovation space”. Within that framework each innovation can be mapped somewhere in the four-dimensional space. These dimensions are process, position, product, and paradigm.

H3. Product innovation has a positive effect on competitive advantage

Competitive Advantage and Entrepreneurial Performance

The small and medium enterprise (SME) sector has proven its role in economic development in every country. However, when the presence of technology brings change, this sector faces quite aggressive challenges so it must reformulate its strategy in order to have an advantage. Liu (2017) described competitive advantage as something that an organization can have that its competitors do not have. Organizations can gain competitiveness by offering customers better and higher value than competitors. Chatzoglou (2018) conceptualized competitive advantage as a unique product or service. Competitive advantage is the company's ability to outperform competitors in the same industry that can attract customers, build prestige for the organization or its products, and increase the perceived value and customer satisfaction (Anning-Dorson, 2018). This study of competitive advantage includes two dimensions: taking advantage of market opportunities and neutralizing threats (Jain, 2017). In exploiting market opportunities, organizations can take three different approaches (eg, product development, mergers, and acquisitions). According to Kuo (2017) and Walsh (2017) competitive advantage is defined as the strategic benefits of a company or organization that allow it to perform better than competitors. Initially, Porter has suggested four main competitive strategies: differentiation strategy, cost leadership strategy, differentiation focus and cost focus strategy (Quaye, 2019). The first two strategies, namely differentiation and cost leadership are strategic weapons and are considered as competitive advantages. Organizations that can gain competitive advantage can improve business performance. Rua (2018) stated that business performance can be measured by two factors, namely profit growth and the ability to adapt to the environment (developing trends). According to Salguero (2019), organizations can pursue superior performance using two strategies, namely a good understanding of the market and product innovation. Understanding this market can result in cost leadership enabling companies to gain a price-based advantage by reducing various costs associated with materials, product development, marketing, operational, supplier, wage and management costs which in turn provide higher performance benefits.

H4. Competitive advantage has a positive effect on entrepreneurial performance

According to the explanation and hypothesis development that has been explained, the research model of study is illustrated as:

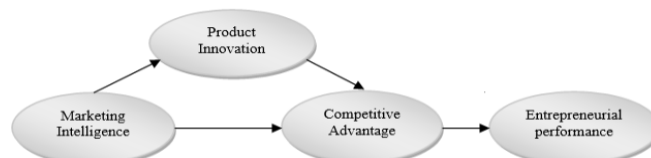


Figure 1: Conceptual Framework

This study proposes that marketing intelligence have a positive influence on product innovation and competitive advantage. In this regard, marketing intelligence enables organization to analyze and absorb changes in the external environment, thus lead organization to produce innovative products, even before the competition begins. When organizations are capable to innovate by considering the condition of both external and internal environment, they will be able to gain profitability and gain a competitive position. As explained before, this study also proposes that competitive advantage can predict entrepreneurial performance. Several studies have shown that organizations that can gain competitive advantage can improve their performance.

Research and Methodology

Instrument Development

The questionnaires are designed to measure marketing intelligence, product innovation, competitive advantage, and entrepreneurial performance. Questionnaires were distributed to SMEs in West Java, especially in Bandung City using the following criteria:

- i. SMEs that run their business activities in the city of Bandung
- ii. SMEs that have salespeople in carrying out their activities
- iii. SMEs have been running for at least 10 years

Table 1 and Table 2 show the variables, operations, descriptions, and measurements of each variable

Table 1: Operational Variables

Variable	Description	Source
Marketing Intelligence	Ability to find sources of information, or the process of gathering information about changes in the business environment	(Rayón, 2017; Tahmasebi, 2017; Falahat, 2020)
Product Innovation	A process, namely the activity of creating a new product or service, new technology, or improving an existing product or service using existing technological processes and organizations.	(Arnal, 2018; Nanda, 2018; Nwachukwu, 2018)
Competitive Advantage	Something an organization can have that its competitors don't have.	(Lorenzo, 2018; Syapsan, 2019)
Entrepreneurial Performance	The results of the organizational goals achieved through the effectiveness of the implemented strategies	(Anwar, 2018; Lorenzo, 2018; Johan, 2019)

Variable Indicator

Table 2: Variable Measurement

Variable	Item	Indicator	Reference
Marketing Intelligence	MI.1	Organizational ability to understand customers	(Falahat, 2020)
	MI.2	Organizational ability to understand product trends	
	MI.3	The organization's ability to understand competitors' movements	
	MI.4	Organizational ability to analyze information	
Product Innovation	PI.1	Availability of product variants	(Marshall, 2019)
	PI.2	Improvements to existing products	
	PI.3	New product manufacturing process	
	PI.4	Additional attributes for existing products	
Competitive Advantage	CA.1	Ability to take advantage of opportunities	(Syapsan, 2019)
	CA.2	Deliver value for customers	
	CA.3	Neutralize threats	
	CA.4	Ability to adapt to trends	
Entrepreneurial Performance	EP.1	Increased sales volume	(Anwar, 2018)
	EP.2	Organizational innovation	
	EP.3	Investor increase	

Samples and Data Collection

To measure entrepreneurial performance, this research was conducted in West Java, especially in the city of Bandung, Indonesia. The population in this study is SMEs in Bandung City, which are then selected using several criteria. The sampling technique was

carried out using purposive sampling technique, with the criteria that the organization had been operating for at least 10 years as a sampling requirement. The data is collected by distributing questionnaire directly. The questionnaires are distributed to 200 business owner respondents and there are 170 questionnaire which are returned and completely filled, and can be used for further data processing. The data were analyzed using Structural Equation Modeling with the help of AMOS version 23 program.

Data Analysis Method

Data analysis in this study used structural equation model analysis (SEM) with AMOS statistical program version 23. The sample size provides the basis for estimating the sampling error. With the estimation model using Maximum Likelihood, the minimum sample required is 100. The Maximum Likelihood method will increase its sensitivity if the sample is above 400, so it will produce a significant difference so that the Goodness-of-fit measure becomes bad. Therefore, it is recommended that the number of samples range from 150 to 400. This research was conducted using a sample of 170 data from SMEs in West Java, Bandung City.

Result and Discussion

Respondents' Profile

Respondent data obtained from this study were 58 percent men and 42 percent of women. For the age group, the highest number is in the age range of 31-45 years with a percentage of 45 percent. Then for the majority educational background group from bachelor degree. While in the income group, the data obtained is 31 percent for respondents with an income level of Rp 2,500,000 – 5,000,000.

Table 3: Respondents' Profile

Criteria	Distribution	N	Percentage
Gender	Male	98	58
	Female	72	42
Age	18 – 30 Year	62	36
	31 – 45 Year	76	45
	46 – 60 Year	32	19
Education	Senior High School	23	14
	Diploma	54	32
	Bachelor	61	36
	Master	32	19
Income	< Rp 2.500.000	31	18
	Rp 2.500.000 – 5.000.000	53	31
	Rp 5.100.000 – 7.500.000	49	29
	> Rp 7.500.000	37	22

Data Reliability Test

Based on the results of the standardized loading estimate significance test, objective information is obtained that all indicators provide a very significant standardized loading estimate value ($p < 0.001$) with a loading value greater than 0.50. This indicates that all indicators are valid in measuring the latent variable. For reliability testing, Cronbach's Alpha (α) is calculated using the SPSS version 23 program, with test results > 0.70 . Construct Reliability (CR) and Average Variance Extracted (AVE) are calculated manually with the following equation:

$$CR = \frac{(\sum_{i=1}^n \lambda_i)^2}{(\sum_{i=1}^n \lambda_i)^2 + (\sum_{i=1}^n e_i)}$$

$$AVE = \frac{(\sum_{i=1}^n \lambda_i^2)}{n}$$

Statistical results for all databases with alpha values and Construct reliability (CR) values must be above 0.7. The value of Average Variance Extracted (AVE) is recommended above 0.5. From the results of this test, the values obtained by Cronbach's Alpha, Construct reliability and Average Variance Extracted meet the critical values, so this data can be said to be reliable.

Table 4: Reliability Test and Standardized Loading Estimate

Latent Variable	Measurement Indicator	Standard Loading	Ca	CR	AVE
Marketing Intelligence	Organizational ability to understand customers	0,684	0,847	0,857	0,601
	Organizational ability to understand product trends	0,801			
	The organization's ability to understand competitors' movements	0,784			
	Organizational ability to analyze information	0,825			
Product Innovation	Availability of product variants	0,738	0,811	0,811	0,518
	Improvements to existing products	0,736			
	New product manufacturing process	0,696			
	Additional attributes for existing products	0,709			
Competitive Advantage	Ability to take advantage of opportunities	0,581	0,823	0,832	0,561
	Deliver value for customers	0,879			
	Neutralize threats	0,661			
	Ability to adapt to trends	0,834			
Entrepreneurial Performance	Increased sales volume	0,825	0,840	0,849	0,655
	Organizational innovation	0,889			
	Investor increase	0,702			

Model Fit Test

The results of the model suitability test in this study are complete as shown in Figure 2. The results of the model suitability test using Chi-square, CMIN/DF, GFI, AGFI, RMSEA, TLI and CFI are summarized as in Table 5. Table 5 shows that the planned model fits marginally, because after being tested, for the values of RMSEA, RMR, AGFI, CFI, GFI and TLI the results were good, but the Chi Square p-value was $0.000 < 0.050$. So with this, modification of the model is carried out by following the modification indices by linking the error on the MI1 indicator with the error on the MI2 indicator (Marketing Intelligence variable), then connecting the error on the MI3 indicator with the error on the MI4 indicator (Marketing Intelligence variable), and linking the error on the CA3 indicator with an error on CA1 (Competitive Advantage variable), and linking the Marketing Intelligence variable with Entrepreneurial Performance. The results of the model modification can be seen in Figure 2.

Table 5: Model Fit on Initial Model

Statistical Test	Critical Value	Test results	Information
Chi Square	-	170,713	-
Degree of Freedom	-	86	-
p-Value	$> 0,05$	0,000	Not fit
CMIN/DF	$< 2,00$	1,985	Fit
Root Mean Square Residual (RMR)	$> 0,05$	0,125	Fit
Root Mean Square Error of Approximation (RMSEA)	$< 0,08$	0,050	Fit
Goodness of Fit Index (GFI)	$\geq 0,90$	0,948	Fit
Adjusted Goodness of Fit (AGFI)		0,927	Fit
Comparative Fit Index (CFI)		0,968	Fit
Tucker Lewis Index (TLI)		0,961	Fit

After modification of the measurement model, the results of Chi-square, CMIN/DF, GFI, AGFI, RMSEA, TLI and CFI meet the critical value, along with the p-value $0.057 > 0.05$ and CMIN/df obtains better results and meet the critical value. In this alternative model there is a new correlation that occurs between the variables of Marketing Intelligence and Entrepreneurial Performance. With this, the modified model is better than the initial model and the alternative model has a model that fits the population studied as shown in Figure 2, and the results of the improved model fit are shown in Table 6.

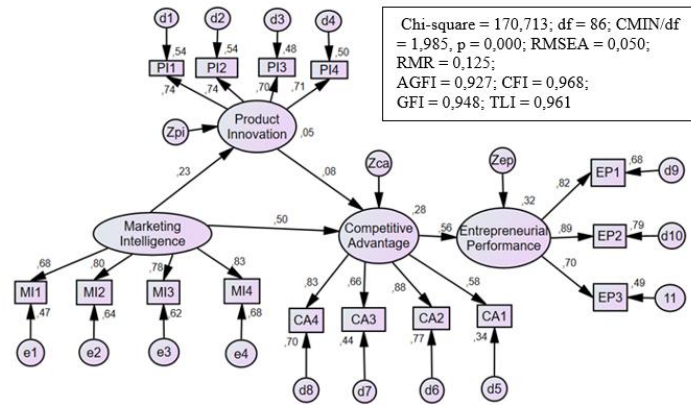


Figure 2: Initial Research Model

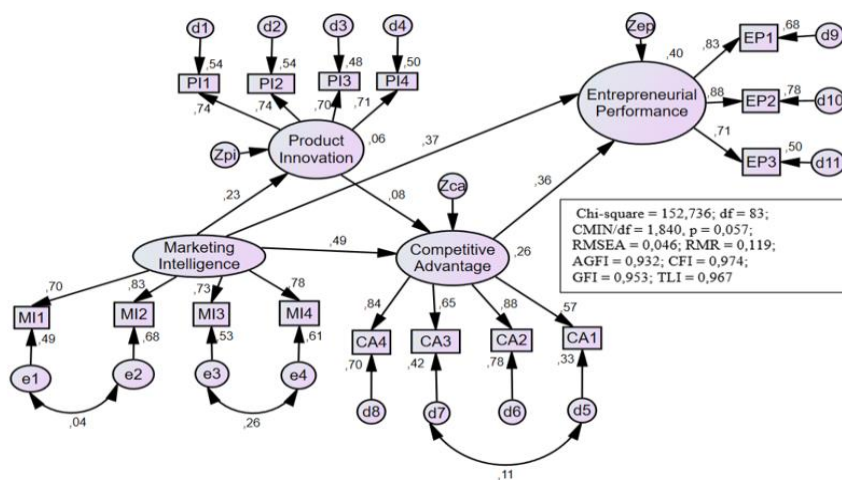


Figure 3: Alternative Model

Table 6: Model Fit in Alternative Models After Repair

Statistical Test	Critical Value	Test results	Information
Chi Square	-	152,736	-
Degree of Freedom	-	83	-
p-Value	> 0,05	0,057	Fit
CMIN/DF	< 2,00	1,840	Fit
Root Mean Square Residual (RMR)	> 0,05	0,119	Fit
Root Mean Square Error of Approximation (RMSEA)	< 0,08	0,046	Fit
Goodness of Fit Index (GFI)	≥ 0,90	0,953	Fit
Adjusted Goodness of Fit (AGFI)		0,932	Fit
Comparative Fit Index (CFI)		0,974	Fit
Tucker Lewis Index (TLI)		0,967	Fit

Convergent Validity Test

Convergent validity test is obtained from the model measurement data for each variable, this test is carried out to determine the validity of each estimated indicator, by measuring the dimensions of the concepts tested in the study. If each indicator has a critical ratio (CR) value greater than twice standard error (SE), indicating that the indicator has measured what it is supposed to measure in the model presented (Ferdinand, 2002). From the test results, the regression weight value shows that the critical ratio (C.R.) is greater than twice the standard error (S.E.), which means that all indicators in the study are valid for each latent variable. The regression weight values for each construct are as shown in Table 7.

Table 7: Regression Weights on Factor

			Estimate	S.E.	C.R.	P
MI4	<---	Marketing_Intelligence	1,000			
MI3	<---	Marketing_Intelligence	,897	,054	16,568	***
MI2	<---	Marketing_Intelligence	1,223	,114	10,733	***
MI1	<---	Marketing_Intelligence	1,144	,116	9,866	***
PI1	<---	Product_Innovation	1,000			
PI2	<---	Product_Innovation	1,020	,080	12,698	***
PI3	<---	Product_Innovation	,927	,077	12,054	***
PI4	<---	Product_Innovation	,919	,076	12,121	***
CA2	<---	Competitive_Advantage	1,343	,114	11,797	***
CA3	<---	Competitive_Advantage	,796	,075	10,608	***
CA4	<---	Competitive_Advantage	1,194	,104	11,508	***
EP1	<---	Entrepreneurial_Performance	1,000			
EP2	<---	Entrepreneurial_Performance	1,086	,061	17,719	***
EP3	<---	Entrepreneurial_Performance	,993	,068	14,697	***
CA1	<---	Competitive_Advantage	1,000			

Model Causality Test

Through the AMOS statistical program, it can be analyzed and calculated the results of the regression weights between latent variables which are often referred to as estimated loading factors or lambda values. In addition, the degree of freedom (df), the value of C.R or t-count can also be known.

Based on the significance of t-count with probability value (p) = 0.05. The results of the causality test regression weights are as shown in Table 8. Further explanation of the regression weight evaluation analysis can be described and explained as follows:

- The Marketing Intelligence variable has a significant effect on the Product Innovation variable with a t-count value smaller than the probability value <0.05.
- The Marketing Intelligence variable has a significant effect on the Competitive Advantage variable with a t-count value smaller than the probability value <0.05.
- The Product Innovation variable does not significantly affect the Competitive Advantage variable with a t-count value greater than the probability value $0.154 > 0.05$.
- The Competitive Advantage variable has a significant effect on the Entrepreneurial Performance variable with a t-count value smaller than the probability value <0.05.
- The Marketing Intelligence variable has a significant effect on the Entrepreneurial Performance variable with the t-count value smaller than the probability value <0.05.

Table 8: Evaluation of Causality Test Regression Weights

			Estimate	S.E.	C.R.	P
Product_Innovation	<--	Marketing_Intell	,208	,055	3,765	***
Competitive_Adv	<--	Marketing_Intell	,677	,094	7,235	***
Competitive_Adv	<--	Product_Innovation	,114	,080	1,425	,154
Entrepreneurial_Perf	<--	Competitive_Adv	,285	,035	8,115	***
Entrepreneurial Perf	<--	Marketing_Intell	,244	,041	5,880	***

Direct Effects, Indirect Effects, and Variable Total Effects

The magnitude of the influence of each latent variable directly (standardized direct effect) and indirectly (standardized indirect effect) as well as the total effect (standardized total effect) are summarized in Table 9. The magnitude of the influence of each latent variable directly (standardized direct effect) or indirect (standardized indirect effect) and total effect (standardized total effect) are explained as follows:

- The Marketing Intelligence variable has a direct effect or influence on Product Innovation of 0.231 and there is no indirect effect.

- ii. Marketing Intelligence variable has a direct effect or influence on the Competitive Advantage variable of 0.519 and has an indirect effect of 0.018, so the total effect is 0.537.
- iii. Marketing Intelligence variable has a direct influence on Entrepreneurial Performance of 0.372 and does not have an indirect effect.
- iv. Product Innovation variable has a direct effect on Competitive Advantage of 0.078 and has no indirect effect.
- v. Competitive Advantage variable has a direct effect on Entrepreneurial Performance of 0.569 and does not have an indirect effect.

Table 9: Standardized Direct, Indirect and Total Effects

Variable	Direct Effect	Indirect Effect	Total Effect
Marketing Intell → Product Innovation	0,231	0,000	0,231
Marketing Intell → Competitive Advantage	0,519	0,018	0,537
Marketing Intell → Entrepreneurial Perf	0,372	0,000	0,372
Product Innovation → Competitive Advantage	0,078	0,000	0,078
Competitive Advantage → Entrepreneurial Perf	0,569	0,000	0,569

Coefficient of Determination

The magnitude of the simultaneous variable contribution to other variables is explained as follows:

- i. Competitive Advantage variable has a role of 56.8.4% on Entrepreneurial Performance.
- ii. Product Innovation and Marketing Intelligence variables have a role of 71.7% of Competitive Advantage.
- iii. Marketing Intelligence variable has a role of 62.8% towards Product Innovation.
- iv. Marketing Intelligence variable has a role of 59.3% to Competitive Advantage.
- v. Marketing Intelligence variable has a role of 52.1% on Entrepreneurial Performance.

Table 10: Coefficient of Determination

Influencing Variables	Affected Variables	Effective Donation
Competitive Advantage	Entrepreneurial Performance	56,8%
Product Innovation dan Marketing Intelligence	Competitive Advantage	71,7%
Marketing Intelligence	Product Innovation	62,8%
Marketing Intelligence	Competitive Advantage	59,3%
Marketing Intelligence	Entrepreneurial Performance	52,1%

Discussion

Effect of Marketing Intelligence on Product Innovation

In this study, it can be seen that there is a significant influence of the Marketing Intelligence variable on Product Innovation. Based on this data, it is very important for SMEs to continue to improve their ability to understand market trends that can affect business performance. This can be done by seeking information about the market and what consumers want so that it can trigger the development of Product Innovation. These results are consistent with the findings from Serdari (2020) and Hegdepatil (2021) that to apply innovation to products, understanding of the target market must be good and requires structured analysis. Marketing intelligence is a factor that can overcome the complexity of information in the external environment. Thus, the first hypothesis can be accepted.

Effect of Marketing Intelligence on Competitive Advantage

In this study, it can be seen that there is a significant influence of the Marketing Intelligence variable to encourage an increase in Competitive Advantage. Based on this data, it is very important for SMEs to continue to improve Marketing Intelligence by seeking information about the market and what consumers want so that SMEs will have a better competitive advantage compared to competitors. This result is also supported by Eleter's research (2019) that intelligence analysis with planned monitoring, scanning and the use of multiple methods to collect and analyze information, is needed not only to function but also to prevent challenges, risks and pursue competitive advantage. Therefore, based on this, the second hypothesis is accepted.

Effect of Product Innovation on Competitive Advantage

In this study, data obtained that Product Innovation does not significantly affect Competitive Advantage. This can happen because the variable that can increase the Competitive Advantage is not only Product Innovation but there are other variables that influence it, such as Service Quality. Based on the distribution of questionnaires conducted, respondents answered that competitive advantage

can be obtained through the network that is built and the quality of the services provided. Therefore, the hypothesis which states that product innovation has an influence on competitive advantage is rejected.

Effect of Marketing Intelligence on Entrepreneurial Performance

In the study, data obtained that Marketing Intelligence has a significant influence on Entrepreneurial Performance. This relationship is a new finding in the measurement model and can be an alternative model. In the initial model shown in Fig. 1 obtained data that the p-value is smaller than 0.05 (Table 1), so the model is said to be unfit with empirical conditions. Therefore, modifications were made to the initial model, then an alternative model was obtained with the emergence of a relationship between Marketing intelligence and Entrepreneurial Performance in the population studied. This finding is supported by research by Snihur (2019) that marketing intelligence has a direct influence on entrepreneurial performance.

Conclusion

After the initial model was improved, it was found that the Goodness of Fit Test as a whole had met the feasibility of the model (fit), and gave rise to a new relationship between the Marketing Intelligence variable and Entrepreneurial Performance, which means that the model became an alternative model for the population studied. Therefore, the model is in accordance with empirical conditions in the SME world, especially in the city of Bandung. In the research model, the results show that the Marketing Intelligence variable has a direct effect on Product Innovation. The Marketing Intelligence variable has a direct and indirect influence through Product Innovation on Competitive Advantage. There is a direct influence of the Marketing Intelligence variable on Entrepreneurial Performance. The Competitive Advantage variable on the Entrepreneurial Performance variable has a significant direct effect. However, there is no significant effect of the Product Innovation variable on Competitive Advantage so that a direct effect is obtained with a small value of 0.078. Based on the research results, it is practically recommended for local governments to develop SME actors so that they have good Marketing Intelligence, Product Innovation, and Competitive Advantage that can increase competitiveness and increase entrepreneurial spirit through entrepreneurship training. In addition, the results of this study can also contribute to the world of education, especially entrepreneurship education to pay attention to entrepreneurial attitudes and the desire to seek various kinds of market information as internal or personal factors. Theoretically, this research model can be developed further, such as considering personality and demographic factors that determine the unique behavior of each individual.

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