ALGEBRA : JURNAL PENDIDIKAN, SOSIAL DAN SAINS

ISSN : 2807-663X e-ISSN : 2807-629X
Journal Homepage : https://algebra.yana.or.id/index.php/ejournal/index
Volume 6 Number 2 (2026)

THE INFLUENCE OF PRODUCT INNOVATION AND LOCATION ON BUSINESS COMPETITIVENESS ALMADANI JUARA CEMILAN IN PAJUS MARKET

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ABSTRACT

This research is motivated by the importance of micro-enterprise competitiveness in facing increasingly fierce competition, particularly for the Almadani Juara Snacks business in Pajus Market. The purpose of this study was to determine the effect of product innovation and location on business competitiveness. This study used a quantitative approach, collecting data through a questionnaire from 100 respondents who were Almadani Juara Snacks consumers, using an accidental sampling technique. Data analysis was performed using multiple linear regression. The results showed that product innovation had a partial significant effect on business competitiveness, with a calculated t-value of 4.804 > t-table 1.660 and a significance value of 0.000 < 0.05. Location also significantly influenced business competitiveness, with a calculated t-value of 3.062 > t-table 1.660 and a significance value of 0.003 < 0.05. Furthermore, product innovation was the most dominant variable influencing business competitiveness compared to location. Simultaneously, product innovation and location significantly influence business competitiveness. The discussion shows that increasing product innovation, such as flavor and packaging variations, along with strategic location selection, can increase consumer interest and maintain business sustainability. The conclusion of this study is that product innovation and location play a crucial role in enhancing the competitiveness of Almadani Juara Cemilan in Pajus Market.

Keywords: product innovation; location; business competitiveness.

INTRODUCTION

Micro, small, and medium enterprises (MSMEs) are a crucial pillar of the economy, playing a strategic role in boosting economic growth and employment. According to Law Number 20 of 2008, MSMEs are productive businesses owned by individuals or business entities that meet certain criteria based on assets and turnover. As they develop, MSMEs face challenges in the form of increasingly fierce business competition, requiring businesses to be highly competitive to survive and thrive. Competitiveness is a business's ability to demonstrate superiority over its competitors, both in terms of product quality, price, and service, thereby attracting and retaining consumers. One factor that can increase business competitiveness is product innovation. Product innovation is the effort to create or develop products to make them more attractive and meet consumer needs. According to Kotler and Keller (2016), innovation is the result of developing new products, both existing and completely new, aimed at meeting evolving market needs. Furthermore, according to Makmur and Thahier (2015), innovation is a tool for companies to leverage change as an opportunity to run a better business. Thus, product innovation is crucial for MSMEs to create a competitive advantage amidst business competition.

In addition to product innovation, another factor influencing business competitiveness is location. Business location is where business activities take place, making it easier for consumers to access the products offered. According to Sumarwan and Tjiptono (2018), location is the place where consumers conduct transactions with a company. A strategic, easily accessible, and centrally located location will provide distinct advantages for businesses by increasing the number of customers and sales volume. Conversely, a less strategic location can hinder business development. Pajus Market is one of the centers of economic activity in Medan City, offering significant potential for business development, particularly in the culinary sector. The large number of businesses operating in the snack food sector has intensified competition. One such business is Almadani Juara Cemilan, which offers a variety of snacks such as French fries, bananas, mushrooms, sausages, baby crabs, and broccoli. In operating its business, Almadani Juara Cemilan faces competition from similar businesses with similar products and target markets. This situation requires businesses to continuously innovate their products and choose the right location to maintain and enhance their competitiveness.

Based on the existing problems, several obstacles remain for Almadani Juara Snacks, such as a lack of innovation in creating product variations and its location on a main road, which can potentially be disrupted by the surrounding environment. This demonstrates that product innovation and location play a crucial role in determining a business's success in facing competition. Therefore, research is needed to analyze the influence of product innovation and location on business competitiveness, thus providing a clear picture of the factors influencing business success. The purpose of this study is to determine the effect of product innovation on business competitiveness, the influence of location on business competitiveness, and the simultaneous influence of product innovation and location on the competitiveness of Almadani Juara Snacks in Pajus Market. This research is also supported by previous research showing that product innovation and location influence increased business competitiveness, thus strengthening the theoretical basis of this study.

Based on the description, the hypothesis in this study is: (1) product innovation is suspected to have a positive influence on the competitiveness of the Almadani Juara Snack business in Pajus Market; (2) location is suspected to have a positive influence on the competitiveness of the Almadani Juara Snack business in Pajus Market; and (3) product innovation and location are suspected to simultaneously have a positive influence on the competitiveness of the Almadani Juara Snack business in Pajus Market.

RESEARCH METHODS

This study used a quantitative approach with an associative design to analyze the influence of product innovation and location on business competitiveness. The study was conducted at Almadani Juara Cemilan, Pasar Pajus, Jalan Jamin Ginting No. 354, Padang Bulan, from October 2024 to June 2025. The study population was all consumers, with a sample of 100 respondents determined using a non-probability sampling technique through accidental sampling. The sample size was calculated using the Lemeshow formula, which was 96.04 and then rounded to 100 for greater representativeness. The data used were primary data obtained through observation, interviews, and questionnaires using a four-level Likert scale. The independent variables consisted of product innovation (X1) with indicators of product type, packaging, flavor, and features, and location (X2) with indicators of

parking availability, floor space, and strategic location. The dependent variable was business competitiveness (Y) with indicators of sales volume, brand position, and ability to survive and thrive. Data analysis techniques included validity and reliability tests, classical assumption tests (normality, multicollinearity, and heteroscedasticity), and multiple linear regression analysis. Hypothesis testing was conducted using F-tests and t-tests at a 5% significance level, as well as the coefficient of determination (R^2) to measure the model's ability to explain the dependent variable.

RESULTS AND DISCUSSION

Validity and Reliability Test

Validity Test

Validity test shows the degree of accuracy between the data that actually occurs on the object and the data collected by the researcher to determine the validity of an item, and we relate the item score to the total of the item (Sugiyono, 2017). If the calculated r > table then the question element is declared valid. The calculated r value is the result of the correlation of respondents' answers to each question on each variable analyzed by the SPSS version 22 program and the output is called corrected item correlation.

Table 1 Corrected Item-Total Correlation of Product Innovation Variables

Item-Total Statistics

	Scale Mean if item Deleted	Scale Variance if item Deleted	Corrected item Total Correlation	Rtabel	Squared multiple Correlation	Cronbach's Alpa if item Deleted	Ket
X11	12.66	2.590	0.629	0.196	0.427	0.675	**Valid**
X12	12.66	2.651	0.309	0.196	0.125	0.791	**Valid**
X13	12.61	2.402	0.597	0.196	0.427	0.674	**Valid**
X14	12.65	2.432	0.523	0.196	0.335	0.702	**Valid**
X15	12.70	2.455	0.593	0.196	0.383	0.677	**Valid**

Based on the data in Table 1, all variables are valid, therefore, the next data processing is continued because the corrected item total correlation value (calculated r value) is greater than the table r value of 0.196.

Table 2 Corrected Item Total Correlation Variable Location

Item-Total Statistics

	Scale Mean if item Deleted	Scale Variance if item Deleted	Corrected item- Total Correlation	Rtabel	Squared multiple Correlation	Cronbach's Alpa if item Deleted	Ket
X21	19.09	5.800	0.528	0.196	0.357	0.797	**Valid**
X22	19.10	5.747	0.533	0.196	0.350	0.796	**Valid**
X23	19.12	5. 480	0.588	0.196	0.374	0.787	**Valid**
X24	19.11	6.018	0.530	0.196	0.381	0.797	**Valid**
X25	19.10	5.869	0.587	0.196	0.403	0.788	**Valid**
X26	19.05	5.563	0.596	0.196	0.384	0.785	**Valid**
X27	19.05	5.765	0.537	0.196	0.359	0.796	**Valid**

Based on the data in Table 2, all questions for the location variable (X2) are declared valid, because the corrected item-total correlation values are all greater than the r table value of 0.196.

Table 3 Corrected Item Total Correlation of Competitiveness Variables

Item Total Statistics

	Scale Mean if item Deleted	Scale Variance if item Deleted	Corrected item-Total Correlation	R_{tabel}	Squared multiple Correlation	Cronbach's Alpa if item Deleted	Ket
Y1	18.53	5.787	0.587	0.196	0.388	0.811	**Valid**
Y2	18.49	5.768	0.615	0.196	0.395	0.808	**Valid**
Y3	18.59	5.355	0.517	0.196	0.318	0.828	**Valid**
Y4	18.58	5.458	0.618	0.196	0.489	0.806	**Valid**
Y5	18.57	5.884	0.503	0.196	0.547	0.823	**Valid**
Y6	18.59	5.436	0.669	0.196	0.621	0.798	**Valid**
Y7	18.55	5.644	0.615	0.196	0.418	0.807	**Valid**

Based on the data in Table 3, all questions for the competitiveness variable (Y) are declared valid, because the corrected item-total correlation values are all greater than the r table value of 0.196.

Reliability Test

To determine the reliability of the research data, testing was conducted using SPSS 22. If the Cronbach's Alpha value is greater than 0.70 (or 0.60 depending on the reference), the instrument is deemed reliable. The reliability test results for the product innovation (X1), location (X2), and competitiveness variables of Almadani Juara Snacks at Pajus Market are presented in Tables 4, 5, and 6 below:

Table 4 Reliability Value of the Product Innovation Variable Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.749	.795	5

Based on the data in Table 4, the Cronbach's Alpha value for the Product Innovation variable is 0.749. Since 0.749 > 0.60, the questionnaire is considered reliable.

Table 5 Reliability Values for the Location Variable Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.817	.818	7

Based on the data in Table 5, it is known that the Cronbach's Alpha value for the Location variable is 0.817. Since 0.817 > 0.60, the questionnaire is declared reliable.

Table 6 Reliability Values of Competitiveness Variables Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.834	.839	7

The results of the reliability test show that the Cronbach's Alpha value for the product innovation variable X1 is 0.749, location X2 is 0.817, and competitiveness Y is 0.834. Since all values are greater than 0.60, the three variables are declared reliable.

Classical Assumption Test

Normality Test

Normality testing can be performed using the Kolmogorov-Smirnov test at a significance level of $\alpha = 0.05$ (5%). The results of the Kolmogorov-Smirnov test can be seen in Table 7 below:

Table 7 Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	1.50094495
Most Extreme Differences	Absolute	.192
	Positive	.108
	Negative	-.192
Test Statistic		.192
Asymp. Sig. (2-tailed)		.000[c]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

Based on the data in Table 7, the residuals are not normally distributed because the Asymp. Sig. (2-tailed) value is 0.000 < 0.05. The Kolmogorov-Smirnov test results also indicate an abnormality in the residual distribution. However, with a large sample size (N=100), this condition is still acceptable based on the Central Limit Theorem. According to Sugiyono (2019:81), data with samples exceeding 30 can be considered normally distributed even if the normality test results indicate otherwise. Therefore, parametric statistical analysis such as multiple linear regression can still be used. By fulfilling other classical assumptions such as multicollinearity and heteroscedasticity tests, the regression model is considered suitable for use, so the analysis results remain valid for testing hypotheses and drawing conclusions.

Heteroscedasticity Test

Heteroscedasticity testing can be performed graphically and through statistical analysis in the form of a scatterplot. A regression model is considered free of heteroscedasticity if the points are randomly distributed and do not form a clear pattern and are spread both above and below zero on the Y-axis. The following is a diagram of the heteroscedasticity test:

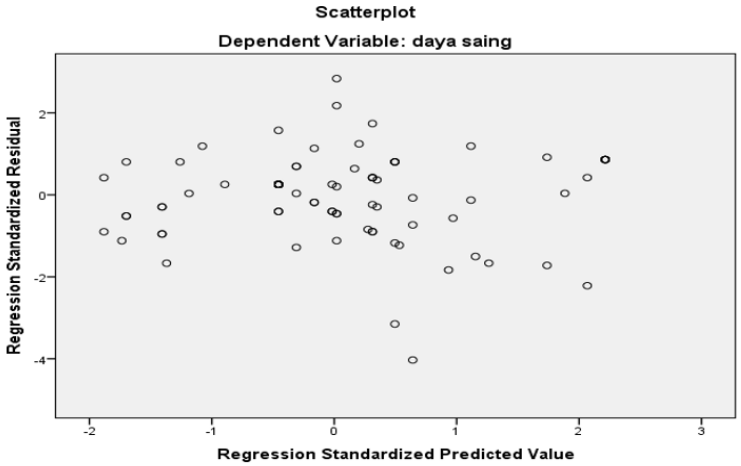

Figure 1. Heteroscedasticity Test

The scatterplot test results show no specific pattern, and the significance value is >0.05 (using statistical tests such as Glejser or Park), thus concluding that there are no symptoms of heteroscedasticity. The figure above shows that the points are evenly distributed above and below the zero line, without any clear pattern. Therefore, there is no heteroscedasticity, meaning the residual variance is relatively constant across the prediction range.

Multicollinearity Test

Symptoms of multicollinearity can be seen from the Tolerance and VIF (Variance Inflation Factor) values. A Tolerance value > 0.10 and a VIF < 10.0 indicate no multicollinearity. The Tolerance and VIF (Variance Inflation Factor) values are shown in the following table:

Table 8 of Multicollinearity Test
Coefficients

Model		Collinearity	
		Tolerance	VIF
1	(Constant)		
	Inovasi Produk	.259	3.866
	Lokasi	.259	3.866

Based on the data in Table 8, the Variance Inflation Factor (VIF) value for the product innovation variable is 3.866 and for the location variable is 3.866, both of which are less than 10.0. Furthermore, the Tolerance value for both variables is 0.259, which is greater than 0.10. This indicates that there is no multicollinearity in the regression model.

Multiple Linear Regression Analysis

At this stage, the researcher tested the influence of the product innovation variable (X_1) and the location variable (X_2) partially and simultaneously on the competitiveness variable (Y). The results of the analysis are presented in the following tables:

Table 9 of Multiple Linear Regression
Coefficients

Model		Unstandard Coefficients		Standardized Coefficients	Collinearity Statistik	
		B	Std.Eror	Beta	Tolerance	VIP
1	(Constant)	2.369	1.299			
	Inovasi Produk	0.750	.156	.528	.259	3.866
	Lokasi	0.333	.109	.336	.259	3.866

Based on the data in Table 9, the multiple linear regression equation obtained is as follows:
Y = 2.369 + 0.750X1 + 0.333X2.
Where:
Y = competitiveness,
X1 = product innovation,
X2 = location.

The explanation of the multiple linear regression equation in Table 14 is as follows:

1) Constant Value
   The constant value is 2.369. This indicates that if the product innovation and location variables are equal to 0, or if product innovation and location are absent, the competitiveness value of the Almadani Juara Snacks business at Pajus Market is 2.369.
2) Regression Coefficient for Product Innovation Variable X1
   The regression coefficient for product innovation is 0.750. This means that if there is a one-unit increase in variable X1, the value of variable Y will also increase by 0.750, and vice versa.
3) Regression Coefficient for Location Variable X2
   The regression coefficient for location is 0.333. This means that if there is an increase in variable X2 by one unit (assuming variable X2 is constant), then the value of variable Y will also increase by 0.333, and vice versa.

Hypothesis Testing

A hypothesis is a tentative answer that must be tested. The purpose of this test is to determine whether the tentative answer is accepted or rejected.

Partial Significance Test (t-Test)

The t-test (partial test) was conducted to individually see the significant influence of the independent variables on the dependent variable. Where the independent variables in this study were product innovation and location on the competitiveness of the Almadani Juara Snack Business in Pajus Market.

Table 10 of Partial Significance Test Results (t-Test)

		Unstandardized Coefficients		Standardized Coefficient			Collinearity Statistics	
	Model	B	Std.Eror	Beta	t	Sig	Tolerance	VIP
1	(Constant)	2.369	1.299		1.824	.071		
	Inovasi Produk	.750	.156	.528	4.804	.000	.259	3.866
	Lokasi	.333	.109	.336	3.062	.003	.259	3.866

Based on the data in Table 10, it is known that because the significance values for both variables are less than 0.05, it can be concluded that both product innovation and location have a significant partial effect on competitiveness, as explained below:

a) The Effect of Product Innovation on Competitiveness
The calculated t-value for the product innovation variable is 4.804. Given that the calculated t-value is greater than the table t-value (4.804 > 1.987) and the calculated sig. < the table sig. (0.000 < 0.05), the product innovation variable has a significant partial effect on the competitiveness of Almadani Juara Snacks at Pajus Market.

b) The Effect of Location on Competitiveness
The calculated t-value for the location variable is 3.062. With the calculated t value > t table (3.062 > 1.660) and the calculated sig < sig table (0.003 < 0.05), the location variable partially has a significant effect on the competitiveness of the Almadani Juara Snack Business in Pajus Market.

c) Dominant Variables Affecting Competitiveness
The calculated t value for the product innovation variable is 4.804, and the calculated t value for the location variable is 3.062. Since the calculated t value for X1 > t table X2 (4.804 > 3.062), the product innovation variable is partially the dominant variable that significantly influences the competitiveness of the Almadani Juara Snack Business in Pajus Market.

Simultaneous Significance Test (F-Test)

The F-test (simultaneous test) was conducted to simultaneously see the significant influence of the independent variables, namely product innovation X1 and location X2 on the competitiveness of Y in the Almadani Juara Snack Business at Pajus Market. This can be seen in Table 11 below:

Table 11 of Simultaneous Significance Test Results (F Test)

Anova[a]

Model		Sum of Squares	Df	Mean Square	F	Sig
1	Regression	513.719	2	256.860	111.713	.000[b]
	Residual	223.031	97	2.299		
	Total	736.750	99			

a. Dependent Variable: daya saing
b. Predictors: (Constant), inovasi produk, lokasi Sumber:

Based on the data in Table 11, it is known that the F-value (111.713) > F-table (3.09) and a significance of 0.000 < 0.05 indicate that simultaneously product innovation and location have a significant effect on competitiveness. Thus, product innovation and location simultaneously have a significant effect on competitiveness in the Almadani Juara Snack Business in Pajus Market.

Coefficient of Determination

The coefficient of determination (R2) is used to measure the proportion or percentage of a model's ability to explain the dependent variable. The coefficient of determination ranges from zero to one (0 <= R2 <= I). If R2 is greater (approaching one), it can be said that the independent variable (X) has a significant influence on the dependent variable (Y), as shown in Table 12 below:

Table 12 of Model Summary Goodness of Fit (R^2)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error Of the Estimate
1	0.835[a]	0.697	0.691	1.51634

a. Predictors: (Constant), lokasi, inovasi produk
b. Dependen Variabel: daya saing

Based on the data in Table 12, the R square value is known to be 0.697 or 69.7%, meaning that 69.7% of the variation in competitiveness can be explained by the product innovation and location variables, while the remaining 30.3% is explained by other factors outside this study.

CONCLUSIONS

Product innovation significantly influences the competitiveness of Almadani Juara Snacks in Pajus Market. Therefore, the higher the level of product innovation, such as flavor variations, attractive packaging, and quality improvements, the greater the business's competitiveness in the market. Business location significantly influences the competitiveness of Almadani Juara Snacks in Pajus Market. A strategic, easily accessible location in a busy area positively impacts accessibility and business visibility, as well as attracting more consumers. Simultaneously, product innovation and location significantly influence business competitiveness. Both variables contribute to increased business competitiveness, with product innovation being the most dominant variable in the regression model. The regression model used in this study meets the classical assumptions. The results of the test that have been carried out obtained an R2 of 0.697 or 69.7% with a sample size of 100 respondents, which means that 69.7% of the variation in Competitiveness can be explained by the Product Innovation and Location variables. Meanwhile, the remaining 30.3% is explained by other factors outside the research.

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