The Effect of Product Design, Promotion and Location on the Purchase Decision on the Green Java Housing, Kemang Bogor

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A R T I C L E I N F O	A B S T R A C T
  	Housing problems often occur in metropolitan areas or districts when the number of available houses is less than the total population, but people's purchasing power is relatively low due to slowing economic growth. Therefore, This research was done to determine the effects of consumer purchasing decisions on The Green Java Kemang Bogor housing. The main purpose of this review evaluate as well as pinpoint in what way product advertising, design, and location may all or some of the time have an impact on buying choices at The Green Java Kemang Bogor Housing. Contact was made with 58 respondents who had been chosen by purposive sampling and given questionnaires. The questionnaire has undergone validity, reliability, and the traditional assumption test. The test's findings are accurate and valid, and they may be used to data for regression. In this study, a quantitative approach and a descriptive and verification method were used as analytical techniques. The findings demonstrated that factors such as product design, promotion, and location had an impact on buying decisions either concurrently or in part.

INTRODUCTION

Indonesia has a population of 272,229,372, according to Population Administration (Adminduk) data as of June 2021, making it one of the most densely populated countries. As a result, the demand for clothing, food and housing continues to increase. Entrepreneurs take advantage of Indonesia's dense population to make a profit by serving the population's demands. Along with the growth of Indonesia's population, more and more developers are competing to build houses.

Housing problems often occur in metropolitan areas or districts when the number of available houses is less than the total population, but people's purchasing power is relatively low due to slowing economic growth. People's purchasing power is determined by economic stability, changes in economic policy often receive negative reactions from the public.

According to BPS Bogor Regency, the economic development of Bogor Regency from 2016 to 2020 shows a trend of improvement from 2016 to 2018. Setelah krisis keuangan global pada tahun 2014-2015, ekonomi tumbuh pada tingkat tahunan sebesar 5,84% pada tahun 2016. Then, in 2017 and 2018, there was a slight acceleration in growth, reaching 5.92% and 6.19% respectively. The growth rate did not change in 2019 at 5.85%. The slowdown in economic growth is caused by shrinking land area which causes a decrease in agricultural output and an increase in the production cost component, namely the Regency Minimum Wage (UMK) which has reached IDR 3.76 million per month. In line with the trend of slowing national economic growth in 2020, Bogor Regency also experienced a slowdown in trade development that year. The influence of the outbreak caused Bogor Regency's GDP to decrease by 1.77%. Due to the decline in output in almost all industries caused by Covid-19, economic growth has shrunk.

Consumers must consider whether to buy a unit of a house or not considering the many advantages in choosing a house. Purchase decisions can be divided into three phases including pre-purchase, consumption, and consumer purchase appraisal (Tjiptono and Diana, 2016: 60). When choosing a housing unit to buy, people consider various factors including design. According to Kotler and Armstrong (2016: 396) product design is the totality of features that affect the appearance and function of a product based on customer needs.

Promotion is an effort made by business actors to educate and present their products to customers as often as possible using various types of media with the hope that they will be interested in buying the goods supplied (Abubakar 2018:50). A strategic location has good market potential to attract consumers to buy products. According to Tjiptono (2019: 345), location is a variety of marketing activities that are calculated to advertise and facilitate the transfer or recall of services or goods from producers to consumers.

Marketing in a company is very important in order to contribute to the company's profits so that failure in marketing its products does not occur, so that there are no fatal losses in achieving the company's targets.

The results of the preliminary survey of the product design show that: the product does not meet consumer desires (40%), the product does not have contemporary features (63%), the product design does not have an elegant style (57%). So that the product design of The Green Java Kemang Bogor housing is suspected to be not optimal.

The results of the pre-survey on promotions show that: advertising is not yet attractive (40%), sales promotions are not effective (53%), public relations cannot be said to be good (30%) and personal sales are not effective (67%). So the promotion of The Green Java Kemang Bogor housing is suspected to be not optimal.

Based on the results of the pre-location survey, it shows that: vehicle access is difficult to reach (50%), visibility is not visible from the main road (60%), traffic is not close to the city center (70%), does not have a large parking area (53%), housing does not have a large area of land if available expansion of buildings in the future (23%), housing environment is not good (43%) and competition is not strategic (43%). So that the housing location of The Green Java Kemang Bogor is suspected not to be strategic.

Based on this background, the aim of this research is to determine consumer responses to product design, promotion, location and purchasing decisions; as well as the simultaneous and partial influence of product design, promotion and location on purchasing decisions at The Green Java Kemang Bogor housing complex.

THEORETICAL FRAMEWORK
Marketing Management

According to Abubakar (2018: 3), Every business always tries to achieve its main goal of fulfilling the requirements and wishes of customers. Marketing is a whole system of business actions aimed at meeting the needs and fulfilling the aspirations of business actors through the development and reciprocal exchange of goods.

Product Design

According to Abubakar (2018:33) product design is an important design to show product differences compared to competitors' products. The product design indicators according to Kotler and Armstrong (2016:410) in this journal are as follows:

a. Shape, is the form displayed by a particular product.
b. Features are a competitive means of differentiating a company's products from competitors' products.
c. Style is the appearance and feeling that the product gives to the buyer.

Promotion

According to Alma (2016: 179), promotion is communication that provides explanations that are able to convince potential consumers about goods and services. The promotion indicators according to Alma (2016: 188), are as follows:

  a. Advertising is conveying sales messages through persuasive means.
  b. Sales promotion is the desire to offer incentives within a certain period to encourage the desires of potential consumers.
  c. Public relations is a communication activity to build a good image for the company, maintain the trust of shareholders.
  d. Personal selling is verbal disclosure in a conversation with one or more potential consumers to increase sales.

Location

A company's location correlates with the various tasks it performs to bring a product to market, whether those tasks include making the product itself, or making it more accessible to buyers in the target market (Kotler and Armstrong 2018: 51). Tjiptono (2016: 15) states the indicators used in determining the location are:

a. Access, such as frequently visited locations.
b. Visibility, or the area that is clearly visible at a standard viewing distance.
c. Traffic
d. Spacious parking space, which prioritizes vehicle comfort.
e. Expansion, namely the availability of a large enough place if there is expansion in the future.
f. The environment, especially the surrounding area that supports the proposed product.
g. Competition (place of competition).

Buying Decision

Making purchases is an aspect of consumer behavior, which is people's learning to select, obtain, utilize, and adapt products, services, ideas, or experiences to meet their needs and desires. (Kotler and Armstrong 2016: 177). Purchasing decisions have indicators as stated by Kotler and Keller in Indrasari (2019:74).

  a. Product selection, in this case the company must pay attention to those who are interested in buying the product as well as the alternatives they assume.
  b. Choosing a brand is a decision that must be understood by companies to understand how customers make decisions.
  c. Choice of dealer, each consumer is different in identifying possible dealers because of close location, low prices, complete inventory, convenience in shopping, large space and so on.
  d. Time of purchase, when the consumer decides to make a purchase may vary.
  e. Payment methods, purchasing decisions are influenced by the technology used in purchasing transactions.

METHODS

This study uses clear procedures and checks based on a quantitative examination system. Quantitative examination as a positivist technique that focuses attention on a particular example or population, collects information with instruments, and investigates information quantitatively or purely to test speculation. Purposive sampling, or the sampling method chosen according to the research objectives used. The respondents selected were adult consumers and consumers who visited The Green Java Kemang Bogor were used as a test measure. The number of tests completed with the Taro Yamane formula, using information from 58 respondents.

Multiple Linear Regression Analysis

As explained by Sugiyono (2019: 210), Multiple Linear Regression Analysis is a method of estimating how the value of a variable will vary in response to changes in other variables. The following is the linear regression formula:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Information:

Y=Dependent Variable (purchasing decision).

a= Constant.

β= Regression Coefficient or Directional Number, which shows the magnitude of the increase or decrease of the variable depending on changes in the independent variables.

X= The average purchase influence rate.

β_1= Regression coefficient for the influence of product design dimensions.

β_2= Regression coefficient for the influence of promotion dimensions.

β_3= Regression coefficient for the influence of the Location dimension.

ε= Other factors not researched.

Multiple Correlation Analysis

The correlation coefficient is a number that shows the direction and strength of the relationship between two or more independent variables and one dependent variable (Sugiyono, 2019:286).

Analysis of the Coefficient of Determination

If R^2 is close to 1, it means that the independent variables provide almost all the information needed to predict the dependent variable. The scope of the coefficient of determination is 0 and 1. R2 shows how much the independent variable contributes to the dependent variable (Atmaja et al 2014: 122).

Hypothesis testing

The alternative hypothesis is in positive form and the null hypothesis is in negative form (Sinambela, 2014: 221).

1. F test

The test is directed to see if the dependent variable can be influenced by the coordinated efforts of each dependent variable. The following are the F test conditions:

    1) If F_{count} is not the same or equivalent to F_{table} ($F_{count} \leq F_{table}$), at α = 0.05 then Ho is accepted Ha is rejected, it means that product

design, promotion and location do not influence purchasing decisions at all.

2) If F_{count} is greater than F_{table} ($F_{count} > F_{table}$) of 0.05 then Ho is eliminated and Ha is accepted, which proves that product design, promotion and location settings together influence the client's purchasing choices.

2. t test

Atmaja et al. (2014: 122), statistical t tests were conducted to determine whether the partial impact of each independent variable on the dependent variable was tested. Further information on the criteria for the t test:

1) For product design (X_1), if t_{count} is small or equal to t_{table} ($t_{count} \leq t_{table}$) at $\alpha = 0.05$ then Ho is accepted and Ha is rejected, meaning that product design has no positive and significant effect on consumer purchasing decisions. Meanwhile, if t_{count} is greater than t_{table} ($t_{count} > t_{table}$) at $\alpha = 0.05$ then Ha is accepted and Ho is rejected, meaning that product design has a positive and significant effect on consumer purchasing decisions.

2) For promotion (X_2), if t_{count} is smaller or equal to t_{table} ($t_{count} \leq t_{table}$) at $\alpha = 0.05$ then Ho is accepted and Ha is rejected, meaning that promotion has no positive and significant effect on consumer purchasing decisions. Meanwhile, if t_{count} is greater than t_{table} ($t_{count} > t_{table}$) at $\alpha = 0.05$ then Ha is accepted and Ho is rejected, meaning that promotion has a positive and significant effect on consumer purchasing decisions.

3) For location (X_3), if t_{count} is smaller or equal to t_{table} ($t_{count} \leq t_{table}$) at $\alpha = 0.05$ then Ho is accepted and Ha is rejected, meaning that location has no positive and significant effect on consumer purchasing decisions. Meanwhile, if tcount is greater than ttable ($t_{count} > t_{table}$) at $\alpha = 0.05$ then Ha is accepted and Ho is rejected, meaning that location has a positive and significant effect on consumer purchasing decisions.

RESULTS

Participants in this research were consumers of The Green Java Kemang Bogor housing complex who visited the housing complex. The characteristics of the consumers in the sample are that most of The Green Java Kemang Bogor housing consumers are male.

Consumer Responses to Product Design

Consumer responses regarding product design variables have a recapitulation, namely as follows:

1. The form has a point of 3.39, which means it is quite good.
2. The feature has a value of 3.24 which is in the quite good category.
3. Style is a pretty good category with an average value of 3.37.

Based on the recapitulation of consumer assessments, it is stated that the residential product design of The Green Java Kemang Bogor has a pretty good effect on consumers in making purchasing decisions.

Consumer Responses to Promotions

The following is a recapitulation of consumer responses regarding promotional variables:

1. Advertising has an average value of 3.69 included in the good category.
2. Sales promotion has an overall score of 3.64 which is a high group.
3. Public relations obtained an overall score of 3.48, which means good.
4. Personal sales have an average value of 3.48, which is in the good category.

Promotions carried out by The Green Java Kemang Bogor housing complex are able to attract consumers to buy housing units at The Green Java Kemang Bogor housing complex.

Consumer Responses to Location

The following is a recapitulation of consumer responses regarding location variables:

1. Access is included in the appropriate category with an average value of 3.78.
2. Visibility obtained an average value of 3.73, which means it is suitable.
3. Traffic is included in the best classification and has an average value of 3.78.
4. The spacious parking lot received an average score of 3.66, including it as a suitable choice.
5. The expansion indicator has an overall value of 3.65, which is in the appropriate category.
6. The environment has an average value of 3.60, meaning it is suitable.
7. Competition is affordable and has an average value of 3.82.

Based on data from a survey on consumer location indicators, The Green Java Kemang Bogor housing is in a strategic location which makes it easier for consumers to carry out their daily activities.

Consumer Responses to Purchasing Decisions

The following is the conclusion of consumer perceptions about purchasing decision variables:

1. Product choice gets a score of 3.46 which is included in the high category.
2. Brand choice has a calculation of 3.47 which is a good classification.
3. The dealer's choice obtained the number 3.52 which means high.
4. Purchase time is included in the high category with a value of 3.53.
5. The payment method indicator has a final value of 3.48 which is grouped into a high score.

Based on the recapitulation of consumer answers to purchasing decisions made by The Green Java Kemang Bogor housing complex, it is able to attract consumers to buy housing units at The Green Java Kemang Bogor housing complex.

Multiple Linear Regression Analysis

To show how the regression analysis was carried out on product design, promotion, and location influence consumers' choice to buy a house The Green Java Kemang Bogor.

Table 1. Multiple Linear Regression Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-1,262	6,317		-,200	,842
	Product Design	,591	,250	,244	2,366	,022
	Promotion	,541	,117	,482	4,608	,000
	Location	,183	,075	,256	2,433	,018

a. Dependent Variable: Purchase Decision (Y)
Source: Data Processed In, 2022

The regression formula is listed as follows, as presented in Table 1. Multiple Linear Regression:

$$Y = -1{,}262 + 0{,}591X1 + 0{,}541X2 + 0{,}183X3 + \varepsilon$$

All independent variables are shown to be positive in the regression equation. Higher values for the independent variables indicate higher home purchase choices at The Green Java Kemang Bogor.

Correlation Coefficient Analysis

Table 2. Results of Correlation Coefficient and Determination Coefficient Analysis

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,658[a]	,432	,401	5,58724

a. Predictors: (Constant), Location, Product Design, Promotion
b. Dependent Variable: Purchase Decision
Source: Data Processed in, 2022

Table 2. Results of Correlation Coefficient and Determination Coefficient Analysis shows that there is a positive relationship between the independent and dependent variables (Y) through an R number of 0.658, which shows that the correlation between the independent variable and the dependent variable has a strong correlation (0.601 – 0.800), which means that when the independent variable has increased, it will be followed by an increase in the value of the dependent variable (Sugiyono 2019: 267). This shows that the increasing product design (X_1), promotion (X_2) and location (X_3) will have a positive effect on purchasing decisions in housing The Green Java Kemang Bogor.

Analysis of the Coefficient of Determination

Table 2. Results of Correlation Coefficient and Determination Coefficient Analysis show that R square is 0.432 or 43.2%. This confirms that the rate of commitment from the independent factors to the dependent variable is 43.2%, the remaining 56.8% is influenced by variables that are not in this study.

Simultaneous Test (Test F)

Testing the simultaneous influence of independent variables, namely product design (X_1), promotion (X_2), and location (X_3) on the dependent variable purchasing decisions (Y), using the F test. Based on Partial Regression Testing, it can be seen that Fcount is 13.717 and Ftable for $\alpha = 0.05$ through the chance level (df = n-k) or 58-3-1 = 54 by looking at the consequences of the chance level, the Ftable value is 2.776 which shows that Fcount is more is greater than Ftable (13.717 > 2.776), so it can be concluded that Ho is rejected and Ha is accepted, implying that the independent factors, especially the independent variables, simultaneously have a significant influence on purchasing decisions at The Green Java Kemang Bogor.

Partial Test (t test)

By comparing tcount and ttable, a t test is performed. The independent factor influences the dependent variable with the assumption that t_{count} is greater than t_{table} ($t_{count} > t_{table}$). Based on Table 3. Partial Regression Testing, the t_{count} value and significance value of each independent variable are obtained. Meanwhile, the t_{table} value for $\alpha = 0.05$ with degrees of freedom 58-3-1= 54 is 1.674, thus the partial test results are obtained as follows:

Table 3. Partial Test Recapitulation

No	Variabel	t_{hitung}	t_{tabel}	Sig.	A	Keputusan	Kesimpulan
1	Product Design	2,366	1,674	,022	0,05	Ha₁ accepted	Product design has a positive and significant effect on purchasing decisions.
2	Promotion	4,608	1,674	,000	0,05	Ha₂ accepted	Promotion has a positive and significant effect on purchasing decisions.
3	Location	2,433	1,674	,018	0,05	Ha₃ accepted	Location has a positive and significant effect on purchasing decisions.

Source: Data Processed in, 2022

Based on Table 3. Recapitulation of Partial Testing, the independent variable has a partial positive and significant impact on the dependent variable. The t_{count} value indicates that all variables are higher than the t_{table} value. The most dominant element that influences purchasing decisions (Y) is the promotional variable (X_2).

DISCUSSION

Product design variable constant (X_1), promotion (X_2) and location (X_3) have a value of 0, do not change or are fixed then the decisionpurchases (Y) decrease.

The product design regression coefficient is positive, meaning if product design improves, it will be followed by an increase purchasing decision (Y) assuming product design, promotion and variables fixed or unchanging location.

The promotion regression coefficient (X_2) is positive, meaning if If promotions increase, this will be followed by an increase purchasing decision (Y) assuming product design, promotion and variables fixed or unchanging location.

The location regression coefficient (X_3) is positive, meaning that if the location increases, it will be followed by an increase in decisions purchase (Y) with the assumption of product design, promotion and location variables fixed or unchanged.

From the regression equation it is known that the product design variable (X_1), promotion (X_2) and location (X_3) are positive.

So that will show The higher the value of the independent variable, the greater the purchasing decision The Green Java Kemang Bogor housing complex will be even higher.

This proves that product design, promotion and location are important factor for the purchase decision. In accordance with the results of the study Yandra Rivaldo et al (2021) that there is a positive and significant influence on product design, promotion and location on purchasing decisions.

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions were reached based on the study findings using the tested data:

1. Based on consumer research on product design, promotion, location and purchasing decisions, it can be concluded that consumer responses are as follows:
    a. Consumer responses to product design variables have a fairly good interpretation.
    b. Consumer responses to the promotion variable have a good interpretation.
    c. Consumer responses to purchasing decision variables have a high interpretation.
2. Product design, promotion and location simultaneously have a positive and significant effect on purchasing decisions at housing The Green Java Kemang Bogor.
3. Based on partial testing, namely as follows:
    a. Product Design (X_1) has a positive and significant influence on residential consumers' purchasing decisions at The Green Java Kemang Bogor.

    b. Promotion (X_2) has a positive and significant effect on purchasing decisions at The Green Java Kemang Bogor housing complex.

    c. Location (X_3) has a positive and significant effect on purchasing decisions at The Green Java Kemang Bogor housing complex.

FURTHER STUDY

The implications that can be given based on the research results are as follows:

1. The housing marketing department is advised to improve the features of The Green Java Kemang Bogor housing complex.
2. Residential marketing parties are advised to hold an exhibition event in a location that is visited by the public in order to attract potential customers.
3. Housing authorities are advised to be stricter in maintaining security in the residential environment.
4. It is recommended that companies can provide payment methods that make it easier for consumers, for example debit cards, credit cards, and so on.
5. This study can be a reference for further observations. It is suggested that future researchers explore more factors that influence purchasing choices, such as segmentation, targeting, and positioning, to obtain more diverse findings and have a greater impact on purchasing choices.

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