

Preference-Based Feasibility Study for Premium Apartments in Indonesia

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Abstract

This research aims to analyze the most optimistic scenario of a financial feasibility study for apartment product in South Bekasi, Indonesia. The location was selected due to the plan by the property developer to conduct a development in the area. It is a premium apartment enthralled-market towards differentiation strategy; by providing luxury facilities; however, the market response is negative. To determine adequate facilities, apartment unit size, and unit prize, the authors have evaluated the most feasible scenarios. These scenarios are developed using the worst to the very optimistic patterns that can be achieved through financial analysis. A market survey was conducted to analyze customer preferences. There are nine factors of customer preferences that have been analyzed in this research encompassing specific location, design and concept, facilities, accessibility, liveability, reinvestment value, the reputation of the developer, physical quality, and floor plan. Data were collected from a total of 252 respondents, consisted of apartment owners and future apartment owners. This study used descriptive statistical analysis via average analysis. The market survey results were then used to develop the scenarios for feasibility studies in this research. Nine scenarios were carried out to evaluate the most optimistic feasibility study. All the scenarios produced positive NPV and accepted IRR, with Payback Period faster than the required and/or requested time. The smallest IRR produced is 12.45%, which is higher than the Weighted Average Cost of Capital of 10.9%. These findings show that even in the worst situation, this project is feasible to use the modified assumptions discussed earlier.

Keywords: Premium apartment, consumer preference, scenario analysis, ideal price analysis, feasibility study

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1.0 INTRODUCTION

Jakarta, as the centre of economy and politics in Indonesia, is the central economic city in Indonesia. Company headquarters, Presidential Palace, and most of the education services are in this region. Jakarta is a gateway for foreign and domestic investors to invest in Indonesia. Proud of itself as the country's first commercial centre, Jakarta is a fast-growing city for many migrants. As a result, the population in Jakarta has continued to increase for decades. Undeveloped land in Jabotabek decreased from 17,956 hectares in 1992 to 7,166 hectares in 2005. Declining land access was 60 per cent in only 13 years (Badan Pusat Statistik DKI Jakarta, 2005). Over the past 50 years, the population in Jakarta has increased by an average of 2.4% per year (Badan Pusat Statistik DKI Jakarta, 2009). It started from 530 thousand people in 1930 to 2.9 million in 1961 to 6.5 million in 1980 and eventually to 10,855 million in 2018. The Central Bureau of Statistics estimates that the population will grow to 11,459 million by 2035 (Badan Pusat Statistik, 2013). Meanwhile, urban growth may be higher than officially indicated due to the failure of attempts at the amount of seasonal migration.

To avoid the overcrowded population, the government has prepared a master plan for the integration of the Jakarta Metropolitan Region, which consisted of Bogor, Tangerang, and Bekasi, or what called as Jabotabek (Browder et al., 1995). In 2008, Depok was being included in the Jakarta Metropolitan Region, and the acronym has been changed into Jabodetabek (Holt, 2012).

The Central Bureau of Statistics has indicated that the population of Jabodetabek will reach 32 million in 2018, compared to 28 million in 2010. Rapid population growth has contributed to the sharp living space needs, which arouse housing development on Jakarta's outskirts. Physical infrastructure such as roads and railways have been built to accommodate and connect Jakarta with the suburbs. This condition has become an incentive for real estate developers to expand their housing development through Jakarta's outskirts. Since 1995, housing development has expanded to a radius of 30-40 km from downtown Jakarta (Browder et al., 1995).

Due to the massive rise in land prices in the area, new developments in Jabodetabek over the past decade have been dominated by densely populated housing or known as apartments. The transition was with some restraints as Indonesians prefer to live in landing houses due to their living habits (Rahadi et al., 2015). However, in recent years, residents in Jakarta Metropolitan Region has started to embrace the option of living in an apartment due to the high cost of land. This reality opens an opportunity for real estate companies to start selling apartments and luxury apartments in the area.

In this study, the authors are interested in the development of a premium apartment named Lotus Valley. Lotus Valley gains many benefits from the active development of infrastructure around its buildings, such as the Becakayu toll road, LRT station, APTB (Transjakarta) connecting Bekasi-Tanah Abang, Bekasi-Dukuh Atas, and Bekasi-Roundabout Hotel Indonesia, and the line connecting Bekasi to Cawang. Lotus Valley has offered: the luxurious premium facilities, large semi-gross areas for each unit, and unique gimmicks.

Some of the facilities that Lotus Valley offers include a residential hub composed of four tower blocks with a plethora of strategically configured units and unbeatable amenities, with a unique boundary-hugging façade, sky decks, and ground floor terraces, coupled with cascading greenery mimicking giant, and lush waterfalls. For Lotus Valley, additional premium facilities are being offered in the project including car lift, private parking, smart parking system, private lift, infinite swimming pool, warm swimming pool, skywalk and sky garden, sky deck, sculpture park, RGB spectrum, premium kitchen set, and sky jogging loop.

All the facilities offered in the project have failed to attract the customers due to adverse reactions from buyers. It is worsened with pre-sales have been stopped, and development progress has been delayed. This fact is a problem because this premium apartment is located on the outskirts of Jakarta. While assisted by easy access to downtown Jakarta, prospective customers still need to ride 26 kilometres to downtown Jakarta. By the same access, location, and neighbourhood, this premium apartment is surrounded by middle to middle up apartments, landed houses, and even a subsidized apartment. Several studies have been conducted to measure what factors affect the customers' preference at most on purchasing residential product. Labib et al. (2013), in their study, found that high- and middle-income customers focus on the apartment area once they plan to buy a condo. They prefer apartments that are in the city centre or close to their office area. Rahadi et al. (2015) analyzed three environmental factors that affect customers' preference for purchasing residential products in Indonesia, comprising physical qualities, concept, and location. This research indicates the location; indeed, the most critical factor influencing customers the most when deciding to buy a residential product. Fardiansyah (2017) researched wishes, inspiration, and understanding of clients' dwell-in apartments in Bekasi. Based on his survey findings, location near the district centre is the factor that affects the most on the apartment purchase decision.

Luxe facilities are not prominent for an apartment located in outskirt area, according to respondents. The price respondents willing to buy is a third of Lotus Valley's price. Lotus Valley should reconsider their differentiation strategy since the premium facilities offered presently are not worth the cost regarding its location.

Throughout this study, the authors attempt to address the issue faced by the developer of Lotus Valley when developing their product. An analysis of NPV, IRR, and Payback period is being conducted here. In contrast, additional descriptive analysis was performed to understand the customer behaviour and preferences towards the apartment product.

■ 2.0 LITERATURE REVIEW

In this section, the authors try to present the previous related work involving in the stages of the research. It begins with an analysis of previous studies about customer preferences towards purchasing decisions, following the feasibility study process to determine factors that influence the feasibility level of a project. The eventual part will dwell on capital budgeting to address the financial analysis of the projects.

2.1 Customer Preferences towards Purchase Decision

Because Indonesians tend to live in occupied homes, it is a critical decision to buy an apartment. Generally, customers do studios to invest or take vacations but rarely live there. Several studies have been carried out to determine the variables that influence the customer's choice to purchase home goods. Rahadi et al. (2015) examined three environmental factors that influence customer preferences to buy housing goods in Indonesia, namely tangible value, definition, and place. That shows the location of the most critical factors that most influence customers when they decide to buy housing products. Followed by concepts and physical quality as the factors that least influence customer preferences. This research is based on a study conducted by Ratchatakulpat et al. (2009). They analyzed the decision to buy residential real estate in Australia from the buyer's point of view. Buyers who stay at home are more concerned about the local distance factor to pass through workplaces, local shops, and local schools.

Also, research has been carried out on various housing products. Research has been conducted to analyze customer preferences for purchasing decisions on apartment products. However, some research on this research topic has been carried out in Indonesia. Fardiansyah (2017) studies the wishes, inspiration, and understanding of clients in a Bekasi flat. Three factors are analyzed, such as price gaps, facilities, and accessibility. Based on survey findings, location near the district centre is the most influential factor in buying an apartment.

In comparison, the authors found that cost was a factor influencing the decision to buy an apartment after the venue. In short, facilities are the least influencing factor in the decision to buy an apartment. Rahadi et al. (2020) suggest that physical condition, accessibility, location, reinvestment value, and livability plays different roles in three major cities in Indonesia: Bekasi, Surabaya, and Bandung.

As for the studies outside of Indonesia, there are some research discussing about customer preferences towards a purchase decision. For example, a study performed by Szopińska et al. (2012) that discussed about environmental noise levels and purchase decision in Poland. Kamal et al. (2015) examined the factors that influence consumer apartment purchases in Dhaka City, Bangladesh. This study found that position is the most influential factor in apartment purchases, followed by physical quality, climate, costs, project facilities, and promotions that have the least impact on apartment purchases. Szczepańska et al. (2015) suggested that in urban agglomerations, road traffic noise has a considerable impact on apartment buyers' purchasing decisions. Long and Wilhelmsson (2020) postulate that shopping malls will influence the apartment price in Stockholm. All these previous studies will help the authors construct the preferences factors for buying the apartment.

2.2 Feasibility Study

The feasibility study identifies due diligence whether the proposal can invest or reject it. A feasibility study is carried out by evaluating several alternatives and determining which solution best fits the scenario. Kerzner (2004) defines a feasibility study as a technical aspect of the conceptual alternative used to decide whether to undertake a project. The classification of feasibility study by Abou-Zeid et al. (2007) categorizes feasibility study for construction projects based on their functions, namely:

1. Legal Study - Check every legal aspect that impedes construction progress, such as compliance and regulatory risks.
2. Market Study - Data collection involved, analysis and marketing, market studies examining supply, demand, schedule of sales periods, projected market absorption, product mix overview, product positioning, market suitability analysis, and competitive position of the project location. Analysis of demand and supply must include analysis and forecast now, in the future
3. Technical and Engineering Studies - Determine the ideal concept, design, construction process, construction method. Not only determine the ideal things, but this type will also analyze soil structure analysis, availability of heavy equipment and raw materials, vendor capabilities, location and accessibility assessments (via road, railroad, and telecommunications), plant design and layout, technical drawings (blueprint). SWOT analysis is also determined on technical and technical aspects
4. Financial and Economic Studies - In financial and economic studies, all the above aspects are summarized in this aspect. The following heads are analyzed in financial and economic studies, accurate pricing strategies, Demand Absorption and Projection, land costs, construction costs, development costs, marketing costs, and NPV, IRR, and Payback Period analysis classified as budgeting techniques.

The feasibility study process will help understand the project's strengths and weaknesses, and to understand whether the project from all aspects is achievable.

2.3 Capital Budgeting

Capital budgeting theory establishes the process of evaluating and selecting and deciding the proposed long-term investment to maximize the company's shareholders' wealth. Some additional analysis must be considered in the valuation process because the long-term investment is a crucial decision on company wealth - the authors use capital budgeting techniques to analyze financial feasibility studies. Capital budgeting techniques are fundamental in deciding whether to accept or reject the proposed long-term investment. In this study, we discuss three capital budgeting techniques based on Gitman and Zutter (2012), such as the payback period, net present value (from now on called NPV), and internal rate of return (from now on) referred to as IRR). By analyzing the NPV and IRR of the project, we can calculate and measure whether the project is feasible.

3.0 METHODOLOGY

In this study, we employed quantitative analysis via data collection. Data of 252 respondents were collected using a questionnaire. The respondents encompass apartment owners and future apartment owners. A non-probability sampling method was conducted to gather the data needed for this study. The data collected in the study are then analyzed using descriptive analysis. The results will then be used to produce a feasibility study through NPV, IRR, and Payback Period analysis.

3.1 Research Framework

Figure 1 explains the research framework of the study.

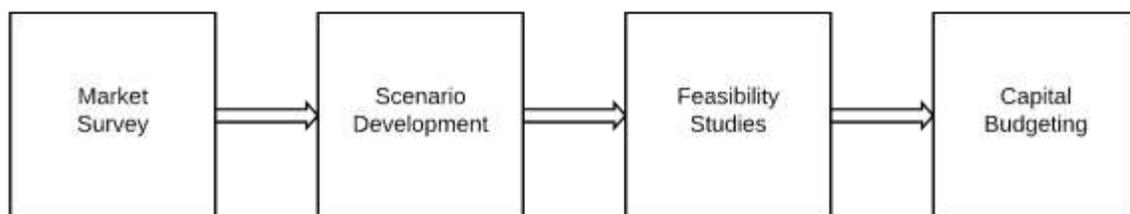


Figure 1 Research framework
(Source: Authors' analysis)

The analytical process begins by defining the main problem of this research, which is part of the success of the Lotus Valley campaign. The author will then describe the factors that influence the success of the project held by conducting a questionnaire survey. The questionnaire survey was conducted to assess whether the differentiation strategy set by Lotus Valley determines customer preferences for buying apartments. Based on the survey results, the researchers have updated the previous feasibility study; thus, the most optimistic scenario can

be achieved. The theoretical structure for this research has been determined. After reviewing the feasibility study's revision, the optimal service, semi-gross area, and unit price that will be calculated by the customer's choice will be conveyed with a conclusion.

3.2 Market Survey

The market responds to an analysis of customer preferences determined by a questionnaire modified by previous research conducted by Rahadi et al. (2016). Data were collected from a total of 252 respondents, including apartment owners and apartment owners in the future.

The questionnaire consists of four main sections, the first part of the question relating to the background of the respondent and, the second part of the question relating to preferences for apartment products, the third part of the question relating to the tendency of the respondent to housing products, and the last part of the question relating to the size of the unit the ideal apartment and the ideal facilities based on their preferences. The author modifies customer preference factors by adding unit sizes to be factors that influence customer preferences in purchasing decisions. The size of apartment units is an expansion factor from previous studies. The first and second sections use a descriptive approach to present the findings. The third part uses the 1-6 Likert scale to present the findings. Scale 1 shows the least preferred factors that influence customer preferences, while scale 6 shows the preferred factors that influence customer preferences.

3.3 Feasibility Study

The feasibility study assesses several alternatives and then decides which option best fits the scenario. Based on the questionnaire's findings, the authors will develop nine modified situations for the feasibility study. These scenarios are developed using the very worst to the very optimistic patterns that can be achieved through financial analysis. The scenarios were consulted to academicians in the School of Business and Management, Institut Teknologi Bandung, Indonesia, and to the property developer personnel. Also, there are several assumptions that the writer has changed. First, the land price of one million rupiahs per square meter is updated to 10 million rupiahs per square meter. Revised land prices apply in all cases. Legal costs are the second modification scenario. Considering the size of the land and the time needed to complete the project, the developer has changed the legal costs, which initially amounted to 1.5 per cent of the total construction costs, to 5 per cent of the total construction costs. The third is interest rates and deposit rates. Interest rates and deposit rates do not state explicitly, which is why the author uses 11.17% of the interest rate and 5.88% of the deposit rate, as shown in his annual report. The fourth is the proportion of progress in construction. In the previous feasibility study, construction progress had been completed in three years. The author modifies it to 20 per cent: 20 per cent: 20 per cent, which means that construction progress will be completed in four years.

Project development starts one year before the sales period. This action is under Article 43 paragraph (2) of the Law on Flats, which states that the sale of apartments can occur after the construction progress reaches 20%. The fifth is the basic price of a premium apartment that has been modified to 27 million rupiahs, 30 million rupiahs per square meter in the previous period. Sixth is annual price growth. A recent feasibility study shows a 10% increase in prices every year. The researchers sought to use a 10% price increase and found that the IRR effect was not moderate. As a result, growth is examined to other sources as a fundamental assumption, which is 7% every year. The 7% rate is based on research conducted by Savills (2017). This updated sixth assumption applies to all general assumptions of the modified feasibility study. To validate the most tailored feasibility study based on customer interest, researchers applied three updated scenarios to the previous feasibility study. The main differences in all situations are shown in the figure below:

Table 1 The difference of each scenario by its subdivided scenario
(Source: Author's analysis)

Unit type	Total of Unit Sold		
	Scenario-1	Scenario-2	Scenario-3
One-Bedroom	1464	727	727
Two-Bedrooms	570	1139	1139
Three-Bedrooms	40	140	140
Penthouse	6	74	74

The number comes from the design analysis of the Lotus Valley project vs the land and building size availability. The feasibility study in scenario one was developed by the modified base price and the modified semi-gross area's size based on the results of the questionnaire. However, it has an impartial composition of the total units for each apartment unit based on the original feasibility study. Feasibility study in scenario 2 The adjusted base price changes the size of the semi-gross area and the composition of the modified units sold in each unit form based on the questionnaire results. The feasibility study on the 3rd scenario produced by the modified value, the modified size of the semi-gross area, the modified composition of the total units offered for each type of apartment unit, and modification of construction costs based on the results from the questionnaire.

4.0 RESULTS AND DISCUSSIONS

4.1 Customer Preferences on Premium Apartment

Data were gathered from a total of 260 respondents who took part in this research. Eight answers of the respondents were invalid. Hence, only 252 answers of the respondents could analyze. The 252 respondents encompass apartment owners and future apartment owners. The

first section on the respondents' background and demographic questions consists of six questions. It uses a descriptive approach to present the findings.

The first question is about the age of the respondents, where it is asked in a closed question. Half of the respondents are from the age of 25 to 30 years old, followed by respondents on age 31 to 35 years old and 46 to 55 years old, which is even (16%). 11% of respondents are 36 to 45 years old, and the least of all is respondents whose age is older than 55 years old. The second question is a closed question about the marital status of the respondents. 33% are single, and 64% of respondents are married, the rest are widowed/divorced (3%).

The third question is on the domicile of the respondents. The domicile asked in an open question, as presented in Figure 2 below. Most of the respondents are located in Jakarta (37%), followed by respondents who live in Bandung (19%), Bekasi (13%), Tangerang (11%), Depok (8%), Bogor (4%), and 8% of them are located in another part of Indonesia.

The fourth question is on the occupation of the respondents. This part is a closed question to ease the grouping. More than half of respondents are working at state-owned enterprises (52%), while 35% of the respondents are working at a private company; the rest 13% is working as a civil servant and entrepreneur. The fifth question is asked in a closed question about the income per month of the respondents. The level income each month of 46% of respondents are six to ten million rupiahs, 27% of respondents are greater than 10 million but less than 15 million rupiahs, 12% of respondents are greater than 25 million, 10% of respondents are greater than 15 million but less than 20 million rupiahs, and 5% the rest of it has the level income of greater than 20 million but less than 25 million rupiahs.

The sixth question is on time needed by respondents to arrive at their office. To ease the grouping, the time needed by respondents to arrive at their office asked in a closed question. From the result, 38% of respondents need more than a half-hour, 26% of respondents need less than a half-hour to arrive at the office, 21% of respondents need more than an hour. Further asked, 8% of respondents need more than a half and an hour, and 6% need more than 2 hours. The result shows that 64% of respondents need less than an hour to arrive at the office. It means more than half of the respondents choose to live near the office location.

Next, the authors asked about the appropriate price and size of the apartment, followed by the facility needed in the development of the apartment. 78% choose to buy an apartment in Pekayon, South Bekasi, which is worth less than 500 million rupiahs. For apartment size, the average size of a one-room type based on the respondents' response is 42 square meters, for the two-room type is 75 square meters, the three-room type is 90 square meters, while for penthouse is 151 square meter. Based on the research result, the kitchen facility is the only facility that can influence customers to spend more money more. An additional 50 million rupiah is the amount the customers are willing to pay for the apartment's additional facility.

4.2 SWOT Analysis

SWOT analysis will be useful as the gateway for the feasibility study of the project. To understand more about the development of this project, the authors conducted a SWOT analysis. SWOT analysis is a business analysis technique used to identify strengths, weaknesses, opportunities, and threats (Gürel & Tat, 2017). Strength is a useful factor and comes from internal factors of the company; weakness is a critical factor for the company which was initially caused by internal factors of the company, the opportunity is a useful factor and external factors of the company and threats are factors that are harmful to the company, which were initially caused by external factors (Ghazinoory et al., 2007). Author provides SWOT analysis regarding to Lotus Valley are described on the figure as follows:

Table 2 SWOT analysis scenario

(Source: Author's analysis)

Strengths	Weaknesses
<ol style="list-style-type: none"> 1. Direct toll road access to Kalimalang Road 2. Offering green concept 3. Near to toll gate such as Bekasi Barat and Becakayu 4. 1.6 kilometres apart from TransJakarta shuttle which connects Bekasi, Tanah Abang, Dukuh Atas, and Bundaran Hotel Indonesia 5. Light Rail Transit (LRT) is under construction, and it will be located near to the apartment 6. Overall physical qualities 	<ol style="list-style-type: none"> 1. 26 kilometres needed to reach Central Jakarta 2. Located in an area which notorious for traffic congestion 3. Located at the low-lying area which made the neighbouring building susceptible to flooding risk
Opportunities	Threats
<ol style="list-style-type: none"> 1. High land price in Jakarta is evoking residential development in Bekasi 2. Bekasi is one of the most developed outskirts in Jakarta Metropolitan Area 	<ol style="list-style-type: none"> 1. Premium apartments dominated Central Jakarta 2. Plenty apartments with lower-middle and middle segments surround it 3. The development of mega-blocks in the area might influence the sales 4. Plenty landed house with lower price, and bigger size surrounds it.

The distance of Lotus Valley is about 26 kilometres from the central of Jakarta and located in an area which notorious for traffic congestion. Mitigate these weaknesses; Lotus Valley is equipped with a bridge directly connected to Kalimalang Road, the main road of Bekasi. This development is a strategic value since the residents can reduce the possibility of spending hours trapped in congestion by crossing the bridge. Lotus Valley also facilitated with green concept while there is no green concept public facility surrounds it. Based on

research conducted by Rahadi et al. (2015), the green concept can attract customers due to high-density pollution. Lotus Valley benefited by the active development of infrastructure surrounds the building, such as Becakayu toll road, LRT station, APTB (Transjakarta), which connecting Bekasi-Tanah Abang, Bekasi-Dukuh Atas, and Bekasi-Bundaran Hotel Indonesia, and commuter line which connecting Bekasi to Cawang. However, with all the ease of accessibility, Lotus Valley located in a low-lying area, which made the neighbouring building susceptible to flooding risk. Mitigating the flooding risk, superblock Grand Kamala Lagoon equipped with an artificial lake as the watershed of the neighbouring area.

Rapid population growth has led to an incisive demand for living space that is eventually evoking residential development in the outskirts area of Jakarta. Physical infrastructure such as highways and railways has been built to accommodate and connect Jakarta with its outskirts area. This condition has been enticed real estate developer to expand the residential development through the peripheries area of Jakarta. By 1995, residential development has been expanded to a radius of 30 km to 40 km away from the centre of Jakarta. Due to massive land price increases in the city, new developments in Jabodetabek over the past decade have been dominated by high-density vertical housing or known as apartments. This condition becomes the opportunity for Lotus Valley to enter the market.

However, most premium apartments dominate Jakarta. Labib et al. (2013), on his research, found that upper-middle and high-income customers focus on apartment' areas once they plan to buy an apartment. They prefer apartment which located in the downtown area or near to their office area. Regarding their research, it means customers with upper-middle and high incomes will prefer to buy an apartment in the centre of Jakarta rather than a premium apartment in Bekasi. With the same access, location and neighbourhood, Lotus Valley is surrounded by middle to middle up apartments, and even a subsidized one. One of the competitors of the superblock is Meikarta, which might influence the sales of Lotus Valley. Also, plenty of landed houses surround Lotus Valley with has the same or even bigger size compared to Lotus Valley. Since Indonesian inclined to live-in the landed house, this becomes a threat to Lotus Valley.

4.3 Feasibility Study Analysis

The overall scenario is feasible, which means it is worth doing. The NPV of the ninth scenario is positive and more significant than zero. The smallest IRR value is 12.45%, which means that this scenario's lowest IRR value is higher than WACC (10.9%). This result shows that even in the worst situation, this project is feasible to use the modified assumptions discussed earlier. The return time from the ninth situation is less than the project time. Therefore, the project is feasible even though the payback period is near its limit in some situations. The results showed that the highest NPV and IRR are in scenario 3A, which has a sales period of three years and 30%: 30%: 40% of the sales proportion. The second and third higher also come from scenario A. This condition arises because of the fast-selling period. The sales period has reached 100% while construction costs are still ongoing, even though construction began in 2023. Compared to scenario B, where construction starts faster compared with scenario A, scenario B fails to beat A because B assumes a slower sales period. The building has completed 100% of its progress. In comparison, only 50% of the units are sold in both scenarios B and C. This condition will impact the developer's working capital and ultimately turn on overhead costs. In its implementation, the authors suggest that developers use the 3A scenario as the most optimistic scenario.

Table 3 Result summary of the nine scenarios
(Source: Author's analysis)

Scenarios	NPV (In Indonesian Rupiah)	IRR (in %)	Payback Period (Years/ Months)	Analysis Result
1A	277.088.665.470	24.00	7/ 0.07	Accepted
1B	189.597.521.194	15.95	6/ 0.41	Accepted
1C	64.958.850.071	12.45	9/ 0.11	Accepted
2A	293.654.021.359	23.45	7/ 0.01	Accepted
2B	342.631.517.885	18.24	6/ 0.62	Accepted
2C	172.595.230.007	14.34	9/ 0.27	Accepted
3A	541.304.682.264	27.53	7/ 0.13	Accepted
3B	469.194.014.058	21.30	6/ 0.11	Accepted
3C	172.595.230.007	16.73	9/ 0.57	Accepted

The Lotus Valley team must reconsider their differentiation strategies related to premium facilities and large apartment units. The survey revealed that the premium facilities offered by Lotus Valley are currently not feasible concerning their location. An individual facility favoured by correspondence is the kitchen set. The developer must reduce the basic price per square meter, reduce the size of each type of unit, and eliminate some of the premium facilities.

5.0 CONCLUSION

Based on the research findings, we can conclude that the current sales strategy by the real estate developer is not in line with the market response, as most of the respondents do not exhibit their intention to buy a middle-class apartment.

For the theoretical implications of this study, we can see that nine factors of customer preferences have been analyzed in this research. The eight factors are based on prior research conducted by Rahadi et al. (2016), specific location, design and concept, facilities, accessibility, liveability, reinvestment value, developer reputation, and physical quality. An additional variable asked in this study is the expansion of prior research conducted by Rahadi et al. (2015) about the floor plan. The survey revealed that factors affecting the most to customer preference

on purchasing an apartment in South Bekasi are location. This result in line with the prior study conducted by Rahadi et al. (2016), Kamal et al. (2015), Ratchatakulpat et al. (2009), Fardiensyah (2017), and Labib et al. (2013) which concluded that location is the most influencing factor toward customer preferences. Based on the findings above, we can relate the survey result with the SWOT analysis performed earlier in section 4.2. We can see that location can be considered as one of the strengths of the development. With the support of accessibility such as toll road, LRT, and other transportation modes, Lotus Valley has the potential to become of the development jewel in the Bekasi area.

The practical implications of the study, for property developers, the survey indicates that the most preferred apartment unit type in South Bekasi is a two-bedroom type. For demographics of the buyer focused on the lower-middle to a middle-class segment. Therefore, the developer should consider which unit type to be sold at most. It also is shown that an apartment would be more attractive once it has a shuttle facility directly to the downtown of Jakarta and Soekarno Hatta Airport. Another facility that would be attractive to customers is an apartment which provides co-working space. This finding could be a consideration for developers once they decide what facilities to be provided.

The managerial implications of the study, for the company currently developing the project, the evaluation of the most optimistic scenario has been done due to the deferment of construction progress in Lotus Valley. Lotus Valley team should reconsider their strategy, which concerns in premium facilities and enormous apartment unit, since location is the number one preference for consumers. The survey revealed that the premium facilities offered by Lotus Valley presently are not worthy regarding its location. The sole facilities preferred by the correspondences are the kitchen set. Based on the findings, the developer should lower the base price per square meter, diminish the size of each unit type, and eliminate some of the premium facilities.

We can see from the study results that the public was increasingly interested in living or investing in an apartment for the government. Savills (2017) predicted that 10.7% of the total family in Bekasi is well-heeled to purchase an apartment. As the demand for apartment climbing, the government shall support these trends by establishing and enforcing clear and firm provisions related to the apartment's regulation, for example, regarding the service charge of the semi-gross area. Heretofore, the rule is poorly regulated by the authority, as the example provisions relating to the service charge limits of the semi-gross area. Considering that regulation plays a significant part in accelerating the demand of the property market, it is time for the government to start to put this issue as a priority of concern.

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