Analysis on factors affecting consumers decision on purchasing simple-type houses

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Abstract. In line with the increase of the population and the need of comfortable houses, as affected by modernization era, the house demand is getting higher. Hence, conducting a research on consumers need and want in buying a house should be seriously attempted to succeed marketing activity. Using an analysis consumers’ behavior, the researcher will know few affecting factors related to consumers’ satisfaction in buying a house. Among other, the factors in question include: house price, house condition, facilities, location and accessibility. The sample of this research was drawn from the residents of Graha Asri Housing, Taman Bulang Permai, and Sukodono Permai. Based on the analysis and discussion, some conclusions are made as follow: the factors and variables affecting the consumers’ decision on each choice of house is different and also the same variables on three sources of data include housing atmosphere, cleaning service, ease of access to shopping center, health clinics or hospitals, tourism spot, schools, and the bus station.

1. Introduction
The development conducted in a country is always geared to the efforts of fulfilling the basic needs such as clothing, food, housing, health, education as well as other secondary needs like entertainment and freedom of religious practices. Indonesia will naturally enter the free trade era, which force the companies within the country to be truly competitive. Therefore government as well as private sectors keep on trying to meet the demand of houses for the citizens. Such condition challenged several housing construction companies to be able to provide various types of houses with all pluses and minuses they have. The increase of the number of house supplier will vary the consumers’ choice, which then sharpen their selective instinct on a house parallel to their want and affordability before making a decisions on purchasing a house.

Based on the study background previously discussed, the problem of the research are restated as follow:
1. What factors and variables affect the consumers’ decision?
2. To what extent do the validity, reliability, correlation, and their significance go?

The objectives of the study is:
1. To know factors and variables affecting consumers’ decision.
2. To know the level of validity, reliability, correlation, and their significance.
The site of the housing complex chosen as the respondents of the study are the several residents who live in: Graha Asri Sukodono; Taman Bulang Permai; Sukodono Permai Housing Complex

The questionnaire as the instrument of data collection were distributed to the residents who live in the type 36- houses.

2. Literature and Method

2.1 Consumer behavior
Umar (2003) stated that consumers behavior is a regular proces planning, buying and using goods or services. Consumers behavior is a part of internal human behavior since in part of his life, consumer behavior is very complex and influenced by various social needs for survival. It does rule not only what to buy or to consume but also in what condition the goods and service are purchased.

2.2 Factors affecting purchase decision
Factors affecting purchase decision for each buyer is different, besides the purchased products and purchasing time. Those factors are: Culture; Social class; Family; Experience.

2.3 The identification of factors and variables
In this research, factor is defined as any circumstances affecting consumers in choosing, buying or determining the product to satisfy their needs and want. In line with the main problem of the research, factors being analyzed are based on the concept developed by Tjiptono and Chandra (2004) as follows: Price; Condition; Facility; Location; Accessability.

2.4 Data collection
The data of the study was collected from the data source by using an instrument which is previously designed. Each datum was carefully recorded, including the current condition as it is necessary. In the process of data collection, the researcher collected the data such as: Primary data; Secondary data. Data processing is done by: Measurement Scale; Sample Respondents; Validity Test; Reliability Test; Product Moment Correlation

3. Results and Discussion

3.1 The questionnaire was given to the respondent living in the houses of 36 types. Its distribution can given below :

| Table 1. The size of samples |
|--------------------------------|
| Residence | Population | Sample |
| Graha Asri S | 229 | 57 |
| Sukodono Permai | 112 | 24 |
| Taman Bulang P | 42 | 15 |

Source : Author

3.2 Analysis of Frequency Distribution
The analysis of Frequency distribution was used to find out the tabulated frequency scores of the respondent’s characteristics.

| Table 2. Respondents’ characteristics |
|--------------------------------------|
| No | Variable | Graha Asri | Sukodono Permai | Taman Bulang |
|----|----------|-----------|----------------|-------------|
| 1  | Job Type |           |                |             |
|    | PNS      | 22.8%     | 16.7%          | 13.3%       |
|    | Private  | 59.6%     | 79.2%          | 80%         |
|    | Entrepreuners | 15.8% | 4.2%         | -           |
|    | ABRI     | 1.8%      | -              | 6.7%        |
2 Age
- 25 – 35 years: 45.9%, 63%, 40.1%
- 36 – 45 years: 40.7%, 33.4%, 47%
- 46 – 55 years: 8.9%, 4.2%, 6.7%
- 56 – 65 years: 5.3%, -%, 6.7%

3 Religion
- Moslem: 87.7%, 79.2%, 100%
- Christian: 10.5%, -%, -%
- Catholic: 1.8%, 8.3%, -%
- Hindu: -%, 12.5%, -%
- Buddha: -%, -%, -%

4 Last Education
- Junior High School: -%, 4.2%, 6.7%
- Senior High School: 47.4%, 95.8%, 73.3%
- Diploma: 7%, -%, -%
- Academy: 5.3%, -%, -%
- Bachelor: 40.4%, -%, 20%

5 Number of Family
- 2 people: 12.3%, -%, 6.7%
- 3 people: 33.3%, 37.5%, 53.3%
- 4 people: 29.8%, 50%, 13.3%
- 5 people: 19.3%, 12.5%, 26.7%
- 6 people: -%, -%, -%
- 7 people: 5.3%, -%, -%

6 Income Level
- < Rp 500.000: 1.8%, 8.3%, 6.7%
- Rp 500.000 – 1.000.000: 19.3%, 37.5%, 33.3%
- > Rp 1.000.000: 78.9%, 54.2%, 60%

Source: Author

3.3 Test of Validity and Reliability

3.3.1 Test of Validity

| Variable | Graha Asri Sukodono | Sukodono Permai | Taman Bulang Permai |
|----------|---------------------|-----------------|---------------------|
|          | r result | r table | Information | r result | r table | Information | r result | r table | Information |
| 1.1      | 0.521    | 0.266   | Valid       | 0.058    | 0.423   | Rejected    | 0.173    | 0.553   | Rejected    |
| 1.2      | 0.255    | 0.266   | Rejected    | 0.186    | 0.423   | Rejected    | 0.223    | 0.553   | Rejected    |
| 1.3      | 0.551    | 0.266   | Valid       | 0.368    | 0.423   | Rejected    | 0.482    | 0.553   | Rejected    |
| 1.4      | 0.454    | 0.266   | Valid       | 0.246    | 0.423   | Rejected    | 0.552    | 0.553   | Rejected    |
| 1.5      | 0.385    | 0.266   | Valid       | 0.045    | 0.423   | Rejected    | -0.079   | 0.553   | Rejected    |
| 2.1      | 0.323    | 0.266   | Valid       | 0.400    | 0.423   | Rejected    | 0.308    | 0.553   | Rejected    |
| 2.2      | 0.016    | 0.266   | Rejected    | 0.529    | 0.423   | Valid       | 0.099    | 0.553   | Rejected    |
| 2.3      | 0.481    | 0.266   | Valid       | 0.395    | 0.423   | Rejected    | 0.251    | 0.553   | Rejected    |
| 2.4      | 0.302    | 0.266   | Valid       | 0.199    | 0.423   | Rejected    | 0.527    | 0.553   | Rejected    |
| 2.5      | 0.345    | 0.266   | Valid       | 0.388    | 0.423   | Rejected    | 0.257    | 0.553   | Rejected    |
| 2.6      | 0.234    | 0.266   | Rejected    | 0.232    | 0.423   | Rejected    | 0.492    | 0.553   | Rejected    |
| 2.7      | 0.426    | 0.266   | Valid       | 0.457    | 0.423   | Valid       | 0.585    | 0.553   | Valid       |
| 3.1      | 0.386    | 0.266   | Valid       | 0.450    | 0.423   | Valid       | 0.108    | 0.553   | Rejected    |
| 3.2      | 0.290    | 0.266   | Valid       | 0.001    | 0.423   | Rejected    | 0.858    | 0.553   | Valid       |
| 3.3      | 0.502    | 0.266   | Valid       | 0.310    | 0.423   | Rejected    | 0.569    | 0.553   | Valid       |
| 3.4      | 0.437    | 0.266   | Valid       | 0.416    | 0.423   | Rejected    | -0.097   | 0.553   | Rejected    |
| 3.5      | 0.322    | 0.266   | Valid       | 0.430    | 0.423   | Valid       | 0.161    | 0.553   | Rejected    |
| 3.6      | 0.530    | 0.266   | Valid       | 0.436    | 0.423   | Valid       | 0.834    | 0.553   | Valid       |
| 4.1      | 0.495    | 0.266   | Valid       | 0.541    | 0.423   | Valid       | 0.435    | 0.553   | Rejected    |
| 4.2      | 0.533    | 0.266   | Valid       | 0.563    | 0.423   | Valid       | 0.613    | 0.553   | Valid       |
| 4.3      | 0.683    | 0.266   | Valid       | 0.521    | 0.423   | Valid       | 0.623    | 0.553   | Valid       |
Variable | Graha Asri Sukodono | Sukodono Permai | Taman Bulang Permai
---|---:|---:|---:|
| r result | r table | Information | r result | r table | Information | r result | r table | Information |
4.4 | 0.383 | 0.266 | Valid | 0.616 | 0.423 | Valid | 0.569 | 0.553 | Valid |
4.5 | 0.366 | 0.266 | Valid | 0.474 | 0.423 | Valid | 0.917 | 0.553 | Valid |
4.6 | 0.217 | 0.266 | Rejected | 0.496 | 0.423 | Valid | 0.142 | 0.553 | Rejected |
5.1 | 0.527 | 0.266 | Valid | 0.655 | 0.423 | Valid | 0.479 | 0.553 | Valid |
5.2 | 0.415 | 0.266 | Valid | 0.055 | 0.423 | Rejected | 0.416 | 0.553 | Rejected |
5.3 | 0.443 | 0.266 | Valid | 0.319 | 0.423 | Rejected | 0.233 | 0.553 | Rejected |
5.4 | 0.336 | 0.266 | Valid | 0.353 | 0.423 | Rejected | 0.789 | 0.553 | Valid |
5.5 | 0.518 | 0.266 | Valid | 0.743 | 0.423 | Valid | 0.569 | 0.553 | Valid |

Source: Author

### 3.3.2 Test of Reliability

**Table 4. Test of reliability**

| No | Residence | r alpha | r limit | Information |
|---|---|---|---|---|
| 1 | Graha Asri Sukodono | 0.867 | 0.6 | Reliable |
| 2 | Sukodono Permai | 0.843 | 0.6 | Reliable |
| 3 | Taman Bulang Permai | 0.881 | 0.6 | Reliable |

Source: Author

### 3.4 Product moment correlation

To calculate correlation coefficient \( r \) product moment person, we can use the common formula, which is directly calculated from the raw scores. The formula can be given as follows:

To identify the correlation coefficient, we can see the correlation output. The result of the correlation among variables above can be given as follows:

#### 3.4.1 The Level of correlation on Graha Asri Sukodono

The highest level of the shopping centre is 0.718 and the lowest is telephone line, 0.375.

#### 3.4.2 The level of correlation on Sukodono Permai

The highest level of the distance to the public transport or bus station is 0.782 and the lowest is sport / jogging facilities, 0.468.

#### 3.4.3 The Level of correlation on Taman Bulang Permai

The highest level of the health clinics or hospitals is 0.931 and the lowest is schools, 0.608.

### 4. Conclusion:

#### 4.1 Generally, the factors and variable affecting the customers’ decisions include

1. Factors of price with variables including:
   - Building design, technical specifications, size of land, construction quality and income rate.
2. Factors of condition with variables including:
   - The arrangement of rooms and bedrooms, number of bedrooms, size of bedrooms, air circulation, water sanitation, drainage system, and surroundings/neighborhood of the housing.
3. Factors of facilities with variables including:
   - Electricity, telephone line, water resource, means or religious practices, sport facilities, and cleaning service.
4. Factors of location with variables including:
   - Getting to down town, shopping centre, schools, health clinics, and free-flood area.
5. Factors of accessibility with variables including:
   - The quality of roads heading to the housing, the size of roads before the house, the road material, public transport and bus stations.
4.2 Factors and variables affecting consumers’ decision which is significantly tested by validity and reliability tests can be presented as follow:

4.2.1 Graha Asri Sukodono Housing Complex

4.2.1.1 Factors of price with variables including:
- Technical specifications with correlation coefficient of 0.604

4.2.1.2 Factors of condition with variables including:
- The size of bedrooms with correlation coefficient of 0.524

4.2.1.3 Factors of facilities with variables including:
- Cleaning service with correlation coefficient of 0.585

4.2.1.4 Factors of location with variables including:
- Getting to down town and with correlation coefficient of 0.718

4.2.1.5 Factors of accessibility with variables including:
- The public transport and bus stations with correlation coefficient of 0.575

4.2.2 Sukodono Permai Housing Complex

4.2.2.1 Factors of condition with variables including:
- The number of bedrooms with coefficient of correlation of 0.588

4.2.2.2 Factors of facilities with variables including:
- Cleaning service with coefficient of correlation of 0.524

4.2.2.3 Factors of location with variables including:
- Getting to school sites with coefficient of correlation of 0.647

4.2.2.4 Factors of accessibility with variables including:
- The distance of bus station to the housing complex with coefficient correlation of 0.782

4.2.3 Taman Bulang Permai Housing Complex

4.2.3.1 Factors of condition with variables including:
- The surrounding / neighborhood of the housing with correlation coefficient of 0.618

4.2.3.2 Factors of facilities with variables including:
- Telephone line with correlation coefficient of 0.876

4.2.3.3 Factors of location with variables including:
- Getting to health clinic or hospital with correlation coefficient of 0.931

4.2.3.4 Factors of accessibility with variables including:
- The availability of public transportation with correlation coefficient of 0.814

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