Decision to Purchase a House in Sikka Regency

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Abstract— *Some factors considered by consumers to purchase a house are price (X1), income level (X2), location (X3), facilities (X4), and building design (X5). The purpose of this study is to analyze the factors that influence the consumer's decision to buy a house in Sikka Regency. The population taken were all consumers in Housing in Sikka Regency, while for determining the sample it was done by using Slovin formula and obtained 72 respondents. Before the analysis was carried out it was necessary to test the instrument's feasibility. From the results of this test all variables was declared valid because the value of $r_{count} > r_{table}$ and reliable because the value of Alpha Cronbach > 0.6. This study uses multiple linear regression analysis. Based on the results of research all the factors or variables together have a positive effect on home purchase decisions (Y), because it is shown by the results of the Fisher test (F_{count} Test) = 10,055 > F_{table} = 2.51. From the results of existing research the consumer's decision to buy a house is influenced by the five variables above.*

Keywords— *Building design, consumer decisions, facilities, income level, location, price.*

I. INTRODUCTION

The basic needs of every human being are the primary needs of clothing, food and shelter. After the needs of clothing and food are met humans also need a place to live. With the development of an increasingly modern house has made a measure of human degrees because of the prestige factor that cannot be denied [1]. Every human being needs a house as a place to stay for protection. The house is a building used as a decent place to live, a place of family formation, a reflection of dignity as well as an asset for its owner [2].

With the increasing demand for housing due to the increase in prospective new residents and increasing population each year, the housing developer as a producer takes advantage of the opportunity to fill the needs of the community with the technological capabilities they have in developing their product design that it can make the property business, housing. The developer with various efforts offers various prices and types thus it can be reached by all levels of society [3].

In the residential property business there are many things that must be done by the developer so that consumers can feel satisfied and comfortable living in the housing. Maumere City is a city located in the district of Sikka, NTT Province. Many factors that consumers consider in buying a house including: the price of a house offered to consumers, strategic location, facilities provided, attractive building design and the level of consumer income. This is certainly the influence of the level of home sales.

In Table I it shows the data on housing sales transactions in housing in Sikka Regency.

Therefore this study aims to analyze the factors that influence the decision of consumers to buy a house in Sikka Regency, Maumere City that developers try to improve their selling behavior so that it can be reached by all levels of society. Purchasing decisions are actions of consumers to buy or not to a product. Of the various factors that influence consumers in purchasing a product or service, consumers usually always consider the quality, price and products already known by the public [4].

TABLE I. Total House Sales Transaction

No	Period	Total Transactions of home sales at Pesona Safira Residence Housing	Total Transactiosn of home sales at Citramas Village Housing	Total Transactions of home sales at Bukit Mas Residence Housing
1	2015	150 units	-	-
2	2017	-	84 units	22 units
3	Total	150 units	84 units	22 units

II. LITERATURE REVIEW

A. House

According to Domestic Minister SKB, the Minister of Public Works and the Minister of Public Housing explained several types of houses including: Public houses for low-income people, commercial houses for profit, luxury homes selling prices four times the selling price of simple houses, medium-sized commercial houses with selling prices one to four times the selling price of a modest house, a modest house with a large plot of land 60 m^2 – 200 m^2 dengan luas lantai minimal 36 m^2.

B. Process of Decision Making

In general the decision making process can be explained in detail below [5] :

1. Introduction to problem
   Consumers are aware of the needs problem. This need is influenced by internal and external stimuli of consumers.
2. Information Search
   Consumers try to find information through family, friends or relatives, neighbors, mass media, advertisements and through experience about a product.
3. Alternative Evaluation
   Cognitive process evaluation model is an appraiser of a product based on rational consideration.

4. Purchase Decision
   The buyer's goals and purchase decisions are influenced by two (2) factors, namely the attitude or ideality of others and the situation that cannot be anticipated.
5. Post Purchase Behavior
   After purchasing a product, consumers will experience a level of satisfaction and dissatisfaction. Buyer satisfaction is a function of consumer expectations of a product. If the product's efficiency is below the customer's expectations, the customer would be disappointed. If it meets expectations, the customer would be satisfied, and if it exceeds expectations, then the customer would be very satisfied.

III. RESEARCH METHODOLOGY

A. Research Type

In this study, it was done using descriptive quantitative research and factor analysis. The type of research is based on the philosophy of positivism to examine populations and samples, random sampling technique using quantitative research instruments and aim to test hypotheses [6].

B. Population and Sample

The population in this study were all consumers of Safira Residence Housing, Citramas Village Housing, Bukit Mas Residence Housing, totaling 256 units in 2015-2017 located in Sikka Regency. Whereas for determining the sample then used random sampling method done by using Slovin formula:

$$n = \frac{\cdot N}{1 + N e^2} \qquad (1)$$

From equation (1) we obtain 72 samples.

C. Data Collection

Data collection technique in this study was done by observing the three houses in Sikka Regency, interviewing directly the developer, and distributing questionnaires. The questionnaire distribution technique was divided into 2 (two), they were: distributed and then filled in by respondents and conducted direct interviews with respondents [7].

D. Research Variable

A variable is something in the form of what is determined by the researcher to be studied in order to obtain information about it, then draw conclusions [6]. The several variables and indicators used in this study are as follows:
1. Price Variable (X1)
   Price is the amount of money consumers pay to buy a house [8]. The indicators on the price variable are:
   a. Ability
   b. Prices offered
   c. Investatment
2. Income Level (X2)

Income level is how much income or earning of consumers as the respondents [8]. The indicators on the level of income are:
   a. Fulfillment of *down payment (dp)*
   b. House Purchase Credit Payment (KPR)
   c. The amount of income
3. Location (X3)
   Location is related to the distance from the house to other important places [8]. A location that has a strategic and profitable place will be of high use value. The indicators on location variables are:
   a. Access to the workplace
   b. Access to City or Supermarkets
   c. Access to places of worship
   d. Access to Terminal
   e. Access to Hospital
   f. Access to educational facilities
4. Facility (X4)
   Facilities are all available in housing [8]. Indicators on facility variable are:
   a. House security
   b. House Facilities (PDAM, PLN, Telephone etc.)
   c. Wide and easy road access
5. Building construction (X4)
   The building design is a framework of the shape of a building and the size of each house [9]. The indicators of the building design are:
   a. Interest in building design
   b. Building quality
   c. Building type
6. House Purchase Decision Variable (Y)
   The indicators on the variable of house purchase decisions are:
   a. The right decision
   b. Choosing the right type of house
   c. Satisfied with the decision

E. Variable measurement Scale

The measurement scale in this study is to use a Likert scale. This scale shows how much the level of agree or disagree on a statement. This scale also makes it easier for respondents to answer existing statements [10]. Likert scale measurement is done with the division of [6] :
   a. Strongly agree gets a score of 5
   b. Agree gets a score of 4
   c. Quite agree gets a score of 3
   d. Disagree gets a score of 2
   e. Strongly disagree gets a score of 1

F. Instrument feasibility testing

Whether an instrument is good or bad, it influences whether or not the data obtained is true or false thus it can determine the quality of research results. A good instrument other than valid must also be reliable. The instrument is said to be valid if $r_{count} > r_{table}$ with a significant level of 0.05 or 5% as the critical value and the degree of freedom (n-2). While the instrument is said to be reliable if the value of *Alpha Cronbach* > 0.6 [11].

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G. Data analysis using Regression Analysis

This analysis uses Fisher's Test (Test F) means testing to know the effect of independent variables simultaneously. Test F is used to test the independent variables together against the dependent variable. Criteria for acceptance and rejection of hypotheses are [6] :

- If $F_{count} > F_{table}$ or the value of Sig F < 0.05 : Ho is rejected
- If $F_{count} < F_{table}$ or the value of Sig F >0.05 : Ho is accepted.

H. Framework

Framework is a conceptual relationship between theory and factors that have been identified as a problem to be discussed [6]. The following is a framework that will be carried out in this study:
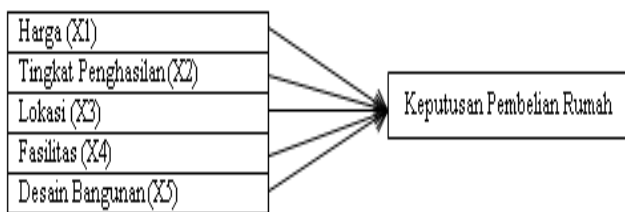

Figure 1. Framework

IV. RESULT AND DISCUSSION

A. Validity and reliability test

Before a regression analysis is carried out, an instrument must be tested for the feasibility of the results of the questionnaire. The results of testing the validity and reliability can be seen in tables III and IV below:

TABLE III. Questionnaire Validity Test Results

Variable	Correlation coefficient (r_{count})	R-table)	Resilts ($r_{count} > r_{table}$)
X1 (Price)	0.626	0.2319	Valid
	0.877	0.2319	Valid
	0.749	0.2319	Valid
X2 (Income)	0.829	0.2319	Valid
	0.901	0.2319	Valid
	0.836	0.2319	Valid
X3 (Location)	0.665	0.2319	Valid
	0.910	0.2319	Valid
	0.941	0.2319	Valid
	0.889	0.2319	Valid
	0.916	0.2319	Valid
	0.868	0.2319	Valid
X4 (Facility)	0.641	0.2319	Valid
	0.775	0.2319	Valid
	0.852	0.2319	Valid
X5 (Building design)	0.788	0.2319	Valid
	0.848	0.2319	Valid
	0.822	0.2319	Valid
Y (Purchase Decision)	0.866	0.2319	Valid
	0.838	0.2319	Valid
	0.900	0.2319	valid

TABLE IV. Questionnaire Reliability Test Results

Variable	Cronbach' Alpha	N of items
Price (X1)	0.613	3
Income level (X2)	0.815	3
Location (X3)	0.930	6
Facility (X4)	0.632	3
Building design (X5)	0.749	3
Purchase decision (Y)	0.827	3

B. Results of Multiple Linear Regression Analysis

TABLE V. Results of Multiple Linear Regression Analysis

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,072	1,479		2,077	,042
	X1	,240	,115	,265	2,092	,040
	X2	,013	,129	,013	,104	,918
	X3	,032	,039	,100	,817	,417
	X4	,093	,123	,088	,755	,453
	X5	,393	,114	,428	3,431	,001

a. Dependent Variable: Y

From table V we can find the regression equation as follows : Y = 3.072 + 0.240 X1 + 0.013 X2 + 0.032 X3+ 0.093 X4 + 0.393 X5

Based on the results of the table above it states that the building design variable is the variable that has the greatest regression coefficient (ß): 0.393 meaning that housing in Sikka Regency, Maumere City is influenced by the building design factor. The positive regression coefficient shows that the better the building design, the higher the purchase decision.

C. Hypothesis testing

Hypothesis testing uses the Simultaneous Significant Test or Fisher Test (F Test). The test results of the F_{count} value can be seen in the following table:

TABLE VI. Results of F Test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	111,981	5	22,396	10,055	,000[b]
	Residual	147,005	66	2,227		
	Total	258,986	71			

a. Dependent Variable: Y

b. Predictors: (Constant), X5, X2, X4, X3, X1

Table VI shows that Fcount value is 10,055 and Ftable value obtained is 2.51, which means the Fcount value> Ftable thus the initial Hypothesis (Ho) is rejected and the first Hypothesis (H1) is accepted. The conclusion from these results is that the independent variable price (X1), income

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level (X2), location (X3), facilities (X4), and building design (X5) together have a positive and significant effect on the dependent variable, namely purchasing decision of houses in Sikka Regency namely Safira Residence Housing, Purimas Village Housing and Bukit Mas Residence Housing. So it can be concluded that the research hypothesis is accepted. Significant influence means that the value is significant to the decision to buy a house while a positive value indicates that changes in home purchase decisions are in the same direction or there is an influence with changes from the five (5) factors.

The results of research conducted by Kunaryanto (2013) with the title analysis of the factors that influence the interest in buying a house in Tuban and Jasmawati (2012) with the title Factors affecting the interest in buying a house in Penajem Utara Paser Regency show that the variable price, level of income, location and facilities have a significant influence on the interest in buying a house in Tuban Regency and Penajem Paser Utara. This is in line with the research conducted on housing in Sikka Regency.

The results of this study are consistent with Prihandoyo's research (2015) with the title Analysis of the Effect of Price, Location, Building and Environment on Consumer Decisions to Buy a House. The results of this study stated that there was a strong relationship between the variables influencing variables of Price, Location, Building, Environment, to the decision to buy (Y) a house in Pelangi Grand Residence Balikpapan by using multiple linear regression analysis.

V. CONCLUSIONS AND SUGGESTIONS

A. Conclusions

Based on the results of the analysis and research that has been done, it can be concluded that:

a. From the results of simultaneous testing / Fisher (Test F) obtained $F_{count} = 10,055 > F_{table} = 2.51$ thus the initial hypothesis (Ho) is rejected and the first hypothesis (H1) is accepted.

b. Price factor, income levels, location, facilities, and building design together have a positive and significant effect on the dependent variable, namely the decision to purchase a house.

B. Suggestions

Based on the results of this study, there are suggestions to the parties involved:

a. It is suggested to the developer to pay attention to the price factor thus it can be reached by all groups, strategic locations, adequate facilities, and attractive building designs that it can adjust to the level of consumer income.

b. This study only involves factors of price, location, level of income, facilities, and building design as the dependent variable thus it is suggested to further research to add the influence of several other variables.

c. This research uses a lot of quantitative research that is by distributing questionnaires then respondents fill out data which will then be analyzed. To get better results, qualitative and quantitative approaches are used,

namely conducting direct interview techniques to consumers so that the intentions of the respondents can be understood clearly thus it can prevent respondents from answering questions with the same score because it greatly affects the processed results of SPSS.

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