

A STUDY ON CUSTOMER PREFERENCES AND VALUE PROPOSITIONS TOWARD INTERIOR DESIGN OF APARTMENT IN SURABAYA CITY

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ABSTRACT

The purpose of this paper is to gain a comprehensive overview of the costumer's perceptions on apartments, which include their interior designs and the factors that influence consumers to purchase the packages in Surabaya. The paper also aims to analyze the benefits of those factors for the consumers and how they will obtain those benefits from financial perspective. Surabaya is the second metropolitan city in Indonesia after Jakarta. Both the potential and development of Surabaya are currently almost at par with Jakarta. That is the reason why Surabaya is the sample for the study. As for the case study, this paper worked with Gunawangsa Group and 175 respondents to represent the property practitioners and residential consumers respectively. The study collects the data through structured surveys distributed among citizens of Surabaya. Respondents were chosen randomly from both genders and had various ages, income levels, and occupations from most regions in Surabaya. Descriptive analysis, correlation study, scenario analysis, and feasibility study were all used, and the authors compare the respective results to one another in this paper. The results of this research provided the benefits analysis for a new business strategy in regards to apartment sale that was in the package with its interior design in Surabaya, the factors that influenced the consumers to purchase, and the financial benefit analysis for customers and developers. To summarise, the study provided a valid and dependable apartment product testimonies of different consumers and property practitioners equipped with the new strategic business in Surabaya. This research is the first in Indonesia to compare the factors preferences of housing consumers and property practitioners for apartment sale that is in the package with its interior design product. This study is also the first to reaffirm preference attributes that influence apartment price in Indonesia.

Keywords: Consumer preferences, apartment price, residential, Indonesia, Surabaya

1. INTRODUCTION

Surabaya is the second metropolitan city after Jakarta and the capital city of East Java province. Surabaya is the center of numerous businesses, industries, and political hub and education service. The development of Surabaya infrastructure is no less rapid than Jakarta, which stimulates economic growth and also the property sector significantly. Like many other large Indonesian metropolises, Surabaya becomes the attraction point for urbanization and business for people from all over Indonesia after Jakarta. It has attracted many migrants to seek steady employment in Surabaya. As a result, the population in Surabaya continues to increase dramatically every year. Around 2,821,929 people are living in Surabaya with population density in 7,889 inhabitants per square kilometers. Over 50 years, the population in Surabaya is multiplying at an average 0.65 % per year (Indonesian Statistical Board, 2010).

Rapid population growth has led to an incisive demand for living space that eventually evokes the residential development in the area of Surabaya, as well as opens opportunities for real estate developers to gain profit over the price of housing with its increasing value over time. It certainly makes the demand for property rise, but the growing need for the property unaligned with the land availability has amplified the housing price significantly. As real estate product is considered as a unique product (Harshman and Quigley, 1991; Hai-Zhen et al., 2005), it is difficult to put a particular price tag for the product. From year to year, the price of housing increases uncontrollably, which creates socio-economic problems. It is the reason that motivates many developers choosing Surabaya to develop their business, especially in the apartment sector, that is arguably the best solution for housing in a limited land at affordable prices.

From 2018 to 2020, the supply is scheduled to grow by 9,251 units per annum. About 46% of all new units of an apartment are scheduled in the mid-low segment. While the demand of apartment in Surabaya, by the end of 2018, the take-up rate may rise up modestly to 81-82%. A brisker outlook for 2019 and 2020 may allow the take-up rate to reach 84% and 85%, respectively (Collier Internasional Indonesia, 2018). As a result, the growth of property reaches 17, 3% per year. There will be an additional around 28,640 units from 37 new projects, which makes the competition even tighter.

PT. Gunawangsa Group, one of the players in real estate and property business, apprehends this opportunity by developing their business in the central region in Surabaya into towers of apartments called Gunawangsa Tidar apartment. It is built on a large land width approximately 1,4 ha. With the theme "The best city resort living in Surabaya." It uses the superblock highrise building concept in the center of Surabaya. However, tight competition in the apartment sector requires developers to always look for new business strategies to improve their target market. The sale of apartments equipped with interior design is one of the breakthroughs to attract consumers in Surabaya. The sale of a one-package apartment with interior design is more attractive and profitable for both developers and consumers in the financial insight. Referring to this statement, the author is eager to analyze

the most optimistic initial investment strategy used for the target market of Gunawangsa Tidar apartments tower C by considering the customer preferences and value proposition to purchase apartments in Surabaya.

The purpose of this study is to analyze the benefit of the new business strategy of the sale apartments in a package with interior design in Surabaya. Whether this business strategy is feasible or not to be used in the sale of the Gunawangsa Tidar Apartemen tower C project. This research will be focusing solely on apartment product, with the purpose of research as follows:

- a. To identify the factors that influence the consumers to purchase a one-package apartment with an interior design
- b. To determine market preference to maximizing the profit and optimizing the market sales.
- c. To analyze and identify the most optimal scenario based on IRR, NPV and payback period according to consumer's preference.

This research is significant for real estate development in Indonesia, as recently there are limited studies conducted in this industry within Indonesia. This current study is expected to produce significant findings for the real estate industry in Surabaya. As studies in this particular field are still considered to be scarce in Indonesia, the results would be valuable for residential consumers, property practitioners, real estate developers, and the government to improve the current property market condition in Indonesia.

It can be relevant for real estate developers in other metropolitans in South East Asia, as some of the behaviors in purchasing a property product in similar cities such as Singapore, Kuala Lumpur, Bangkok, and Manila. The paper is intended to be the first pioneer study on factors of preferences on the sale apartments in a package with interior design products in Indonesia.

The theoretical framework and methods can be replicated and implemented in other major cities in Indonesia such as Jakarta, Bandung, Medan, and Makassar. Last but not least, the knowledge gained from this study will be valuable for all interacting parties to create a better, more efficient, cheaper and profitable market of apartment product in Indonesia.

2. LITERATURE REVIEW

2.1. Indonesian real estate market condition

Consumers usually tend to go through a series of steps before committing a purchase of a product. In this case, rational choice behaviors underline the process of buying the product. Lerman (1976), Thaler (1980), and Bateman et al. (2002) suggested that consumers always attempt to choose based on rational considerations when purchasing a product. Most customers tend to begin by identifying the price of the selected products, the advantages and disadvantages factors such as location, facility, neighborhood, safety, and others. They also weigh the utility when choosing a housing product.

Collier Internasional Indonesia (2018) assumes that investor-type of buyers in Surabaya tends to be more responsive to the new property projects, especially those that are built by reputable developers. Currently, the buyers are more selective in spending their money, particularly on apartment projects. They tend to choose products that have a strategic location and a unique concept as well as offers flexible payment method. These products are still able to thrive despite the current market condition with the economic outlook in the next year to be up slightly from 2017 to 5.3%. The short-term outlook projection for apartments in Surabaya may not be rosy. However, for the longer-term prospect of apartment market in Surabaya will be very rosy.

2.2. Previous research on residential consumer behavior and price

Authors have conducted studies to understand the behavior of real estate customers especially apartment when selecting and purchasing residential products. Based on the Collier International Indonesia researcher (2018), apartment construction in Surabaya has continued to increase since 2008. Study on real estate developer especially apartment equipped interior design toward price and financial insight are still new. Some of the researcher's worth mentioning include researches by Rahadi et al. (2013) and Renuka et al. (2016). The most influential factor that affects price mostly come from the customer point of view. To optimize price-housing product, real estate developer should pay attention to the customer preferences, and not just reflecting on their experience when setting up a price for their new product. Customers also prefer to purchase real estate product that has reinvestment value. From the journal of Renuka et al. (2016), most of the costumes tend to be neutral about the price, and it depends on the promotion. Based on the reason of preferring the apartment, location is on the first rank, followed by appearance and cost.

Indonesians are inclined to live in a landed house; it is such a pivotal decision to buy an apartment. Commonly, customers buy an apartment more about investment or sojourn; hence apartment with the location near to the district center is preferential (Putri et al., 2016). Several studies have been conducted to measure what factors that are affecting the customer's preference at most on purchasing the residential product. Rahadi et al. (2015) analyzed three environmental factors affect customer's preference for purchasing residential products in Indonesia. Three environmental factors analyzed comprising physical qualities, concept, and location.

Fardiansyah (2017) researched customer preference, motivation and perception dwell-in apartment on Bekasi which have analyzed three factors; videlicet price, facility, and accessibility. According to the survey findings, location is the factor-affecting customers to purchase apartment and facility is the least of all factors affecting the apartment purchase decision. To sum up, location is still the most factors that influence the customer to buy a housing product. However, the authors are eager to analyze

deeper factors about the factors that influence customers to purchase apartment include interior design as a new business strategy.

2.3. Capital Budgeting

Any investment decision depends on the decision rule applied under circumstances and conditions. The decision rule itself considers three factors such as cash flow, project life, and discounting factor. Ideally, every business should pursue all their projects and opportunities that enhance shareholder value. However, the amount of capital available for new projects is limited; management needs to use capital budgeting. Capital budgeting prescribes as the whole process of evaluating and selecting and deciding the proposed long-term investment to maximize the wealth of firm's shareholders. On this research, the author discusses the four techniques of capital budgeting based on Gitman and Zutter (2012: 392). Below is the discussion of those four techniques:

1. The weighted average cost of capital (WACC) is one of the methods to determine the discount rate. The calculation of WACC is multiplying the cost of each equal weight (debt and equity) and adding together to get the value of WACC.
2. Payback Period is used to examine the time required to recover its initial investment in a proposed investment/project. Since this research is to analyze the feasibility study for multiple years, hence, yearly cash inflows must be accumulated with the result that the company will recover the initial investment. The management should determine the maximum time of the acceptable payback period. If the period is less than the maximum time of the acceptable payback period, the result would be to accept the project. While If the payback period is higher than the maximum time of acceptable payback period, hence reject the project.
3. Net Present Value (NPV), Gitman and Zutter (2012: 392) define Net Present Value as a subtracting project's initial investment based on the present value of its cash inflows discounted at an equal rate to the firm's cost of capital. If the NPV is greater than Rp.0, hence accept the project because the firm will earn a higher return than its previous rate of return. However, if the NPV is less than Rp.0, hence reject the project because the firm will inflict a financial loss.
4. The definition of Internal Rate of Return (IRR) in Gitman and Zutter (2003) is the discount rate, which turns the NPV of a project Rp.0. The initial cash investment for the beginning period of construction will be equal to the present value of investment's future cash flow. IRR is preferred because it has an intuitive appeal. If the IRR is higher than its cost of capital, hence accept the project. While if the IRR is less than its cost of capital, hence reject the project.

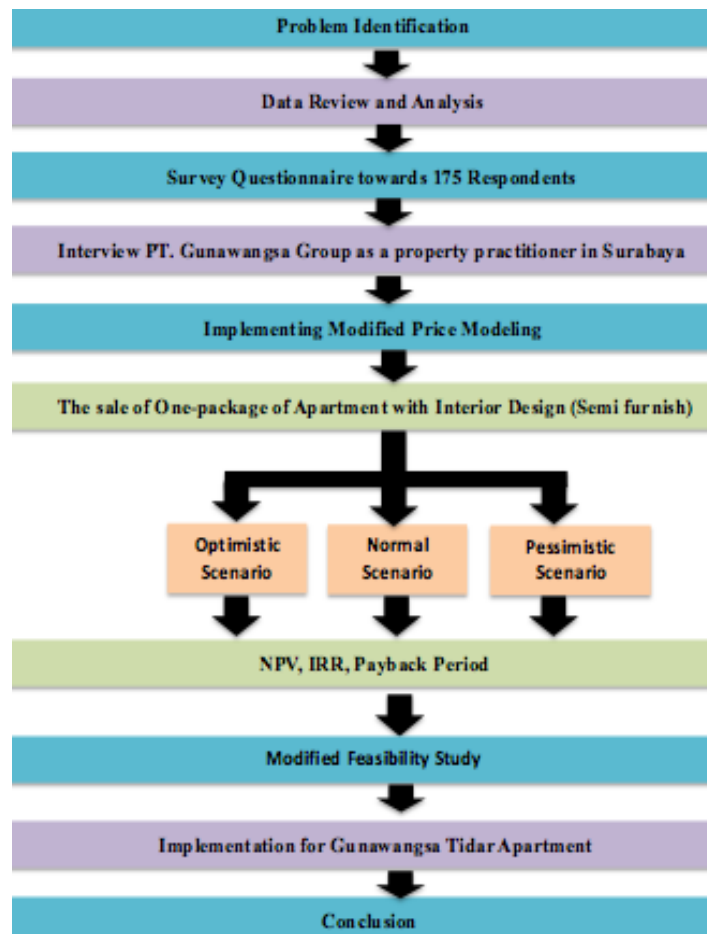
2.4. Feasibility Study

A feasibility study is used to define due diligence whether the project is potential to invest or reject it. A feasibility study is conducted by analyzing several alternatives and deciding which alternative gives the best propitious scenario. Kerzner (2016) defined a feasibility study as technical aspects of conceptual alternatives, conducted to decide whether to undertake the project or not. Classification of Feasibility Study Abou-Zeid et al. (2007) classified the feasibility study for the construction project based on its function, that is:

- a. Legal Study examines any legal aspect, which precludes the construction progress, such as compliance and regulatory risks.
- b. Market Study, involves data collection, analysis, and marketing, a market study examining supply, demand, selling period schedule, projected market absorption, an overview of product mix, product positioning, market fit analysis and competitive position of the project site.
- c. Technical and Engineering Studies, defines an ideal concept, design, construction process, and construction method.
- d. Financial and Economic Studies, all of the aspects above are the sum up on this aspect.

2.5. Conceptual Framework

Figure 1: Conceptual Framework



3. METHODOLOGIES

3.1. Market Survey

The preliminary study will try to analyze the pricing model for the sale of a one-package apartment with interior design in Surabaya city, Indonesia. For this purpose, the author conducted a questionnaire in August 2018. Data used in this research is gathered from a total of 175 respondents comprising current and future apartment owners identified as apartment consumers. The location was in Surabaya, and the age range of the respondents was between 20-56 years old. The data was collected using judgmental sampling with a non-sequential approach.

The main aim of the survey was to elicit respondent's preferences when presented with several alternative apartment products include with its interior design. It expected that the consumer's response would enable this study to map the current apartment market conditions in Surabaya.

a. Questionnaire

The questionnaire items consist of three parts. The first part deals with the respondent's background and demographic information, the second part deals with the validation of the conceptual model for apartment customers, while the last part deals with the validation of the conceptual model for interior design consumers.

b. Interview with practitioners

The Authors used PT. Gunawangsa Group as a case study from property practitioners. This study conducts several interviews with Gunawangsa staffs. It was used to get more in-depth information about Gunawangsa Tidar apartment. During the process of data collection both of questionnaire and interview, confidentiality of the respondent's personal information is for research purpose only. Before the research process, the respondents received instructions for completing the questionnaire, the study purpose, and information about data confidentiality. All respondents have given their consent to participate in this study. The research process, from constructing the survey method, data collection, and data analysis are under monitoring and approved by the university advisers.

c. Statistical Analysis

Statistical analysis used in this research is a descriptive statistical analysis, specifically the mean analysis and the mode analysis. The mean measurement is the sum of all the value of attributes divided by some values. It measures quantitative and symmetrically distributed data. Mean analysis is used to measure the customer preference on apartment purchasing decision and customer preference on interior design purchasing decision. Mode analysis is the

most common data occurred. It should be used for nominal data. The mode analysis used to measure customer preferences on the ideal model for the sale of a one-package apartment with interior design in Surabaya city, Indonesia

3.2. Feasibility Study

According to the questionnaire findings, authors will contrive the modified scenario for a feasibility study. On its original feasibility study, the construction progress of Gunawangsa Tidar apartment tower C starts in 2019, which is the 3rd year since the beginning time of Gunawangsa Tidar apartment.

Furthermore, there are several assumptions changed by the authors like the land price. Since this research conducted in 2018, the authors used the most updated land price in Tidar Surabaya which price is five million rupiahs per square meter. The land price used for all scenarios of a modified feasibility study. The second is legal fees. Considering the previous project of Gunawangsa group, authors used the legal fees 5% of total construction cost. The third is the rate of interest and deposit. In this paper, the authors used 11.97% interest rate and 5.56% deposit rate, which stated on Indonesian bank report in June 2018.

The fourth is the proportion of construction progress. Author modified it into 20% : 30% : 30% : 20%. It means that the construction progress will complete in four years. The selling period will be started a year after construction progress — the assumption used for all scenarios of a modified feasibility study. The fifth is the composition of apartment unit of Gunawangsa Tidar apartment. The Author modified several compositions which consist of 590 unit studio apartment type, 900 unit two bedrooms apartment type, 300 three bedrooms apartment type, and ten penthouse type. The assumption based on the result of the customer preference. The main difference between all scenarios is shown in the figure as follows:

Table 1: Difference in Each Scenario by Timeline

REVENUE APPROACH	3 rd SCENARIO	30%	20%	20%	20%	10%	
		30%	20%	20%	20%	10%	2 nd
TIMELINE	2018	2019	2020	2021	2022	2023	2024
COST APPROACH	20%	30%	30%	20%	1 st , 2 nd , 3 rd SCENARIO		

In this project, there will be three scenarios to be analyzed which is:

1. Optimistic scenario (shorter market sales)
2. Normal scenario (normal market sales)
3. Pessimistic scenario (wider market sales).

These three scenarios will be analyzed to see the most optimist scenario for Gunawangsa Tidar Apartment. Each scenario using the analysis of the calculation of Net Present Value (NPV), Payback Period (PBP), and Internal Return Rate (IRR) based on customer preferences to purchase one-package apartments with interior design.

4. ANALYSIS AND RESULTS

4.1. Background and Demographics of Respondents

The demographic information used in this questionnaire allows the Author to get a better understanding regarding about the background characteristics of the respondents. By asking demographic questions in this questionnaire, the author can gather demographic information about current customers and prospective apartment customers. From the results of the survey, the number of respondents who filled out the questionnaire results tended to be balanced between men (44,6%) and women (55,4%). Most of the respondents are at the age of 20 to 30 years old (72,6%), followed by respondents at the age o.f 30 to 40 years old which is even 17,1% and the last but not least is respondents are on the age 40 to 50 and more than 50 years old which have similar percentage (5.1%). Besides that most respondents, were private employees and based on education level, most respondents is a graduate, where this can be used as a reference for Gunawangsa group in determining the consumer segmentation of the Gunawangsa Tidar Apartment project. It will also help the author to decide and design a market segmentation strategy to reach the right clients. As a result, the Author can determine the best scenario for the Gunawangsa Tidar Apartment project is obtained.

4.2. Customer Tendency towards Apartment Product

The two section is about the tendency of the respondents towards residential product consist of ten questions. The first question of part two is about desire have an apartment. 65.7 % of the respondents are a desire to have an apartment while 34.3% is not desired to have an apartment. Based on the above data it can be concluded that the interest of the Surabaya community to own an apartment is quite high. The popularity of apartments continues to increase from year to year (Property Affordability Sentiment Index, 2018).

The next question is finding that almost half of the respondents prefer to purchase the two-bedrooms type (45, 4%). Followed by studio type, which chooses by 21,3% of the respondent. 17,8% of the respondent prefer to purchase a three-bedroom type, the other 15,5% of the respondents prefer to purchase penthouse type when deciding to purchase an apartment. 49, 7% of the respondent is eager to purchase an apartment, which has a location in East Surabaya. Followed by Central Surabaya (43,4%), West Surabaya (39,4%) and South Surabaya (20,6%) respectively. The result shows that only 8,8% of the respondent keen to buy an apartment, which has a location in North Surabaya.

Regarding the price, 45,7% of the respondent is eager to purchase an apartment which price is less than 250 million rupiahs. Followed by 41,7% of the respondent who prefers to purchase an apartment which price is between 250 million rupiahs to 500 million rupiahs. 19% of the respondent eager to purchase an apartment which price is between 500 million to 500 million rupiahs. 10,3 % of the respondent eager to purchase an apartment which price is between 500 million rupiahs to a billion rupiahs and only 2,3% which consist of four respondents who eager to purchase an apartment which price is higher than a billion rupiahs. For the payment method, almost half of respondents are choosing an installment by KPR (57,1%). Followed by cash installment (29,7%) and 13,1% of the respondents is choosing to pay the apartment by cash. The author is using the finding from this question as an underlying assumption of the modified feasibility study. The composition of apartment unit type will contrive based on this result.

The last question in this section which about customer preference that influences them to purchase an apartment in Surabaya consist of ten questions and use the Likert scale of 1 – 6 to present the findings. The scale of 1 indicates the least preferable factor influencing customer preference and the scale of 6 indicates the preferable factor influencing customer preference. The analyzing of this finding of this result use one sample statistics.

The eight factors are based on Rahadi et al. (2016) with expansion on another two factors: payment method and discount since it is one of the differentiation strategies assigned by Gunawangsa Tidar Apartment.

As seen in Table 2, the location has the highest mean (5.154) followed by reinvestment value (5.131) which influencing the customer preference towards apartment purchases decision. This result is in line with prior results conducted by several researchers such as Herath (2010), Kamal et al. (2015), Putri et. al. (2016), Rahadi et. al. (2016), and Fardiansyah (2017) which indicate location is the most influencing factor for purchasing decision on residential product. This result is also in line with the prior finding on demographic information according to the excellent location to purchase an apartment. Most of the respondents live in East Java. One of the consumer preference is the housing located near the family members such as parents and brothers and sisters (Nulder, 2007).

Indonesia as most South East Asians greatly uphold family values and prefer to live closer to their closest family members. It is common for a son or daughter to live with or near with their parent and brother or sister (Rahadi et al., 2016). While 43,4% prefer to have an apartment in Central Surabaya as a central city of Surabaya, as a result, they can reach every location in Surabaya easily. It will be a valuable asset for Gunawangsa Project to attract the customers. While according to the data, developer reputation indicates the least preferable factor influencing customer preference to purchase an apartment.

Table 2: Customer Preference to Purchase Apartment

Customer Preferences	N	Mean	Std. Deviation	Std. Errors Means
Apartment concept is the key factors that influence my purchase decision of apartment product.	175	4.834	0.992	0.075
Developer reputation is the key factors that influence my purchase decision of apartment product.	175	4.480	0.786	0.059
Reinvestment Value is the key factors that influence my purchase decision of apartment product.	175	5.131	1.462	0.111
The location is the key factors that influence my purchase decision of apartment product.	175	5.154	1.559	0.118
The facility is the key factors that influence my purchase decision of apartment product.	175	4.937	1.153	0.887
Accessibility is the key factors that influence my purchase decision of apartment product.	175	4.851	1.097	0.083
Physical quality is the key factors that influence my purchase decision of apartment product.	175	4.909	1.215	0.092
Livability is the key factors that influence my purchase decision of apartment product.	175	4.794	1.109	0.084
Payment Method is the key factors that influence my purchase decision of apartment product.	175	4.726	1.048	0.079
Discount is the key factors that influence my purchase decision of apartment product.	175	4.194	0.722	0.055

4.4. Customer Tendency towards Interior Design Product

The first question of part three is about the view of interior design. 38,3% of the respondents believe that interior design is very important in housing product. While 32,6% of the respondents believe that interior design is fairly important in housing product, and 13,1% of the respondents believe that interior design is important in housing product, in comparison to that, 8,6% of the respondents believe that interior design is unimportant in housing product and 7,4% of the respondents believe that interior design is slightly important in housing product. The built exterior/interior environment is a critical player in establishing meaning in people's lives (Perolini, 2011). It supported by the findings that more than half of the respondents follow the trend of interior design (64%) while 36% of the respondents do not follow the interior design.

Based on the questionnaire, 81,7% of the respondents are a desire to buy a one-package apartment with the interior design while only 18,3% is not desired to buy a one-package apartment with interior design. Based on the findings, it can be concluded that the interest of the Surabaya community to buy a one-package apartment with interior design is very high. More than half respondent tend to buy a one-package apartment with the interior design because of the affordable price and interested in interior design which has frequency 60, 6% and 54, 3% respectively. While 31,4% respondent wants to buy a one-package apartment with the interior design because of the ease to purchase, 13,1% because of the ease to payment and 11.4% of respondent want to buy a one-package apartment with the interior design because of other reasons.

The finding to this questionnaire is used to analyze the ideal type of interior design in apartment towards customer preference. More than half respondent willing to buy a one-package apartment with the interior design with semi furnished interior design (62,9%) whereas 37,1% of the respondents willing to buy a one-package apartment with the interior design with full furnished interior design. After the finding of the type of interior design, the question on this part will answer the type of interior design that meets the market preference based on the type of apartment unit.

The ideal interior design concept of studio type apartment for Gunawangsa Tidar Apartment project based on customer preference is a minimalist concept which chosen by more half of respondents (53,7%). One important character in the minimalist interior design concept is flexibility. The studio type apartment has limited space, so it requires enough space for the user to be comfortable in their activities. No wonder consumers have chosen the apartment concept as the ideal type of interior design for studio type apartments. Based on the finding, the top three of the furniture for the studio type apartment are pantry, bed, and storage. The typical cost of studio type apartment is 10 to 30 million rupiah to buy a one-package apartment with interior design, which is chosen almost half of the respondents (40%).

The next question is about the two-bedrooms type apartment. The ideal interior design concept of two-bedroom type apartment is a contemporary concept which chosen by almost half of respondents (41,7%). Contemporary interior style reveals a neat and clean look of space — a design style that can be said to represent the present. Most of the respondents are at the age of 20 to 30 years old (72,6%). It is represented in this design style because the contemporary style is very popular with millennials. Two-bedroom type apartment has a larger area compared to studio type apartments so that these apartments can be created more. However, the selection of concepts still focuses on choosing a simple concept given the limited space. For the furniture in the two-bedroom type apartment, the Author will pick top four of the furniture for the two-bedroom type apartment. There are a pantry, 1 set of master bedroom, which is consist of bed and wardrobe, sofa and electronic (TV set). The most of the consumer willing to add cost 30 to 50 million rupiahs to buy a one-package apartment with interior design (30,3%). It can be used as the ideal additional cost for a two-bedroom type apartment.

The last is regarding about the three-bedrooms type apartment. Based on the finding, the ideal interior design concept of three-bedroom type apartment for Gunawangsa Tidar Apartment project is a Scandinavian style concept which chosen by 35.4% of respondents. Most of the respondents are at the age of 20 to 30 years old (72,6%) as millennials. The Scandinavian style has a design character that is simple, functional and unsightly. Three-bedroom type apartment has a larger area compared to two-bedroom type apartments so that these apartments can be created more. However, the selection of concepts is still focused on choosing a simple concept given the limited space. Based on the finding, the top five of the furniture for the two-bedroom type apartment are a pantry, 1 set of master bedroom, which is consisting of bed and wardrobe, living area, electronic (1 set TV) and dining area.

According to the additional cost for three-bedroom type apartment, most of the consumer willing to add cost 50 to 100 million rupiahs to buy a one-package apartment with interior design (28%). It can be used as the ideal additional cost for three-bedroom type apartment. Hence in the next discussion on the feasibility study, the author contrived a scenario of semi-furnished of each type apartments by modified scenario of price based on a customer preference one-package apartment with interior design.

Next on the last question in this section is about customer preference that influences them to purchase interior design product in Surabaya. It consists of ten questions and uses Likers scale of 1 – 6 to present the findings. The scale of 1 indicates the preferable factor influencing customer preference and the scale of 6 indicates the least preferable factor influencing customer preference. The result will be present in the table below.

Table 3. Costumer preference to purchase a one-package apartment with an interior design

Customer Preferences	N	Mean	Std. Deviation	Std. Errors Means
The additional cost is the key factors that influence my purchase decision of the product.	175	5.017	1.318	0.100
The interior design concept is the key factors that influence my purchase decision of the product.	175	4.977	1.144	0.087
The furniture is the key factors that influence my purchase decision of the product.	175	4.943	1.091	0.0082
The color is the key factors that influence my purchase decision of the product.	175	4.589	0.821	0.0062
The material is the key factors that influence my purchase decision of the product.	175	4.971	1.104	0.0083
The element aesthetic is the key factors that influence my	175	4.463	0.794	0.060

purchase decision of the product.				
The brand of the electronics is the key factors that influence my purchase decision of the product.	175	4.371	0.630	0.0048
The motif is the key factors that influence my purchase decision of the product.	175	4.457	0.694	0.052
The lighting is the key factors that influence my purchase decision of the product.	175	4.886	1.086	0.082
Physical quality is the key factors that influence my purchase decision of the product.	175	4.891	1.152	0.087

The analyze of this finding using one sample statistics. While the ten factors of the customer preference are based on the knowledge, understanding of the Author as an interior designer since 2015 and the FGD with other interior designers. As seen on table 3, additional cost has the highest mean (5.017) followed by interior design concept (4.977) and furniture (4.943) which influencing the customer preference towards interior design in a one-package apartment with an interior design purchase decision.

4.5. Feasibility Study Scenario

In this paper, Authors use feasibility study scenario to validate the most optimist feasibility study based on customer preference, which is compared in three scenarios. As discussed on the finding of the questionnaire, the respondents choose semi-furnished for the additional interior design facility and willing to pay thirty million higher for studio apartment type, fifty million higher for two bedroom apartment type and the respondents are willing to pay up to 100 million rupiahs for three bedroom apartment type. Hence, the additional price of interior design added to the calculation of a modified price per unit. The proportion of construction progress each year also set to be impartial in each scenario which is 20 %: 30 %: 30 %: 20% and completed in year fourth. The calculation of each scenario will be present in the next table.

Table 3. NPV, IRR, and Payback Period of three scenarios

SCENARIO	1 st SCENARIO	2 nd SCENARIO	3 rd SCENARIO	RESULT
NPV	366,624,725,348	348,639,246,339	256,184,823,916	Accepted
IRR	31 %	22 %	13 %	Accepted
D. Payback Period	1.39	2.36	4.14	Accepted

According to the calculation, the NPV of the three scenarios is positive and more significant than zero, and all of the projects are applicable. The IRR of all the project is higher than its WACC (10.9%), last but not least payback period of the third scenarios are less than the timeline of the project; therefore the project is feasible although the payback period almost reaches its limit on several scenarios. On the implementation, the authors suggest the developer use the scenario that sells a one-package apartment with its semi furnished interior design to get a higher profit.

5. CONCLUSIONS AND RECOMMENDATION

This study produces one of the initial studies on customer preference towards one package apartment sale with its interior design. It identifies the factor influencing the consumers to purchase, and the financial benefit analysis for customers and developers. Given that this study is the first to be conducted in Surabaya and Indonesia, this research finding has substantial significance for the property market in the area, especially in an apartment as well as contributing the property development theory.

The survey results show that the factor that most influences the customer's preference for buying an apartment in Surabaya is its location. This result is in line with previous research conducted by Rahadi et al. (2016), Kamal et al. (2015), Ratchatakulpat et al. (2009), Fardiansyah (2017), Labib et. al (2013), and Ameliana (2018) who concluded that location is the most influential factor in customer preferences. While for the factor that most influences the customer's preference for buying one package apartment with an interior design product is an additional cost.

Based on the scenario calculation that Author has done, this business strategy is one of the new profitable business strategies, from optimistic scenarios, normal scenarios, and pessimistic scenarios. The business strategy is feasible to be applied in the construction project of Gunawangsa Tidar Apartment tower C and other apartment projects in Surabaya. It also helps the government of Indonesian's program to build 1 million houses per year. Lastly, it would be constructive for the government to create better tool and regulation for apartment project sustainability in Indonesia.

REFERENCES

Abdul-Rahman, H., Kwan, C.L. and Woods, P.C., (1999). Quality function deployment in construction design: application in low-cost housing design. *International Journal of Quality & Reliability Management*, 16(6), pp.591-605.

- Abdul Kadir, M.R., Lee, W.P., Jaafar, M.S., Sapuan, S.M. and Ali, A.A.A., (2005). Factors affecting construction labor productivity for Malaysian residential projects. *Structural Survey*, 23(1), pp.42-54.
- Colliers International. (2018). Collier Half Year Report: Surabaya Property Market Report 2018. Retrieved from <http://www.colliers.com>.
- Devi, Renuka. (2016). A study on customer preference towards flat promotions in Coimbatore City. *International Journal of Applied Research*.
- Goodman, A.C., and Thibodeau, T.G., (2003). Housing market segmentation and hedonic prediction accuracy. *Journal of Housing Economics*, 12(3), pp.181-201. Greiber, C. and Setzer, R., (2007). Money and Housing: Evidence for the Euro Area and the
- The US. Bundesbank Series 1 Discussion Paper No. 2007 12. Retrieved from SSRN: <https://ssrn.com/abstract=2785289>.
- Hai-Zhen, W., Sheng-Hua, J. and Xiao-Yu, G. (2005), "Hedonic price analysis of Urban housing: an empirical research on Hangzhou, China," *Journal of Zhejiang University Science*, Vol. 6A No. 8, pp. 907-914.
- Harshman, B. and Quigley, J.M. (1991), "Housing markets and housing institutions in a Comparative context", in Harshman, B., and Quigley, J.M. (Eds), *Housing Markets and Housing Institutions: An International Comparison*, Springer Netherlands, Dordrecht, pp. 1-29.
- Haurin, D., (1988). The duration of marketing time of residential housing. *Real Estate Economics*, 16(4), pp.396-410. Haurin, D.R., Haurin, J.L., Nadauld, T. and Sanders, A., (2010). List prices, sale prices and marketing time: an application to us housing markets. *Real Estate Economics*, 38(4), pp.659-685.
- Hwang, M. and Quigley, J.M., (2006). Economic fundamentals in local housing markets: evidence from US metropolitan regions. *Journal of Regional Science*, 46(3), pp.425-453. Iacoviello, M. and Minetti, R., (2008).
- Perolini, P.S.,(2011). Interior Spaces and the Layers of Meaning: Design principles and practices an international journal, 05, 06.
- Rahadi, R.A., Wiryono, S.K., Koesrindartoto, D.P. and Syamwil, I.B., (2012). Relationship between consumer preferences and value propositions: a study of residential product. *Procedia-Social and Behavioral Sciences*, 50, pp.865-874.
- Rahadi, R.A., Wiryono, S.K., Koesrindartoto, D.P. and Syamwil, I.B., (2013). Attributes influencing housing product value and price in Jakarta metropolitan region. *Procedia-Social and Behavioral Sciences*, 101, pp.368-378.
- Rahadi, R.A., Wiryono, S.K., Koesrindartoto, D.P., and Syamwil, I.B. (2014). Improved Consumer Preferences Attributes Analysis for Housing Product Price in Indonesia. *International Journal of Applied Business and Economic Research*. 12 (4), pp. 1367-1389.
- Rahadi, R.A., Wiryono, S.K., Koesrindartoto, D.P. and Syamwil, I.B., (2015). Factors influencing the price of housing in Indonesia. *International Journal of Housing Markets and Analysis*, 8(2), pp.169-188.
- Rahadi, R.A., Wiryono, S.K., Koesrindartoto, D.P. and Syamwil, I.B., (2015). Comparison of the property practitioners and consumer preferences on housing prices in the Jakarta metropolitan region. *International Journal of Housing Markets and Analysis*, 8(3), pp.335-358.
- Rahadi, R.A., Wiryono, S.K., Koesrindartoto, D.P. and Syamwil, I.B., (2016). Factors Affecting Housing Products Price in Jakarta Metropolitan Region. *International Journal of Property Sciences*, 6(1).
- Rahadi, R.A., Wiryono, S.K., Koesrindartoto, D.P. and Syamwil, I.B., (2018). External factors Influencing Housing Product Price in Jakarta Metropolitan Religion. *SIBR Conference in Interdisciplinary Business and Economics Research*.
- The credit channel of monetary policy: Evidence from the housing market. *Journal of Macroeconomics*, 30(1), pp.69-96. Iwata, S. and Yamaga, H., (2007). Resale externality and the used housing market. *Real Estate Economics*, 35(3), pp.331-347.
- Jiang, D., Chen, J.J. and Isaac, D., (1998).
- Vadali, S. (2008), "Toll roads and economic development: exploring effects on property values," *The Annals of Regional Science*, Vol. 42 No. 3, pp. 591-620.
- Waddell, P., Berry, B.J. and Hoch, I. (1993), "Residential property values in a Multimodal Urban area: new evidence on the implicit price of location," *The Journal of Real Estate Finance and Economics*, Vol. 7 No. 2, pp. 117-141.
- Wen, H., Zhang, Y. and Zhang, L. (2014), "Do educational facilities affect housing price? An empirical study in Hangzhou, China", *Habitat International*, Vol. 42, pp. 155-163. Retrieved from

www.sciencedirect.com/science/article/pii/S019739751300129X.

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