

Marketing Strategy Design for Housing Property Company Using Structural Equation Modeling and Strategic Management Approach

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ABSTRACT

This study aims to analyze the most influential factors in the decision-making process of home purchases by consumers in the Jabodetabek area and formulate marketing strategies for a real estate company in South Jakarta to remain competitive and maintain sales value. The data for this research were collected using questionnaires for the data processed using the partial least squares-structural equation modeling (PLS-SEM) method, and in-depth interviews were conducted with company representatives to formulate a marketing strategy. Based on the findings of this study, the factors influencing house purchase decisions were identified as trust, environment, characteristics, attitude, and legality. Additionally, five alternative marketing strategy proposals were suggested, including enhancing brand equity, improving project facilities, introducing new promotional schemes, and collaborating with external parties.

Keywords: Structural Equation Modeling, Strategic Management, Marketing, Property, Real Estate

INTRODUCTION

International conflicts and COVID-19 have disrupted global trade and supply chains, causing commodity and food prices to rise globally. High inflation and slow economic growth have raised fears of stagflation that may last for several years. The United States central bank and other developed countries' central banks have increased the monetary policy reference rate to control inflation. However, on the one hand, this policy has caused financial pressure on emerging markets. Despite the global economic slowdown, Indonesia's economy is still able to grow strongly in 2022 (World Bank, 2022). This is due to rising commodity prices and the reopening of the economy. Real gross domestic product (GDP) growth increased from 3.7% in 2021 to 5.4% YoY in the first three quarters of 2022. Sectors like transportation, trades, tourism, food manufacturing, textile, basic metals, are increasing in growth.

Even though the Indonesian economy remains stable amidst the global turmoil, Indonesia continues to experience price pressures for staple goods and other important commodities. Inflation in October was 5.7% year-on-year. Rising international commodity prices, rising domestic energy tariffs, and rising producer prices were factors driving price pressures. Predictions of higher inflation have dampened consumer sentiment, as seen in the Bank Indonesia consumer survey. It is estimated that there will be a slowdown in Indonesia's economic growth in 2023 (World Bank, 2022). This will pose challenges for almost all business sectors in Indonesia, especially the property and real estate sectors. The property and real estate industry makes a significant contribution to Indonesia's gross domestic product in 2022.

In the context of ongoing economic pressures and the threat of a global recession, the reduced demand for residential property, especially residential houses, will become a challenge for property developer companies. Demand in the property and real estate industry is influenced by a country's economic growth. Good economic growth reflects increased

activity in the property and real estate industry, which can be considered as an indicator of economic recovery (Muka, 2021). Meanwhile, consumer behavior in buying property and real estate can also be explained by Theory of Planned Behavior (TPB), which considers attitudes toward behavior, subjective norms, and perceptions of behavioral control according to Phungwong (2010) and Numraktrakul et al. (2009).

According to the source, who is an employee of a property company in the South Jakarta area, the main attention of the marketing division needs to be focused on brand equity and the use of social media platforms to be able to compete with competitors, especially in today's digital era.

Several previous studies have discussed the relationship between factors or the identification of variables that influence intention to make a home buying decision. Among them is research conducted by Zhang et al. (2020), which discusses the relationship between attitude factors, subjective norms, perceived behavioral control, risk perception, and trust on behavioral intention, Le-Hoang (2021), which discusses the relationship factors of private living space, corporate reputation, location, financial status, and surroundings on behavioral intention, Le-Hoang et al. (2020), which discusses the relationship between price, brand developer, location, housing characteristics, social influence, and legal factors on behavioral intention, Yoke et al. (2018), which discusses the relationship between attitude factors, subjective norms, perceived behavioral control, location factor, living space and financial factors on behavioral intention, and finally Chia et al. (2016), which discusses the relationship between house features, living space, financing, distance, environment, superstition-numbers, superstition-ghosts and brand developer factors on behavioral intention. Subsequent research was conducted by Ivana and Furinto (2022) which aimed to formulate a marketing strategy for a property company using a strategic management framework.

In the studies previously described, no research has ever been conducted that combines the process of identifying factors that influence intentions in making home buying decisions using PLS-SEM with the formulation of a marketing strategy for a property company using strategic management. Therefore, the combination of the two research processes and methods will be the main focus of this research.

The research questions is as follows:

- 1) What are the factors that influence consumer interest and behavior in buying residential property?
- 2) What is the marketing strategy needed by the company to maintain sales value and be able to attract more consumer buying interest?

The purpose of carrying out this research is to determine the main factors that influence consumers to buy a house, and to formulate recommendations for marketing strategies that will be used by companies to anticipate economic turmoil that will reduce demand for residential property.

LITERATURE REVIEW

A. *Property and Real Estate*

Property can be defined as land and all its improvements or objects attached to it such as buildings and attached to the land. Property can be grouped into five sectors, namely residential, commercial, industrial, recreational and institutional (Armaini, 2006; Rafitas, 2005; Tan, 1998).

Real estate, as explained by Clapp (1988), refers to permanent properties such as plants, buildings, and minerals that are underground. In Indonesia, real estate more often refers to residential neighborhoods equipped with facilities. However, in essence, real estate is a product that is built on a piece of land or an area.

B. Customer Purchase Intentions and Theory of Planned Behavior

Customer purchase intention is a measure of effectiveness used to anticipate consumer response behavior in buying a product or service (Kotler, 2000). When a consumer chooses a particular product, the final decision to accept or refuse to buy that product depends on the consumer's intention. In addition, several additional external elements have been identified (Keller, 2001). Stated differently, purchase intention serves as a gauge for a consumer's likelihood to acquire products and services; the stronger the inclination to purchase, the greater the consumer's wish to obtain a product or service. This is also supported by opinions (Ajzen, 1991) that a person's behavior is determined by his intention (attitude towards behavior) to carry out the behavior (behavior) so that identifying and measuring the behavior that is of interest or that one wants to understand, predict, or even change is very important.

C. Structural Equation Modeling (SEM)

Structural equation modeling (SEM) is a multivariate statistical method which is a combination of two other multivariate methods, namely factor analysis and multiple regression (Hair et al., 2021). Slightly different, Schumacker and Lomax (2010) say that SEM is a combined statistical method of two other statistical methods, namely confirmatory factor analysis and path analysis (an analytical technique developed from multiple regression analysis).

Hair et al. (2021) said that with SEM, researchers can test the relationships between variables as well as measure errors that occur in measurements directly in a model. In addition, SEM is also capable of testing multiple hypotheses at the same time. There are two types of SEM that are most often used with their respective advantages, namely partial least squares SEM (PLS-SEM) and covariance-based SEM (CB-SEM). For this study, the type of SEM used is partial least squares (PLS-SEM).

D. Strategic Management

Strategic management involves three stages, namely the formulation, implementation, and evaluation of strategies (David & David, 2012). In formulating strategies, strategic management analysis tools are needed to identify, select, and evaluate strategies. Analysis and choice of strategy aims to determine the best alternative course of action to achieve the mission and goals of the organization. Alternative strategies are derived from the organization's vision, mission, goals, and external and internal audits.

At the strategy formulation stage, it consists of three stages, namely input, matching, and selecting/deciding on a strategy (David & David, 2012). The input stage provides information for the matching and strategy selection stages. In the matching stage, internal resources and competencies are linked with external opportunities and risks. The purpose of the matching stage is to generate alternative strategies. At the strategy selection stage, the company chooses a strategy from the alternatives that have been formulated.

The strategy formulation framework also includes important strategy formulation techniques in the three stages of decision making (David & David, 2012). The input stage involves SWOT analysis, internal factor evaluation (IFE) matrix, and external factor evaluation (EFE) matrix to collect basic information. The matching stage focuses on creating alternative strategies using the IE matrix (Internal-External), the Competitive Profile Matrix and the TOWS matrix. In the decision phase, the most optimal strategy is ascertained through the utilization of a Quantitative Strategic Planning Matrix (QSPM).

RESEARCH METHODOLOGY

In the early stages of this research, a study was carried out related to the background of the problem, the formulation of the problem so that it could be carried out in setting research objectives and determining the scope of the problem. Furthermore, a literature study was carried out on the scope of related topics and also the research methods used, then a partial

least squares structural equation modeling (PLS-SEM) model was designed, pilot testing was done, data processing, validity and reliability tests, and parameter tests. Furthermore, strategy formulation and selection are carried out based on the results of PLS-SEM data processing and using a strategic management framework assisted by company expert assessment.

The flowchart of the research methodology used in this study can be seen in Figure 1 below.

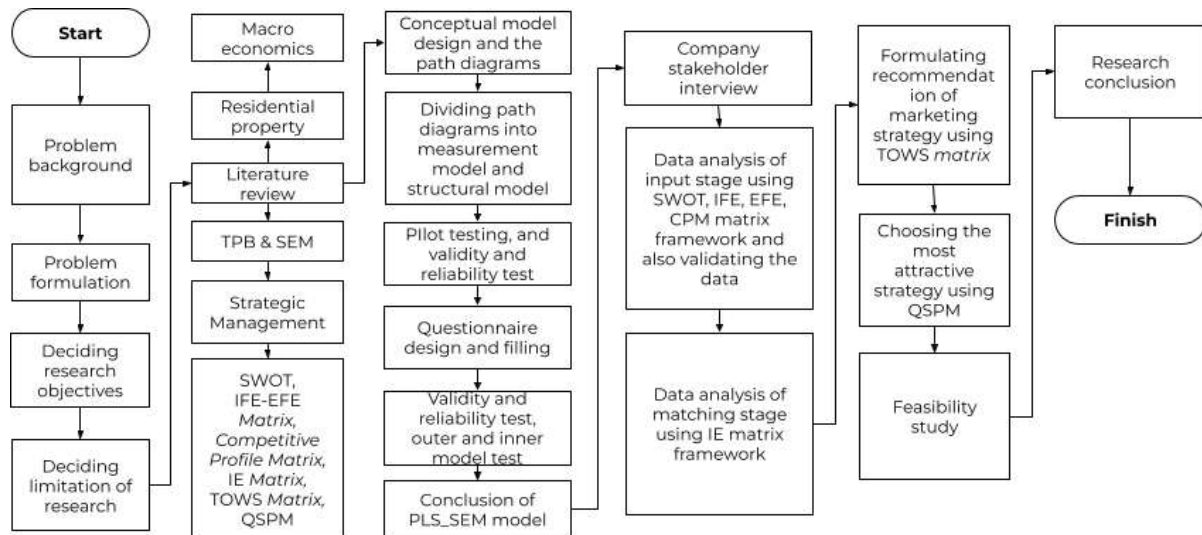


Figure 1. Research methodology

In this study, two types of data were used, namely primary data obtained through the process of distributing questionnaires and interviews, and secondary data obtained through statistical institutions, mass media, books, research articles, and company reports. The factors that will be used in the model were gathered from previous studies and discussed with the experts from the real estate company. There are ten variables used (Table 1). It is necessary to design a conceptual model and select variables based on previous research, where the conceptual model can be seen in Figure 2.

Table 1. Latent Variables List

Latent Variables	Indicator	References	Characteristics
Attitude Towards Purchase	Significantly affects behavioral intention	(Zhang et al., 2020) (Yoke et al., 2018)	Independent variable
Subjective Norm	Significantly affects behavioral intention	(Zhang et al., 2020) (Yoke et al., 2018)	Independent variable
Perceived Behavioral Control	Significantly affects behavioral intention	(Zhang et al., 2020) (Yoke et al., 2018)	Independent variable
Trust (to Brand Developer)	Significantly affects behavioral intention	(Zhang et al., 2020) (Chia et al., 2016) (Le-Hoang, 2021)	Independent variable
Funding	Significantly affects behavioral intention	(Opoku & Abdul-Muhmin, 2010) (Le-Hoang, 2021) (Hong Sharon Yam & Stanley McGreal, 2010) (Yoke et al., 2018) (Kamal & Pramanik, 2015)	Independent variable

Latent Variables	Indicator	References	Characteristics
		(Thanaraju et al., 2019)	
Legality	Significantly affects behavioral intention	(Le-Hoang et al., 2020)	Independent variable
House Characteristics	Significantly affects behavioral intention	(Le-Hoang et al., 2020) (Opoku & Abdul-Muhmin, 2010)	Independent variable
Environment and its surroundings	Significantly affects behavioral intention	(Hong Sharon Yam & Stanley McGreal, 2010) (Opoku & Abdul-Muhmin, 2010) (Chia et al., 2016)	Independent variable
Location	Significantly affects behavioral intention	(Thanaraju et al., 2019) (Chia et al., 2016) (Le-Hoang, 2021) (Le-Hoang et al., 2020) (Yoke et al., 2018) (Kamal & Pramanik, 2015)	Independent variable
Behavioral Intention		(Zhang et al., 2020) (Yoke et al., 2018) (Le-Hoang et al., 2020) (Le-Hoang, 2021) (Chia et al., 2016)	Dependent variable

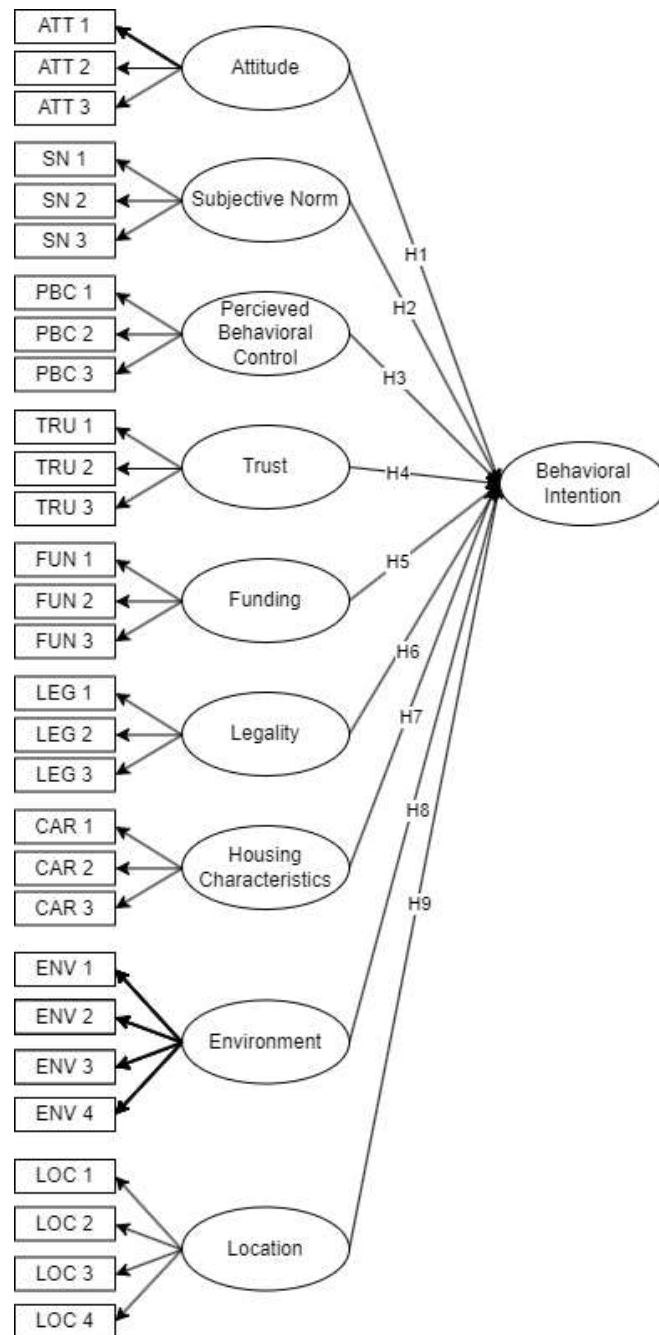


Figure 2. TPB-SEM Conceptual Model

In the early stages, it is necessary to carry out pilot testing to ensure that all the variables used are able to meet the prerequisites for data processing using the PLS-SEM method. Based on the results of pilot testing conducted on 30 initial samples, the model is considered to have met the prerequisites for parameter testing for data processing using the PLS-SEM method, namely the values of outer loading, composite reliability, Cronbach's alpha, average variance extracted and discriminant validity (using the Fornell-Larcker criterion) that meet the criteria for the outer model test, and the values of collinearity, determinant coefficient, redundancy of cross-validity Q2 and patch coefficient test that meet the criteria for the inner model test, so no model re-specification is needed at this stage.

Furthermore, data was collected using a questionnaire and 277 valid samples were obtained, which fulfilled the minimum sample set using the inverse square root method

proposed by Kock and Hadaya (2018), which is equal to 155.

Based on the results of the tests that have been carried out (Table 2), the Kaiser-Meyer Olkin value of sampling adequacy is 0.823 so that the data from filling out the questionnaire can be considered suitable for processing using factor analysis, as well as fulfilling sample adequacy, and a significance value, Bartlett's test which is less than 0.05 so that it is known that the variables used have a correlation, so that data processing can be carried out using a data reduction technique. The total explained variance value was also obtained at 64.739%.

Table 2. KMO Test Results, Bartlett's Test, and Total Variance Explained

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measures of Sampling Adequacy		0.823
Bartlett's Test of Sphericity	approx. Chi-Square	3612,595
	df	496
	Sig.	0.000
Total Variances Explained		64.739%

The reliability of a questionnaire can be seen through the value of Cronbach's alpha (Table 3). The questionnaire is considered reliable when the resulting CA value is greater than 0.5 (Cronbach, 1951). From the test results, a CA value of 0.862 was obtained, which means that there was consistency between the data, and the data was considered reliable.

Table 3. Reliability Test Results

Reliability Statistics	
Cronbach's Alpha	N of Items
0.862	32

Testing of the measurement model (outer model) is carried out by conducting several tests on the data. In the early stages, there were several variables that did not meet the outer loading, CA, and AVE tests on the FUN3 and LOC4 indicator variables. So these two variables must be removed.

After re-testing, the test results show that after re-specification, all outer loading values exceeds 0.7 (indicator reliability), Cronbach's alpha exceeds 0.5 (internal consistency reliability), composite reliability exceeds 0.7 (internal consistency reliability), average variance extracted exceeds 0.5 (convergent validity) and the Fornell-Larcker criterion are sufficient according to the criteria. It indicates that all variables have fulfilled the parameters.

In testing the structural model (inner model), a collinearity test was carried out on the model that has been respecified, all indicator variables have a VIF value of less than 5. Therefore, there is no indication of collinearity in the model being tested at this stage.

Based on the results of the coefficient of determination test on the re-specification model, the endogenous latent variable has a coefficient of determination greater than 0.26, namely 0.495. Therefore, the predictive accuracy of the endogenous latent variables used in this model is strong. Furthermore, based on the Stone-Geisser's Q^2 test results on a respecified model, the endogenous latent variable has a Q^2 value that is greater than 0, namely 0.337. Therefore, the predictive relevance of the endogenous latent variables used in this model is sufficient. Furthermore, based on the Path coefficient test results, it is measured to determine the significance of the relationship between hypotheses. Parameter value of path coefficient according to Hair et al. (2021) acceptable value for the path coefficient, which is greater than -1 and less than 1. It can be seen in the table that all path coefficient values for each hypothesis meet the criteria and are acceptable.

Hypothesis testing was carried out to find out whether there was a relationship in each hypothesis using the bootstrapping method to meet the sample criteria for testing the hypothesis considering the sample size in PLS-SEM is small, so there is a possibility that the data is not normally distributed. After bootstrapping, hypothesis testing was carried out through a two-tailed test with a significance level of 5% ($\alpha = 0.05$). Hypothesis acceptance parameter, which occurs if the t-value is greater than 1.96, and the p-value is less than 0.05 (Hair et al., 2021). In Table 4, it can be seen that the hypotheses H1, H2, H3, H5 and H9 are accepted, while the hypotheses H4, H6, H7 and H8 are rejected.

Table 4. Results of Path Coefficient Test and Hypothesis Test

Hypothesis	Variable Relations	Coefficient	T-Value	P-Value	Information
H1	ATT -> BI	0.130	2,361	0.018	Accepted
H2	CAR -> BI	0.152	2,215	0.027	Accepted
H3	ENV -> BI	0.221	3,198	0.001	Accepted
H4	FUN -> BI	0.042	0.985	0.325	Rejected
H5	LEG -> BI	0.126	2,289	0.022	Accepted
H6	LOC -> BI	0.029	0.606	0.545	Rejected
H7	PBC -> BI	-0.004	0.079	0.937	Rejected
H8	SN -> BI	0.012	0.245	0.807	Rejected
H9	TRU -> BI	0.284	3,583	0.000	Accepted

An analysis of the condition of the company which is the object of research is carried out using the SWOT analysis framework and also an assessment of the factors resulting from the analysis using the IFE and EFE matrices. The process of analyzing the condition of the company and evaluating the factors found is assisted and carried out together with five experts who have worked for a long time in the company that is the object of research. The results of the assessment (Table 5 and Table 6) of the five experts are averaged for each factor using the geometric mean function, and the weighting used in all matrices used in the strategic management framework comes from the path coefficient generated by the results of data processing using PLS-SEM in the previous section.

Based on the placement of the IE matrix based on the scores of the IFE and EFE matrix calculations (Figure 3), it is indicated that companies are advised to prioritize the formulation of hold and maintain oriented strategies, namely can be interpreted as a company can formulate a strategy that aims to develop and expand the market, by modifying existing products (David & David, 2012).

Table 5. IFE Matrix

ID	Strength	Weight	Geomean Rating	Weighted Score
S-1	Communicative, solutive and interactive sales person	0.042	4,000	0.166
S-2	The company has been in property development sector for more than 15 years and has had quite a number of projects in Jabodetabek	0.042	3,776	0.157
S-3	Have stock of finished houses which are considered quite a lot (vacancy rate 40%)	0.042	3,288	0.137
S-4	Most of the project locations are directly beside the main road	0.017	3,776	0.064

S-5	Has three types of clusters that have been conceptualized according to segmentation	0.089	2,930	0.261
S-6	Provide competitive promo schemes	0.025	2,169	0.053
S-7	Do not have problems related to permits and legality of land	0.148	4,000	0.590
S-8	Focusing on concept of green housing	0.089	2,766	0.246
ID	Weaknesses			
W-1	Bad and unattractive marketing gallery	0.042	1,741	0.072
W-2	There is no proper and attractive model house (Show unit)	0.042	1,149	0.048
W-3	The use of marketing via social media is still very mediocre and not yet massive	0.042	1,888	0.078
W-4	There are several parts of the housing project complex that have been damaged and have not been repaired, and the house was in poor condition at the time of handover	0.129	1,888	0.244
W-5	There was a rebranding using a new company name so there was an urgency to re-introduce the brand	0.042	1,516	0.063
W-6	Brand visibility at the entrance to the complex is not solid	0.042	1,320	0.055
W-7	There are only 2 banks that cooperate in mortgage financing	0.025	2,352	0.058
W-8	There have been several complaints regarding the security of the housing complex	0.129	2,352	0.304
W-9	For several ongoing projects there is no new land for project expansion or development	0.017	1,149	0.020
				2,617

Table 6. EFE Matrix

ID	Opportunity	Weight	Geomean Rating	Weighted Score
O-1	The Jabodetabek backlog numbers in 2023 is 2,933,239 units, meaning that there is still a need for very large houses	0.077	3,366	0.158
O-2	The increasing trend of green building opens up opportunities because it is a trademark concept for the company.	0.014	3,366	0.417
O-3	Policy of 100% Loan to Value Ratio (DP 0%)	0.025	4,000	0.104
O-4	The use of social media is increasing rapidly, especially in terms of videos and content which are increasingly massive	0.338	3,565	0.909
ID	Threats			
T-1	The search for houses for the lower middle class or houses with a price range of under IDR 750 million has decreased from 42 percent in 2020 to 29 percent in 2022.	0.077	1,516	0.070
T-2	Competitors that offer more diverse public and social facilities than companies	0.263	1,516	0.365

T-3	The number of big company competitors offering small house segments around the project area is increasing	0.090	1,000	0.171
T-4	Rising lending facility interest rates	0.025	1,320	0.061
T-5	Rising prices of building materials	0.090	1.516	0.065
				2,388

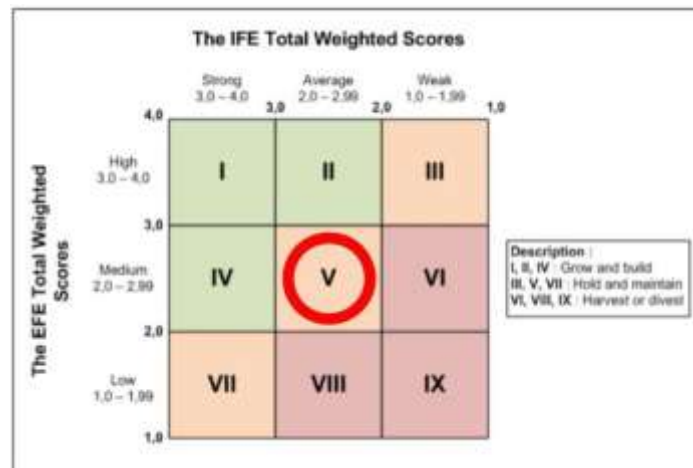


Figure 3. IE Matrix

Then, an analysis of the formation of alternative strategies is carried out using the TOWS matrix, which will later be assessed for the attractiveness of the strategy using the QSPM (Table 7). The outcomes of the analysis employing the TOWS matrix yield the subsequent alternative strategies:

Table 7. Strategy Design Using TOWS Matrix

TOWS Matrix		
	S-1, S-2, S-3, S-4, S-5, S-6, S-7, S-8	W-1, W-2, W-3, W-4, W-5, W-6, W-7, W-8, W-9
O-1 O-2 O-3 O-4	Adding sales channels for home products (S- 3 + O-1) Increasing emphasis on branding the concept of green housing as well as other aspects on a more massive basis to create a unique selling point that contrasts (S-8 + O-2)	Improve physical and non-physical facilities that can enhance strong branding identity, especially related to the green housing concept and also innovate on the company's social media lines and landing pages. (W-1, W-2, W-3, W-5, W-6 + O-2, O-4)
T-1 T-2 T-3 T-4 T-5	Providing a new promotional scheme in addition to DP All-In and Free fees and other promotions that are common (S-6 + T-1, T-4, T-5) Creating new values that can be a differentiator from competitors (S-1, S-2 + T-2, T-3)	Conducting approaches and proposals for cooperation with banks providing mortgage facilities that are commonly used by prospective customers (W-7 + T-4) Repair and revitalization of public facilities and social facilities as well as security for housing projects, and create a QA reporting system for both housing and project facilities. (W-4, W-8 + T-2, T-3)

Based on the arrangement of alternative strategies that have been analyzed and discussed, the arrangement of these strategies will be grouped again based on the similarity of objectives and the similarity of the implementation plan of the strategy (Table 8).

Table 8. Summary of Strategy Alternatives

ID	Strategy
A1	Adding sales channels for home products
A2	Improving branding by improving facilities and infrastructure both physical and non- physical, especially those that directly touch consumers, and innovating on social media lines and landing pages to emphasize brand excellence, especially in the green housing concept.
A3	Providing new promotional schemes and providing added value to potential customers.
A4	Conducting approaches and proposals for cooperation with banks providing mortgage facilities that are commonly used by potential customers.
A5	Repair and revitalization of public facilities and social facilities as well as security for housing projects, and create a QA reporting system for both housing and project facilities.

Furthermore, the attractiveness rating of the five proposed alternative strategies is carried out using the quantitative strategy planning matrix (QSPM) framework. The results of the ranking will be discussed in the results discussion section.

RESULTS AND DISCUSSION

Based on the analysis of the Partial Least Squares-Structural Equation Modeling (PLS-SEM) model, there are several important points that need attention. In testing the measurement model or outer model, there are two indicator variables that do not meet the parameter requirements and must be eliminated. After the final test, all values of AVE, CA, CR, and discriminant validity met the parameter requirements. VIF measurements show no double collinearity on the hypothesis.

There are nine variables in the model and all endogenous latent variables fulfill the path coefficient requirements. In the analysis of variable relationships or hypothesis testing, five hypotheses are accepted, while four hypotheses are rejected. The test results indicate a significant effect of attitude towards behavior, characteristics, environment, legality, and trust on behavioral intention. However, funding, location, perceived behavioral control, and subjective norms do not have a significant effect on behavioral intention. This result is in line with previous studies (Zhang et al., 2020; Yoke et al., 2018; Le-Hoang et al., 2020; Opoku & Abdul-Muhmin, 2010). Therefore, the developer company needs to consider the factors that influence the intention to buy a house such as attitudes towards behavior, characteristics of the house,

Based on the results of the QSPM calculations, the total STAS score obtained for each proposed alternative strategy is as shown in the following Table 9:

Table 9. Strategy Alternative STAS Value Rating

Strategy	Total STAS Value	Variables that will be Affected Positively
A2	6,683	TRU, CAR, SN
A5	4,758	ENV
A3	3,751	TRU, FUN
A4	3,355	FUN
A1	3,134	ATT, TRU

Based on the results of the QSPM calculation, the highest order of attractiveness score is alternative strategy A2, which is to increase the value of brand equity by improving facilities and infrastructure both physical and non-physical, especially those that directly touch consumers, and innovate in the social media line. and landing pages to emphasize brand excellence, then alternative strategy A5, namely by repairing and revitalizing public facilities and social facilities as well as securing housing projects, and creating a quality assurance reporting system for both housing and project facilities, alternative strategy A3, that is providing more added value and also designing promotions that are different from what is commonly done or offered by other developers in the same segment, alternative to the A4 strategy, i.e. by focusing on making proposals for cooperation with banks that provide mortgage loans. more diverse in order to accommodate customers from certain banks who only want to transact with certain banks and provide convenience for existing customers who have a good credit track record at the bank, and the lowest, namely alternative strategy A1, is to add new marketing channels that have never been used by the company before.

CONCLUSION

Derived from the findings of the conducted research, the following conclusions are drawn:

1) There are five exogenous latent variables that significantly influence one endogenous latent variable (consumer's home purchase decision), namely attitude towards behavior (attitude towards home buying decisions), house characteristics, housing complex environment and its surroundings, legality, and trust towards the developer. In addition, there are four exogenous latent variables that do not significantly influence one endogenous latent variable (consumer's home buying decision), namely location, funding, subjective norm, and perceived behavioral control.

2) Of the nine existing exogenous latent variables, the order of magnitude of influence (path coefficient) on endogenous latent variables from the largest to the smallest, namely trust, environment, characteristics, attitude, legality, funding, location, subjective norm, perceived behavioral control.

3) Based on the calculation results of IFE, EFE, IE, CPM matrix, companies are advised to formulate strategies with a hold and maintain orientation, by modifying existing products and focusing on increasing competition on the following key success factors, namely brand name, social media advertising, product quality, housing facility, and marketing channel.

4) From the results of the TOWS Matrix analysis and calculations using QSPM, six alternative strategies are obtained with a large order of attractiveness scores from the largest to the smallest, the alternative strategies A2, A5, A3, A4, and A1.

Further research on a similar topic can be done by conducting research using respondents who have different characteristics from this research, for example by using respondents who have never purchased a house to find out what factors influence home buying decisions in respondents who have bought a house and those who have never bought a different house, then you can also consider other factors that can influence the decision to buy a house or use the process of buying other property products such as apartments, flats, and others as further research.

REFERENCES

- Ajzen, I., & Driver, B. L. (1991). Prediction of leisure participation from behavioral, normative, and control beliefs: An application of the theory of planned behavior. *Leisure Sciences*, 13(3), 185–204. <https://doi.org/10.1080/01490409109513137>
- Armaini. (2006). *Quantitative risk analysis of real estate investments in the city of Denpasar*. Department of Civil Engineering, University of Udayana.
- Chia, J., Harun, A., Wahid, A., Kassim, M., Martin, D., Kepal, N., Tun, U., & Onn Malaysia, H. (2016). Understanding factors that influence house purchase intention among consumers in Kota Kinabalu: An application of buyer behavior model theory. *Journal of Technology Management and Business*, 3(2).
- Clapp, J. M. (1988). Real Estate Market Gap Analysis: An Application to the Office Market. *Real Estate Market Analysis: Methods and Applications*.
- David, F. R., & David, F. R. (2012). *Strategic Management: A Competitive Advantage Approach, Concepts and Cases*. https://opac.stan.ac.id/index.php?p=show_detail&id=8721&keywords=
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R*. Springer Nature. <https://doi.org/10.1007/978-3-030-80519-7>
- Hong Sharon Yam, L., & Stanley McGreal, W. (2010). House-buyers' expectations with relation to corporate social responsibility for Malaysian housing. *International Journal of Housing Markets and Analysis*, 3(2), 132–145. <https://doi.org/10.1108/17538271011049759>
- Kamal, M., & Pramanik, S. A. (2015). Factors Affecting Customers to Buy Apartments in Dhaka City. *Daffodil International University Journal of Business and Economics*, 9(2).
- Keller, K. L. (2001). *Building Customer-Based Brand Equity*. *Marketing Management*.
- Kotler, P. (2000). *Marketing Management, Millenium Edition*. www.pearsoncustom.com
- Le-Hoang, P. V. (2021). Behavior Intention To Purchase Real Estate: An Empirical Study In Ho Chi Minh City. *Independent Journal of Management & Production*, 12(1), 080–094. <https://doi.org/10.14807/ijmp.v12i1.1262>
- Le-Hoang, P. V., Ho, V. T., Phan, N. T., & Le, T. T. T. (2020). Factors affecting the intention to purchase townhouse. *Independent Journal of Management & Production*, 11(6), 1899. <https://doi.org/10.14807/ijmp.v11i6.1099>
- Merrie Ivana, & Asnan Furinto. (2022). Marketing Strategy to Enhance Brand Awareness and Purchase Initiation For Real Estate XYZ. *South East Asia Journal of Contemporary Business, Economics and Law*, 26(1).
- Muka, I. W. (2021). Risiko Pengembangan Properti. In *Qiara Media*.
- Numraktrakul, P., Ngarmyarn, A., & Panichpathom, S. (2009). Factors Affecting Green Housing Purchase. *17th International Business Research Conference*.
- Opoku, R. A., & Abdul-Muhmin, A. G. (2010). Housing preferences and attribute importance among low-income consumers in Saudi Arabia. *Habitat International*, 34(2), 219–227. <https://doi.org/https://doi.org/10.1016/j.habitatint.2009.09.006>
- Phungwong. (2010). *Factors influencing home purchase intention of Thai single people*. International graduate school of business, University of South Australia, Adelaide, Australia.
- Rafitas, A. B. (2005). *Kiat Sukses Bisnis Properti*. PT Bumi Aksara.
- Schumacker, R. E., & Lomax, R. G. (2010). A beginner's guide to structural equation modeling. In *A beginner's guide to structural equation modeling* (3rd ed.). Routledge/Taylor & Francis Group.

- Tan. (1998). Property Development in Malaysia. A Vantage Point. *Salient Issues in Project Management Urban Design, Architecture and Landscaping*.
- Thanaraju, P., Mentaza Khan, P. A., Juhari, N. H., Sivanathan, S., & Md Khair, N. (2019). Factors affecting the housing preferences of homebuyers in Kuala Lumpur. *Planning Malaysia Journal*, 17(9). <https://doi.org/10.21837/pmjournal.v17.i9.593>
- World Bank. (2022). *Indonesia Economic Prospects December 2022*.
- Yoke, C. C., Mun, Y. W., Peng, L. M., & Yean, U. L. (2018). Purchase Intention of Residential Property in Greater Kuala Lumpur, Malaysia. *International Journal of Asian Social Science*, 8(8), 580–590. <https://doi.org/10.18488/journal.1.2018.88.580.590>
- Zhang, Y., Wang, C., Tian, W., & Zhang, G. (2020). Determinants of purchase intention for real estate developed on industrial brownfields: evidence from China. *Journal of Housing and The Built Environment*, 35(4), 1261–1282. <https://doi.org/10.1007/s10901-020-09741-9>