# Analysis of Factors that Influence Housing Residents' Satisfaction (Case Study: Regency Somerset Housing and Sunggal Graha Housing)

Thomas Winarya P. Harahap[1], Sukaria Sinulingga[2], Nazaruddin Matondang[3]

[1]*(Universitas Sumatera Utara, Indonesia)*
[2]*(Universitas Sumatera Utara, Indonesia)*
[3]*(Universitas Sumatera Utara, Indonesia)*
*Corresponding Author: Thomas Winarya P. Harahap*

***Abstract:*** *This study aims to determine what factors most influence the satisfaction of residential residents in Somerset Regency and Graha Sunggal. Of the 5 (five) factors studied, namely Housing Support Facilities, Distance to Business District or Central Business District (CBD), Building Design Features, Accessibility of Public Transportation, Housing Environmental Sanitation. This research took place at Somerset Regency Housing and Graha Sunggal Housing, located on Jalan Sunggal, Medan Sunggal District, Medan City. For the determination of sampling in this study carried out through sampling techniques in a sample selection method using purposive sampling. Based on the results of research from each of the 42 respondents in each housing. For housing in Sommerset Regency, the most influential independent variables are the Housing Support Facilities and the Central Business District or CBD, and for the Graha Sunggal Housing the independent variable gives the most significant influence is the variable Distance to the Business Center or CBD. On average, all the variables used in the study, namely the variable availability of housing facilities, distance to the business center (CBD), features of house design, availability of transportation and sanitation and cleanliness of the environment have a positive and significant effect simultaneously on the level of satisfaction of each occupant in residential locations in this study.*
***Keywords:*** *Central Business District, Housing, Satisfaction*
---------------------------------------------------------------------------------------------------------------------------------------
Date of Submission: 30-04-2019                                                                 Date of acceptance: 15-05-2019
---------------------------------------------------------------------------------------------------------------------------------------

## I. Introduction

The increase in the population in urban areas raises housing needs that continue to increase every year, and this will result in the more needed fulfillment of housing or owning an adequate home as a very coveted need. Given the need for housing that is greater than the existing housing stock, this is an opportunity for housing developers to meet these consumer needs.

The development of the real estate industry itself leads to dynamic and moving conditions along with demands for basic human needs. Where the increasing number of housing projects will have an impact on the increasingly diverse choices of housing and in the end the housing consumers will choose based on their respective considerations that are mature. And this of course will be related to the tastes of each consumer, therefore the right strategy is needed to attract consumer interest in the developer market.

One important issue in an industry and business is how to avoid and manage consumer complaints. Where the consumer will make a complaint if he is not satisfied, there is a difference between what they expect and the reality they receive.

Housing and property that can meet consumer needs will certainly have a high value, where the high demand for residential property will trigger economic growth, causing the need to pay attention to the variables that affect the housing property. And this is very important because the purchase of residential property in addition to consumption needs is also an investment.

Houses basically have multidimensional functions. where in addition to having a physical function the house also has social and economic functions that can be seen from its utilization which gives satisfaction to its occupants. In order to provide proper functions, a house as a place of residence must have good supporting factors and support a variety of social and economic activities in both residential and urban environments. So for a housing satisfaction factor for physical, environmental and location factors will certainly affect the level of interest in occupancy. In Kecamatan MedanSunggal itself, many found housing that still has empty residential houses, this is thought to still be a feeling of dissatisfaction from residents and prospective residents of housing

in the area for conditions and physical factors, environment and location from the housing that caused a decline in interest in buying and occupying residential houses in housing in the area.

In Kecamatan Mangga Dua itself there are several housing complexes in which the value of land in each location is different, but precisely what is found in housing that has a higher value of land has more occupants. This is what he wants to study and become a phenomenon that is thought to be caused by differences in the satisfaction factors of the occupants.

Based on observations in the field, the occupancy rate at Somerset Regency Housing is around 90 percent and the occupancy rate of Graha Sunggal Housing is 75 percent, there is a significant difference between the two housing areas making it also a quite interesting phenomenon to study. Besides that, based on the information through the price list on residential property offered in both housing areas, the land differences are quite striking, when viewed on the same road location on Jalan Sunggal, where at Somerset Regency Housing Rp.5,300,000 per M² and in Graha Housing Sunggal Rp.4,300,000, - per M².

The land offer at Somerset Regency Housing is 50 meters from Jalan Sunggal as the main road, and the land offer at Graha Sunggal Housing is 25 meters from the location of Jalan Sunggal. The offer of land in Somerset Regency Housing which is higher than Graha Sunggal Housing does not result in a decreased occupancy rate. At the level of land price offered more, Graha Sunggal Housing has a lower occupancy rate than the surrounding competing housing, Somerset Regency Housing.

**Benefits of Research**

The benefits that can be taken from this study are:

1. For the community as a reference in making decisions about buying and selling houses, especially in the research area.

2. For housing developer entrepreneurs, it can be an input in improving the quality of service to consumers, so that later it can provide benefits.

3. For Academics, where this research relates to the knowledge learned at the Postgraduate School of Property Management and Assessment at the University of North Sumatra, especially in Property Management and Asset Management courses, so that interested parties are able to make new breakthroughs in conducting research related to the title this.

# II. Theoretical Review

## 2.1 Real Estate and Housing

Real estate is one form of assets. The realization of real estate is not only in the form of ownership of luxury housing. In essence, real estate is the right to own a piece of land and use whatever is in it. The real estate business is basically a business that deals with land issues and includes all activities carried out therein. This is not limited to the surface of the land but also includes the bottom and the top of the land. Housing is a group of houses that function as a place of residence or residential environment equipped with environmental facilities and infrastructure. According to Law No. 4 of 1992 housing is a group of houses that function as a residential environment or residential environment equipped with environmental facilities and infrastructure while the definition of a house is a building that functions as a place of residence or housing for family development facilities (Harianto and Prasetyo, 2010).

The type of property is divided into 4, namely:

1. Residential Real Estate: Residential housing both private and government-owned and institutional, which meets basic human protection needs. This is the source of the most demand from professional property manager services.

2. Commercial Real Estate: Commercial housing consists of office buildings and retail properties.

3. Industrial Property: Includes heavy and light manufacturing plants, warehouses for storing and distributing products.

4. Special Purpose Property: Hotels, motels, clubs, resorts, hospitals, theaters, schools, universities, government institutions, places of worship are included in special purpose categories. Their general denomination is the fact that the activities that occur in this building are special businesses.

## 2.2 Occupational Satisfaction

Satisfaction is one of the conditions that will occur if the desires, needs and expectations of consumers on a product can be fulfilled. According to experts, measuring customer satisfaction to find out the quality of a product is a matter that is relevant because first, feeling satisfied is generally based on an observation of the measurement of the deficiency or perfection of a product. Second, complaints from a consumer generally indicate a problem with the product.

According to Lewis and Booms quoted from Tjiptono and Chandra (2005), service quality is a measure of how well the level of service provided can be adjusted to customer expectations. Thus, there are two important factors that affect the quality of services, namely:
1. Expected services
2. Perceived services

If the perceived service is able to exceed expected services, then a service can be said to have met the ideal quality. But on the contrary, if perceived services are smaller than expected services, a service is seen as negative or does not meet the ideal quality standards.

Consumer expectations are basically the same as what services the company should provide to consumers. The expectations of these consumers are based on information delivered by word of mouth, personal needs, past experiences, and external communication.

**2.3 Research Hypothesis**

Hypothesis is defined as a statement about the logical relationship between two or more variables expressed in form so that they can be tested for truth (Sekaran and Bougie, 2013)

The hypothesis of the conceptual framework and the formulation of the problems of this study are as follows:

**1. Simultaneous Test**

That all independent variables have a simultaneous influence on the satisfaction of housing residents.

**2. Partial Test**

a. $H_1$

Availability of Housing Support Facilities has a positive effect on satisfaction of residents of Somerset Regency Housing and Graha Sunggal Housing.

b. $H_2$

The distance from the workplace has a positive effect on the satisfaction of residents of Somerset Regency Housing and Graha Sunggal Housing.

c. $H_3$

Design features have a positive effect on satisfaction of residents of housing in Somerset Regency Housing and Graha Sunggal Housing.

d. $H_4$

Availability of Transportation General has a positive effect on satisfaction of residents of Somerset Regency Housing and Graha Sunggal Housing.

e. $H_1$

Environmental Sanitation and Hygiene has a positive effect on satisfaction of residents of Somerset Regency Housing and Graha Sunggal Housing.

## III. Materials and Method

**3.1 Types of Research**

This research is a research that is a causal-effect relationship. Research on causal effect is a type of investigation research, which is conducted to obtain information on whether an event that occurred was a significant result of other events that occurred earlier (Sinulingga, 2016).

The statistics used are inferential statistics that learn how to draw conclusions about the entire population based on data taken in a sample. While econometrics is defined as a quantitative analysis tool of real economic phenomena based on the development of theories and observations associated with inference method (Suliyanto, 2011).

**3.2 Location and Time of Research**

This research took place at Somerset Regency Housing and Graha Sunggal Housing, located on Jalan Sunggal, Medan Sunggal District, Medan City. The location of Medan Sunggal Subdistrict, especially Jalan Sunggal was chosen because this area is an area that is considered as one of the most populous areas covered by housing with a fairly high level of development in the past 10 years.

**3.3 Population and Samples**

Population is the whole study subject. If someone wants to examine all the elements in the research area, then the research is population research or population study or census study (Sabar, 2007).

The population in the study were 120 houses in Somerset Regency Housing and 90 houses in Graha Sunggal Housing.

According to Sugiyono, the sample is the part or number and characteristics possessed by the population. If the population is large, and researchers are not likely to learn all that is in the population, for example due to the limitations of funds, energy and time, the researcher will take samples from that population. What is learned from the sample, the conclusions will be applied to the population. For that samples taken from the population must be truly representative (Sugiyono, 2011).

Based on the research boundaries specified in this study and limited research time and reviewing sample size determination methods, then each study location will be taken as many as 42 (forty two) respondents.

## 3.4 Data Analysis Method

This study uses descriptive qualitative analysis method to determine the existence of relationships between dependent variables and independent using inductive statistics correlation with multiple regression analysis. The qualitative descriptive objective in this study is to provide a systematic, factual and accurate description of certain facts.

### a. Descriptive Analysis

Sugiyono (2011) explains that qualitative research methods are research methods used to examine natural objects, where researchers are key instruments, while data collection techniques are conducted by interview methods, data analysis is inductive, and the results of qualitative research emphasize meaning rather than generalization.

### b. Multiple Linear Regression Analysis

This analysis is conducted to see if there is a causal relationship between the two variables or examine how large one variable affects the other variables. Relationship between variables that describe the function, namely: $y = f(x)$. This function explains the relationship between the dependent variable (Y) and the free variable (X). Hypothesis testing using t test, F test, r squared test.

## IV. Results and Discussion

### Results and Discussion
### a. Variable Housing Support Facilities

The empirical test results of the influence of Supporting Facilities $(X_1)$ on Housing Occupancy Satisfaction for Somerset Regency amounted to 0.013 smaller than 0.05 so that it can be said to influence the Support Facility for customer satisfaction at Regency Sommerset Housing significantly, for Graha Sunggal Housing empirical results Support Facilities $(X_1)$ is 0.126, this result explains that Supporting Facilities $(X_1)$ gives a positive influence on consumer satisfaction at Graha Sunggal Housing.

Coefficient value 0.363 on Supporting Facilities variable $(X_1)$ Regency Sommerset Housing that has a positive sign shows the direction of a positive relationship. This means that the higher satisfaction with Supporting Facilities $(X_1)$, the greater the level of satisfaction of each occupant in the housing. Likewise with the coefficient value of the Supporting Facilities variable $(X_1)$ of Graha Sunggal Housing, where the Support Facility coefficient value $(X_1)$ is 0.160 which is positive indicating the direction of a positive relationship. This means that the higher satisfaction with Supporting Facilities $(X_1)$, the greater the level of satisfaction of each occupant in the housing.

Significant value of the Empirical Facility variable $(X_1)$ empirical results on data at Somerset Regency Housing with a value of 0.013 which is lower than Graha Sunggal Housing at 0.126, this indicates that the level of significance or satisfaction of occupants on the Supporting Facilities variable $(X_1)$ in Somerset Regency Housing better than Graha Sunggal Housing.

In Somerset Regency housing the significance of the calculation results is 0.013, the results of this study support previous research, which according to Harianto and Prasetyo (2010) in his research on the level of satisfaction of residential residents concluded that the variable supporting housing facilities had a significant influence on affecting housing satisfaction.

### b. Variable Central Busines District (CBD)

The empirical test results of the influence of the Distance to the Business Center or Central Busines District $(X_2)$ on the Occupancy Satisfaction Rate for Somerset Regency are 0.02, so that the influence of Distance to the Business Center on customer satisfaction in Sommerset Regency Housing is significant, for Graha Sunggal Housing The results of the empirical test Distance to Business Center $(X_2)$ is 0.00, this result explains that the two Housing consumers at Somerset Regency and Graha Sunggal are very satisfied with the Distance to the Business Center $(X_2)$ from their residential position.

The coefficient of 0.288 on the Distance to Business Center variable ($X_2$) Regency Regency Housing which has a positive sign shows the direction of a positive relationship. This means that the higher the satisfaction with the Distance to the Business Center ($X_2$), the greater the level of satisfaction of each occupant in the housing. Likewise in the Graha Sunggal Housing the value of the coefficient of Distance to Business Center ($X_2$) is -0.273 which is positively indicated positive relationship. This means that the level of consumer satisfaction at Graha Sunggal Housing will increase if the distance to the Business Center is closer to the Graha Sunggal Housing complex.

Hasyim's research (2016) on the consumer satisfaction of the Green Garden Resident Property in Kendal, the results of the analysis showed that the distance of housing to economic and social facilities and infrastructures proved to have a positive and significant effect on customer satisfaction. Hasyim (2016) is in line with the results of this study on Somerset Regency Housing and Graha Sunggal Housing, the level of consumer satisfaction in both housing is significant to the satisfaction of residential residents.

**c. Variables Housing Design Feature**

The empirical test results of the effect of Housing Design Features ($X_3$) on Residence Regency Housing Satisfaction rates of 0.464 are greater than 0.05 so that the effect of Housing Design Features on customer satisfaction on Regency Sommerset Housing has not been significant, for Graha Sunggal Housing empirical results Housing Design Feature ($X_3$) is equal to 0.512, this result also explains that Housing Design Feature ($X_3$) has not significantly affected the consumer satisfaction of Graha Sunggal Housing.

The coefficient of 0.101 in the Housing Design Feature ($X_3$) variable of the Graha Sunggal housing which has a positive sign shows the direction of a positive relationship. This means that the higher the satisfaction with the Housing Design Feature ($X_3$), the greater the level of satisfaction of each occupant in the housing as well as the Housing Design Feature variable ($X_3$) Somerset Regency housing that has a positive sign shows a positive relationship direction, where the coefficient is The Housing Design feature ($X_3$) is equal to 0.139. This means that the higher the satisfaction with the Housing Design Feature ($X_3$), the greater the level of satisfaction of each occupant in the housing.

The different coefficient values between Graha Sunggal Housing and Somerset Regency Housing indicate that there are different treatments from the developers of each housing for design features. Based on observations in the field, Somerset Regency Housing design features are still better than GrahaSunggal Housing, but on the other hand Somerset Regency Housing residents still consider that the housing design features they receive are still unsatisfactory.

Research results at Somerset Regency and Graha Sunggal residential locations explain the positive direction of home design features on housing consumer satisfaction.

**d. Variable Accessibility of Public Transportation**

The empirical test results of the influence of Accessibility of Public Transportation ($X_4$) to Residence Occupancy Satisfaction for Somerset Regency at 0.145 are greater than 0.05 so that the influence of Accessibility of Public Transportation on customer satisfaction on Regency Sommerset Housing has not been significant, for Graha Sunggal Housing empirical results Accessibility of Public Transportation ($X_4$) is equal to 0.804, this result also explains that Accessibility of Public Transportation ($X_4$) has not significantly affected consumer satisfaction at Graha Sunggal Housing.

The coefficient value of 0.241 and 0.020 in the variable Accessibility of Public Transportation ($X_4$) Housing Sommerset Regency and Graha Sunggal which are positive indicates the direction of a positive relationship. This means that the higher the satisfaction of housing residents to the accessibility or reach of residents of housing to access to public transportation facilities the greater the level of satisfaction of each occupant in the housing.

The significance value of the empirical test results of the Accessibility of Public Transportation variable ($X_4$) on data at Somerset Regency Housing with a value of 0.145 lower than Graha Sunggal Housing at 0.804, this indicates that the variable accessibility level of Public Transportation ($X_4$) in Somerset Regency Housing is better from Graha Sunggal Housing.

Research by Rastra et al. (2013) in a study evaluating the provision of public facilities by housing developers based on the regulations for housing implementation in Malang City. From the results of this study it is known that consumer satisfaction is most influenced by the availability of public housing facilities including the coverage of residents of public transportation facilities. This study supports previous research where public transport accessibility variables in both research locations have a positive influence on housing consumer satisfaction levels.

**e. Variable Housing Sanitation**

The empirical test results of the influence of Housing Environmental Sanitation ($X_5$) on Housing Occupancy Satisfaction for Graha Sunggal Housing are 0.703, so it can be said that the effect of Housing Environmental Sanitation on customer satisfaction at Graha Sunggal Housing has not been significant, for Somerset Regency Housing results of empirical tests on Housing Environmental Sanitation (X5 ) is equal to 0.307, this result explains that Housing Environmental Sanitation ($X_5$) has not significantly affected the customer satisfaction of Somerset Regency Housing.

Empirical test coefficient value of Housing Environmental Sanitation variable ($X_5$) 0.182 and 0.040 on Housing Environmental Sanitation variable ($X_5$) Regency Regency Housing and Graha Sunggal which are positive indicate the direction of a positive relationship. This means that the higher satisfaction with Housing Environmental Sanitation ($X_5$), the greater the level of satisfaction of each occupant in Somerset Regency Housing and Graha Sunggal Housing.

The significance value of the empirical test results for Housing Environmental Sanitation ($X_5$) on data in Somerset Regency Housing with a value of 0.307 which is lower than Graha Sunggal Housing at 0.703, this indicates that the level of significance of Housing Environmental Sanitation ($X_5$) in Somerset Regency Housing is better than Somerset Regency Housing.

Research by Thedja and Wiguna (2012) in an analysis of consumer interest in "Dian Regency 2" properties. The results of this study indicate variables that have a positive and significant influence on purchasing decisions, namely environment variables. The results of the research in the two housing locations also showed the same thing as the previous research, where housing sanitation had a positive influence on the satisfaction of each housing occupant.

# V. Conclusion and Suggestion

**Conclusion**

Based on the results of research conducted on all observational data satisfaction of residents of housing in Somerset Regency Housing and Graha Sunggal Housing in Medan Sunggal District, Medan City, the following conclusions can be drawn:

**1. At Somerset Regency Housing**

a) Simultaneously the variable Availability of Housing Facilities, Distance to the Business Center (CBD), Features of House Design, Availability of Transport and Environmental Sanitation and Hygiene have a positive and significant influence on the level of satisfaction of residential residents, where the calculation results are 4,815 with 0.002a Significance.

b) Variables that provide a positive and partially significant effect, namely the variable Availability of Housing Facilities and Distance to the Business Center (CBD).

**2. At Graha Sunggal Housing**

a) Simultaneously the variable Availability of Housing Facilities, Distance to Business Centers (CBD), Features of House Design, Availability of Transport and Environmental Sanitation and Hygiene have a positive and significant influence on the level of satisfaction of housing residents, where the result of analysis is 23,487 with a significance of 0.000a.

c) Variables that give a positive and significant effect partially, namely the Distance to Business Center (CBD) variable.

**Suggestion**

Based on the background and conclusions in this study, suggestions can be given as follows:

1. In measuring the level of satisfaction of residents of a housing complex, the analysis model in this study can be a reference as a measure to see the level of satisfaction of residents of a housing complex.

2. Differences in the significance level of each housing complex can be considered and evaluated for property development actors or developers in providing services to their residential consumers.

3. For further researchers, to obtain factors that provide a significant level of satisfaction in residents of housing complexes can include indicators or variables other than Availability of Housing Facilities, Distance to Business Centers (CBD), Features of House Design, Availability of Transport and Environmental Sanitation and Hygiene, so that there is a deep relationship between variables and the level of satisfaction of residential property consumers.

## Reference

[1].  Harianto, F. and Prasetyo, A.P. (2010). *Analisis Tingkat Kepuasan Penghuni Rumah di Perumahan Puri Surya Jaya Gedangan Sidoarjo.* Surabaya: Pengembangan Infrastruktur dalam Menunjang Pembangunan Ekonomi Nasional, Seminar Nasional VI 2010 Teknik Sipil ITS.

[2].  Hasyim, Daniel Lukman. (2016). *Pengaruh Lokasi, Pelayanan, Fasilitas dan Harga terhadap Kepuasan Konsumen Properti Green Garden Resident di Kendal.* Semarang: Universitas Dian Nuswantoro, Jurnal Manajemen.

[3].  Rastra, Acramanila Magha, Djakfar, Ludfi, Zaika, Yulfi. (2013). *Evaluasi Penyediaan Fasilitas Umum oleh Pengembang Perumahan Berdasarkan Peraturan Penyelenggaraan Perumahan di Kota Malang.* Malang: Universitas Brawijaya, Jurnal Rekayasa Sipil.

[4].  Sabar, Rutoto. (2007). *Pengantar Metedologi Penelitian.* FKIP: Universitas Muria Kudus.

[5].  Sinulingga, Sukaria. (2016). *Metode Penelitian,* Edisi 3. Medan: Penerbit USU Press.

[6].  Sugiyono. (2012). *Metode Penelitian Bisnis, Cetakan Ke 16.* Bandung: Penerbit Alpabrata.

[7].  Suliyanto. (2011). *Ekonometrika Terapan Teori dan Aplikasi.* Jakarta: Penerbit Andi.

[8].  Sekaran U, and Bougie R. (2013). *Resrch Methods for Bussiness A Skill Building Approach, 6th Edition.* A John Wiley and Son, Ltd Publication.

[9].  Thedja, Julian Pratama Putra, Wiguna, I Putu Artama. (2012). *Analisa Ketertarikan Konsumen terhadap Properti Dian Regency 2.* Surabaya: Institut Teknologi Sepuluh November, Jurnal Teknik POMITS.

[10]. Tjiptono, Fandy, and Gregorius Chandra. (2005). *Service Quality & Satisfaction.* Yogyakarta: Penerbit Andi.