



Architectural Design Aesthetics and Housing Purchase Intention: The Mediating Role of Consumer Perceived Value among First-Home Buyers

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Abstract. The development of the property industry indicates that architectural design aesthetics have become an important factor influencing consumer perceptions and housing purchase intention. This study aims to examine the effect of architectural design aesthetics on housing purchase intention and investigate the mediating role of consumer perceived value among first-home buyers. A mixed methods approach with a sequential explanatory design was employed. The quantitative phase involved 230 prospective first-home buyers in Surabaya, Indonesia, and the data were analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS). The qualitative phase was conducted through semi-structured interviews with five expert participants to enrich the interpretation of quantitative findings. The results demonstrate that architectural design aesthetics positively and significantly influence consumer perceived value and housing purchase intention. Consumer perceived value significantly mediates the relationship between architectural design aesthetics and housing purchase intention. The qualitative findings further reveal that façade quality, visual harmony, spatial arrangement, and housing identity contribute to consumers’ perceptions of quality and value. This study highlights the importance of integrating architectural aesthetics into housing development strategies to create value and enhance market attractiveness among first-home buyers.

Keywords: Architectural Design Aesthetics; Consumer Perceived Value; First-Home Buyers; Housing Purchase Intention; Mixed Methods.

1. INTRODUCTION

The property industry in Indonesia, particularly in urban areas such as Surabaya, has experienced increasing competition as consumer preferences shift from purely functional housing needs toward emotional experiences and symbolic values. Among first-home buyers, housing purchase decisions are no longer determined solely by conventional factors such as price, location, facilities, and accessibility, but also by design quality, aesthetics, comfort, and compatibility with lifestyle and personal identity (Kotler & Keller, 2021). This shift indicates that contemporary consumers evaluate residential products not only based on economic considerations but also on the experiences and meanings associated with the property.

In modern property marketing, architectural design aesthetics have become an important factor influencing consumers’ perceptions of residential products. Elements such as building form, façade composition, spatial proportion, layout arrangement, and visual harmony contribute to consumers’ evaluations of housing attractiveness and quality (Gou et al., 2025). Beyond visual appeal, architectural aesthetics can shape perceptions of comfort, prestige, quality, and emotional value associated with residential properties (Montañana et al., 2024). Therefore, architectural design aesthetics are no longer merely decorative elements but have become a strategic differentiation factor for property developers in attracting potential buyers.

However, housing purchase decisions involve a complex evaluation process in which consumers assess the benefits obtained compared with the sacrifices made. Consumer perceived value explains how individuals evaluate functional, emotional, social, and economic benefits before making purchase decisions (Z. Li et al., 2025). In the housing context, attractive architectural design may enhance perceived value by improving consumers' expectations regarding living experiences, emotional satisfaction, and overall property benefits. Thus, consumer perceived value may represent an important mechanism through which architectural design aesthetics influence housing purchase intention.

Previous studies on housing purchase intention have largely emphasized rational determinants, including price, location, construction quality, and supporting facilities. Although these factors remain important, the role of aesthetic experiences and psychological evaluations in shaping residential purchase decisions has received comparatively limited attention. Furthermore, empirical studies investigating the relationship between architectural design aesthetics and housing purchase intention through the mediating role of consumer perceived value remain limited, particularly among first-home buyers in developing urban property markets such as Indonesia. This research gap highlights the need to understand how architectural attributes generate perceived value and subsequently influence consumers' intention to purchase residential properties.

Based on this gap, this study integrates architectural design and consumer behavior perspectives by proposing a model that explains the relationship between architectural design aesthetics, consumer perceived value, and housing purchase intention. The novelty of this research lies in examining consumer perceived value as a mediating mechanism that transforms aesthetic experiences into purchasing decisions among first-home buyers. Therefore, this study aims to analyze the effect of architectural design aesthetics on housing purchase intention and examine the mediating role of consumer perceived value. The findings are expected to contribute to the development of consumer behavior research in the property sector and provide practical insights for developers in designing residential products and marketing strategies that align with contemporary consumer preferences.

2. LITERATURE REVIEW

Architectural Design Aesthetics Theory

Architectural design aesthetics refers to a concept that explains how visual elements of a building create perceptions of beauty, harmony, and attractiveness among observers and users of space. In architectural studies, aesthetics is not limited to physical appearance but also

encompasses the relationship between building proportions, visual composition, materials, colors, textures, and the compatibility of design with its surrounding environment. The concept of modern architecture, which emphasizes the relationship between form and function, suggests that building design should not only fulfill functional requirements but also provide visual and emotional experiences for its users (Ren et al., 2024)

In the context of property marketing, architectural design aesthetics can be considered a product attribute that shapes consumers' initial perceptions of housing quality and value. Elements such as façade design, material selection, building colors, and visual harmony within the residential environment have been shown to influence consumer preferences toward residential properties. Research on architectural aesthetic preferences indicates that façade characteristics and material quality are associated with perceived quality and consumer attractiveness toward housing products (Chen et al., 2024). Therefore, this study positions architectural design aesthetics as a factor that may influence consumer perceived value and housing purchase intention in modern residential developments.

Consumer Perceived Value Theory

Consumer perceived value refers to how consumers evaluate the benefits of a product based on the comparison between the advantages received and the sacrifices made. Consumers do not evaluate a product solely based on its functional benefits but also consider emotional, social, and experiential aspects obtained throughout the purchase decision-making process (Vrtana & Krizanova, 2023). In the context of property products, perceived value is not only formed by technical attributes such as location, building size, and facilities but also through the quality of experiences provided by architectural design and the residential environment.

In housing products, architectural design aesthetics can serve as an important factor in shaping consumer perceived value because attractive design is able to enhance perceptions of quality, comfort, and the social image associated with a property. Consumers may perceive a residence as having higher value when its design reflects their lifestyle preferences and personal identity. Therefore, this study positions consumer perceived value as a mediating variable that explains how architectural design aesthetics are transformed into value evaluations, which subsequently influence consumers' housing purchase intention.

Consumer Purchase Intention Theory

Consumer purchase intention refers to an individual's psychological tendency to engage in a purchase after evaluating a product or service. In consumer behavior theory, purchase intention is influenced by various factors, including perceived quality, perceived value, emotional experiences, and consumers' beliefs regarding the benefits offered by a

product. The higher the perceived value of a product, the greater the likelihood that consumers will develop an intention to purchase (Kotler & Keller, 2021).

In the context of the property industry, housing purchase intention is not only determined by rational factors such as price and location but also by symbolic and emotional factors associated with architectural design and residential experiences. Previous studies have demonstrated that design aesthetics influence purchase intention through the enhancement of consumer perceived value, indicating that product visual attributes are capable of shaping consumer preferences and purchase decisions (Y. Li & Li, 2022). Based on this perspective, this study examines the influence of architectural design aesthetics on first-home buyers' housing purchase intention, both directly and through the mediating role of consumer perceived value.

From a managerial perspective, understanding purchase intention is closely related to market-oriented management. The market represents a key determinant of organizational sustainability, requiring managers to remain adaptive in developing new products as a response to changing demand dynamics (Chayadi, 2025). In the property industry, this requires developers to design architectural aesthetics that align with the evolving preferences of younger buyer segments in order to maintain the competitiveness of residential products.

Previous Studies

Based on the review of previous studies, architectural design aesthetics have increasingly been recognized as an important factor in shaping consumer perceptions and behavioral responses toward residential products. Lindenthal & Johnson (2021) demonstrated that architectural style characteristics have a significant relationship with property value, indicating that building aesthetics not only serve visual purposes but can also generate additional economic value. This finding is further supported by Chen et al., (2024), who revealed that aesthetic elements, such as façade color and material selection, influence consumer preferences and perceived quality toward residential buildings.

Beyond influencing quality perceptions, design aesthetics are also associated with the processes of value evaluation and consumer purchase decisions. Li & Li (2022) found that design aesthetics positively influence purchase intention through the mechanism of perceived value, suggesting that consumers evaluate products not only based on functional benefits but also through emotional and symbolic attributes embedded in design. Similarly, Kim & Heo (2021) explained that aesthetically appealing designs are capable of generating positive emotional experiences, thereby strengthening consumer perceived value.

In the housing context, Mohammad et al., (2021) showed that design attributes and perceived value are important factors influencing young consumers' purchase intention toward residential products. However, previous studies have predominantly examined design aesthetics within the contexts of creative products, interior design, hospitality, or buildings in general. Research that specifically investigates the relationship between residential architectural design aesthetics, consumer perceived value, and housing purchase intention among first-home buyers in urban Indonesian markets remains limited.

Based on this research gap, further investigation is needed to understand how architectural design aesthetics in residential products influence consumer purchase intention through the mechanism of perceived value. This study addresses this gap by examining the effect of architectural design aesthetics on housing purchase intention through the mediating role of consumer perceived value among first-home buyers in Surabaya, Indonesia. This approach is expected to provide a more comprehensive understanding of the relationship between residential design characteristics, consumer evaluations, and purchasing behavior in the modern property industry.

Hypothesis Development

The Effect of Architectural Design Aesthetics on Consumer Perceived Value

Architectural design aesthetics represent an important element in shaping consumers' perceptions of the value of residential products. Consumers do not evaluate houses solely based on functional attributes, such as building size, location, and facilities, but also consider the visual and emotional experiences generated by architectural characteristics. Aesthetic elements, including façade design, color composition, material selection, building proportion, and harmony with the surrounding environment, can enhance perceptions of residential quality and attractiveness.

Previous studies have demonstrated that building visual characteristics are associated with consumers' perceptions of property quality and value. Consumer preferences toward façade colors and materials have been found to influence aesthetic evaluations and perceived quality of residential buildings (Chen et al., 2024). Furthermore, specific architectural styles have been linked to property economic value, indicating that design aesthetics can serve as an added-value factor for residential products (Lindenthal & Johnson, 2021). Therefore, this study proposes that architectural design aesthetics positively influence consumer perceived value.

The Effect of Consumer Perceived Value on Housing Purchase Intention

Consumer perceived value is an important determinant in the purchasing decision-making process as it reflects consumers' evaluation of the benefits obtained compared with the

sacrifices made (Liang et al., 2024). In the context of residential purchases, consumers consider not only economic value but also emotional and social values associated with comfort, self-identity, lifestyle compatibility, and residential experience.

When consumers perceive that a residential product provides greater benefits and value, their intention to purchase is likely to increase. Previous studies have demonstrated that perceived value plays an important role in explaining consumer purchasing behavior by strengthening consumers' confidence in product quality and benefits (Y. Li & Li, 2022). Therefore, this study proposes that consumer perceived value positively influences housing purchase intention.

The Effect of Architectural Design Aesthetics on Housing Purchase Intention

In addition to shaping consumer perceived value, architectural design aesthetics may also directly influence consumers' housing purchase intention. In the property industry, the visual appearance of a residential product often becomes the initial factor attracting potential buyers before they evaluate other attributes. A design with strong aesthetic appeal can generate positive emotional responses and increase consumers' interest in a residential project.

Previous research on the relationship between design aesthetics and consumer behavior indicates that design attributes influence purchasing decisions by creating positive experiences and perceptions toward products (Y. Li & Li, 2022). In the context of modern housing, architectural aesthetics represent a symbolic value that reflects consumers' lifestyles, preferences, and personal identity, particularly among first-home buyers. Therefore, this study proposes that architectural design aesthetics positively influence housing purchase intention.

The Mediating Role of Consumer Perceived Value in the Relationship between Architectural Design Aesthetics and Housing Purchase Intention

The relationship between architectural design aesthetics and housing purchase intention may not only occur directly but can also be explained through the mechanism of consumer perceived value formation. An attractive residential design can enhance consumers' perceptions of quality, comfort, and emotional benefits associated with a property, which subsequently encourages purchase intention. In other words, architectural design aesthetics functions as an initial stimulus, while consumer perceived value represents the evaluation process that connects aesthetic perceptions with purchasing decisions.

Previous studies have shown that design aesthetics can influence purchase intention through the enhancement of perceived value, indicating that consumer perceived value serves as an important mechanism for explaining purchasing behavior (Y. Li & Li, 2022). Therefore, this study positions consumer perceived value as a mediating variable that explains how

architectural design aesthetics contribute to increasing housing purchase intention among first-home buyers in modern residential markets.

3. RESEARCH METHOD

Research Design

This study employed a mixed methods approach with a sequential explanatory design, which consists of two consecutive phases, beginning with a quantitative approach followed by a qualitative approach. The quantitative phase was conducted to examine the structural relationships among research variables, while the qualitative phase was used to provide deeper insights into the statistical findings based on participants' experiences and perspectives (Creswell & Creswell, 2022)

The mixed methods approach was selected because housing purchase decisions are not only associated with measurable relationships among variables but also involve consumer perceptions, experiences, and interpretations of the aesthetic value of residential products. Through this approach, the study provides a more comprehensive understanding of how architectural design aesthetics shape consumer perceived value and influence housing purchase intention.

Population and Sample

The population of this study consisted of prospective first-home buyers from the millennial and Generation Z groups residing in the urban area of Surabaya, Indonesia. The selection of this population was based on the characteristics of young consumers who are entering the stage of home ownership and increasingly consider design attributes, lifestyle compatibility, and emotional experiences when evaluating residential products.

The quantitative sample was selected using purposive sampling with the following criteria: respondents aged between 20 and 40 years old, having plans to purchase a house within the next several years, and showing interest in modern housing concepts. A total of 230 respondents participated in this study. This sample size met the requirements for analysis using Partial Least Squares Structural Equation Modeling (PLS-SEM) (Hair et al., 2021)

For the qualitative phase, participants were selected purposively based on their professional experience and expertise related to residential property development and design. The participants consisted of professionals from architecture, property development, and residential marketing sectors who had relevant knowledge regarding modern housing preferences and consumer behavior.

Research Instrument and Data Collection

Quantitative data were collected through a questionnaire using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The research instrument was developed based on previous literature and adapted to the context of modern residential purchasing behavior. This study consisted of three main constructs: Architectural Design Aesthetics as the exogenous variable (X), Consumer Perceived Value as the mediating variable (Y), and Housing Purchase Intention as the endogenous variable (Z). A summary of the research constructs and measurement indicators is presented in Table 1.

Table 1. Research Constructs and Measurement Indicators.

Construct	Measurement Dimensions	References
Architectural Design Aesthetics (X)	Façade design, building proportion, materials, colors, visual harmony, and design character	Chen et al., (2024)
Consumer Perceived Value (Y)	Functional value, emotional value, and social value	Wang et al., (2024)
Purchase Intention (Z)	Purchase desire, purchase preference, intention to select housing, and recommendation intention	(Kotler & Keller, 2021; Y. Li & Li, 2022)

The qualitative phase was conducted through semi-structured interviews to explore participants' perspectives regarding how architectural design elements influence consumer perceived value and housing purchase intention. The interview findings were subsequently used to support and enrich the interpretation of the quantitative results.

Research Model

The research model illustrates the relationships among architectural design aesthetics, consumer perceived value, and housing purchase intention. Architectural Design Aesthetics (X) was positioned as an exogenous variable, Consumer Perceived Value (Y) was positioned as a mediating variable, and Purchase Intention (Z) was positioned as an endogenous variable. This study examined both the direct effect of architectural design aesthetics on housing purchase intention and the indirect effect through consumer perceived value as a mediating mechanism.

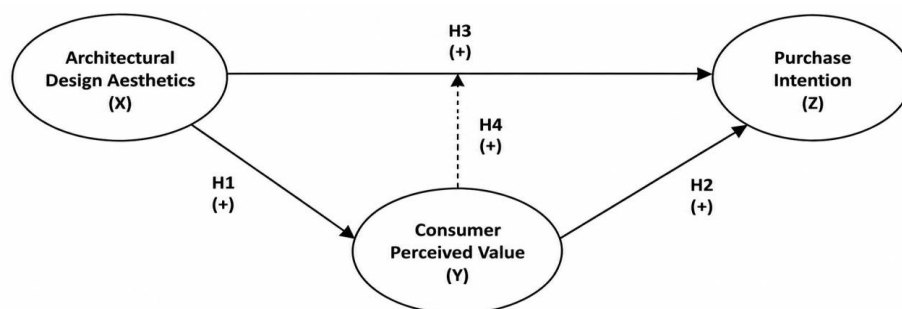


Figure 1. Research Hypothesized Model.

Figure 1 illustrates that the study examines two relationship pathways namely the direct effect of architectural design aesthetics on housing purchase intention and the indirect effect mediated by consumer perceived value.

Data Analysis Technique

Quantitative data analysis was conducted using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with the assistance of SmartPLS software. The evaluation of the model was performed through two stages: measurement model evaluation and structural model evaluation. The measurement model evaluation was conducted to ensure that the indicators appropriately represented each construct through validity and reliability assessments. The results of the measurement model testing indicated that all constructs met the required validity and reliability criteria; therefore, the model was suitable for further structural analysis.

The structural model evaluation was conducted by examining path coefficients, t-statistics, and p-values to determine the significance of relationships among variables. The mediation analysis was performed through indirect effect testing to evaluate the role of Consumer Perceived Value in explaining the relationship between Architectural Design Aesthetics and Housing Purchase Intention.

4. FINDINGS AND DUSCUSSION

Respondent Characteristics

This study involved 230 respondents who were prospective first-home buyers in Surabaya, Indonesia. The respondents were selected based on the research criteria, including being within the productive age range, not currently owning a house under their personal name, having plans to purchase a residence within the next few years, and having experience in seeking information regarding modern residential projects. The characteristics of respondents were analyzed based on gender, age, marital status, educational background, primary residence or activity location, occupation, income level, and current residential status. The summary of respondent characteristics is presented in Table 2.

Table 2. Respondent Characteristics.

Characteristics	Category	Frequency	Percentage
Gender	Male	89	38.7%
	Female	141	61.3%
Age	20–24 years	131	57.0%
	25–29 years	62	27.0%
	30–34 years	10	4.3%
	35–40 years	27	11.7%
Marital Status	Single	176	76.5%

Educational Background	Married	50	21.7%
	Widowed	4	1.7%
	Senior High School/Vocational School	96	41.7%
	Diploma	11	4.8%
	Bachelor's Degree	110	47.8%
Residence/Primary Activity Location	Master's Degree	13	5.7%
	East Surabaya	91	39.6%
	West Surabaya	37	16.1%
	Central Surabaya	27	11.7%
	South Surabaya	17	7.4%
Occupation	North Surabaya	12	5.2%
	Outside Surabaya but active in Surabaya	46	20.0%
	Student/Postgraduate Student	108	47.0%
	Private Employee	66	28.7%
	Entrepreneur	24	10.4%
Income Level	Civil Servant/State-Owned Enterprise Employee	25	10.9%
	Professional	2	0.9%
	Others	5	2.2%
	< IDR 5,000,000	124	53.9%
	IDR 5,000,000–10,000,000	71	30.9%
Current Residential Status	IDR 10,000,000–15,000,000	25	10.9%
	> IDR 15,000,000	10	4.3%
	Rental/Boarding/Lease	114	49.6%
	Living with Parents	97	42.2%
	Own House	15	6.5%
	Others	4	1.7%

Based on Table 2, the majority of respondents represent young consumers who are at the early stage of planning their first home ownership. This is indicated by the dominance of respondents aged 20–24 years (57.0%), unmarried respondents (76.5%), and respondents with senior high school/vocational and bachelor's degree educational backgrounds (89.5%). These characteristics indicate that respondents have sufficient capacity to evaluate various housing alternatives, including architectural design aspects, building quality, and the perceived benefits offered by property developers.

Furthermore, most respondents reported monthly incomes below IDR 5,000,000 (53.9%) and currently lived in rented accommodations, boarding houses, or with their parents (91.8%). This condition reflects that the respondents represent a potential first-home buyer segment who are actively considering future housing ownership decisions. Therefore, these respondent characteristics are relevant for examining how architectural design aesthetics, consumer perceived value, and other considerations influence housing purchase intention in modern urban residential markets.

Respondents' Housing Preferences and Behavior

In addition to demographic characteristics, this study also analyzed respondents' preferences and property-search behavior. This analysis was conducted to understand housing preferences, financial capability, and the level of involvement of respondents in the decision-

making process for first-home purchases. A summary of respondents' housing preferences and behavior is presented in Table 3.

Table 3. Respondents' Housing Preferences and Behavior.

Variable	Category	Frequency	Percentage
Preferred Housing Type	Cluster Housing	118	51.3%
	Landed House	77	33.5%
	Apartment	21	9.1%
	Townhouse	14	6.1%
Housing Budget Range	< IDR 500 million	70	30.4%
	IDR 500 million–1 billion	115	50.0%
	IDR 1–2 billion	35	15.2%
	> IDR 2 billion	10	4.3%
Payment Plan	Mortgage (KPR)	79	34.3%
	Undecided	75	32.6%
	Installment Payment	49	21.3%
Down Payment Capability	Full Cash Payment	27	11.8%
	<10%	91	39.6%
	10%–20%	93	40.4%
	21%–30%	23	10.0%
Frequency of Property Information Search	>30%	23	10.0%
	1–3 times	163	70.9%
	4–6 times	20	8.7%
	>6 times	21	9.1%
Experience Visiting Property Exhibitions/Marketing Galleries	Never	26	11.3%
	Yes	151	65.7%
	No	79	34.3%

Based on Table 2, the majority of respondents preferred cluster housing (51.3%) and landed houses (33.5%). This preference indicates that first-home buyers consider not only the functional aspects of housing but also the quality of the residential environment, neighborhood security, and visual characteristics of the housing development. Furthermore, most respondents belonged to the middle housing segment, with a preferred budget range of IDR 500 million–1 billion (50.0%), primarily considering mortgage financing (34.3%) and having down payment capability between 10%–20% (40.4%). These findings indicate that housing purchase decisions are influenced by the balance between design attractiveness and perceived value in relation to consumers' financial capability.

Regarding information-search behavior, most respondents had actively explored the property market, with 70.9% searching for property information one to three times within the previous year, while 65.7% had visited property exhibitions or marketing galleries. This high level of involvement indicates that respondents actively evaluated various housing alternatives before making purchase decisions. In the context of this study, such evaluation processes enable consumers to consider architectural design aesthetics, visual quality, functional benefits, and emotional value, which subsequently contribute to the formation of consumer perceived value and housing purchase intention.

Descriptive Analysis of Research Variables

Descriptive analysis was conducted to identify respondents' perceptions regarding the research variables, including Architectural Design Aesthetics, Consumer Perceived Value, and Housing Purchase Intention. The measurement was performed using a five-point Likert scale, with the mean score interpretation based on the following intervals: 1.00–1.80 (very low), 1.81–2.60 (low), 2.61–3.40 (moderate), 3.41–4.20 (high), and 4.21–5.00 (very high). The summary of the descriptive analysis results for each research variable is presented in Table 4.

Table 4. Summary of Descriptive Analysis of Research Variables.

Research Variable	Number of Indicators	Mean Value	Category
Architectural Design Aesthetics	9	4.20	High
Consumer Perceived Value	7	4.15	High
Purchase Intention	6	3.97	High

Based on Table 4, all research variables obtained mean scores within the high category. The Architectural Design Aesthetics variable achieved a mean score of 4.20, indicating that respondents provided positive evaluations of residential visual elements, including façade design, building proportion, materials, colors, and environmental harmony. This finding indicates that aesthetic elements represent important considerations for prospective home buyers when evaluating the quality and attractiveness of modern residential properties.

The Consumer Perceived Value variable obtained a mean score of 4.15, indicating that respondents perceived the offered housing products as providing good benefits, comfort, quality, and emotional value. Meanwhile, the Purchase Intention variable obtained a mean score of 3.97 and was categorized as high. This result indicates that respondents demonstrated positive tendencies to seek further information, consider purchasing alternatives, and develop purchase intentions toward housing products that align with their preferences and financial capabilities. Overall, the descriptive findings demonstrate that architectural design aesthetics, consumer perceived value, and housing purchase intention have positive tendencies, thereby

supporting further examination of the structural relationships among variables in the proposed research model.

Measurement Model and Structural Model Analysis

The data analysis in this study was conducted using the Structural Equation Modeling–Partial Least Squares (SEM-PLS) method with the assistance of SmartPLS software. Model evaluation was performed through two stages: the measurement model evaluation (outer model) to assess the validity and reliability of the constructs, and the structural model evaluation (inner model) to examine the relationships among the research variables.

Measurement Model Evaluation (Outer Model)

The measurement model evaluation was conducted by assessing convergent validity, construct reliability, and discriminant validity. The results indicate that most indicators obtained outer loading values above the recommended threshold of 0.70. However, several indicators demonstrated relatively low loading values, namely X9, Y7, and Z6. Therefore, these indicators were excluded from further model evaluation to improve the measurement quality.

Table 5. Construct Validity and Reliability Evaluation Results.

Construct	Composite Reliability	AVE	Remarks
Architectural Design Aesthetics	0.922	0.589	Valid and Reliable
Consumer Perceived Value	0.908	0.615	Valid and Reliable
Housing Purchase Intention	0.900	0.637	Valid and Reliable

Based on Table 5, all constructs achieved Composite Reliability values above 0.70 and Average Variance Extracted (AVE) values above 0.50, indicating that all constructs met the criteria for construct reliability and convergent validity. Discriminant validity was further assessed using the Heterotrait-Monotrait Ratio (HTMT). The results showed that most constructs fulfilled the recommended threshold. Although the HTMT value between Architectural Design Aesthetics and Consumer Perceived Value was relatively high, both constructs were retained because they represent theoretically distinct concepts and are measured using different indicators.

Structural Model Evaluation (Inner Model)

The structural model evaluation was conducted to examine the explanatory capability of the research model in explaining relationships among latent constructs and to test the proposed relationships between variables. The inner model assessment included path coefficient analysis, coefficient of determination (R^2), effect size (f^2), predictive relevance (Q^2), and hypothesis testing through the bootstrapping procedure in SmartPLS.

Figure 2 presents the estimated structural model of the study. The analysis results indicate that Architectural Design Aesthetics has a positive effect on Consumer Perceived Value, with a path coefficient of 0.878. Furthermore, Architectural Design Aesthetics also demonstrates a positive direct effect on Housing Purchase Intention with a path coefficient of 0.512, while Consumer Perceived Value has a positive effect on Housing Purchase Intention with a path coefficient of 0.327.

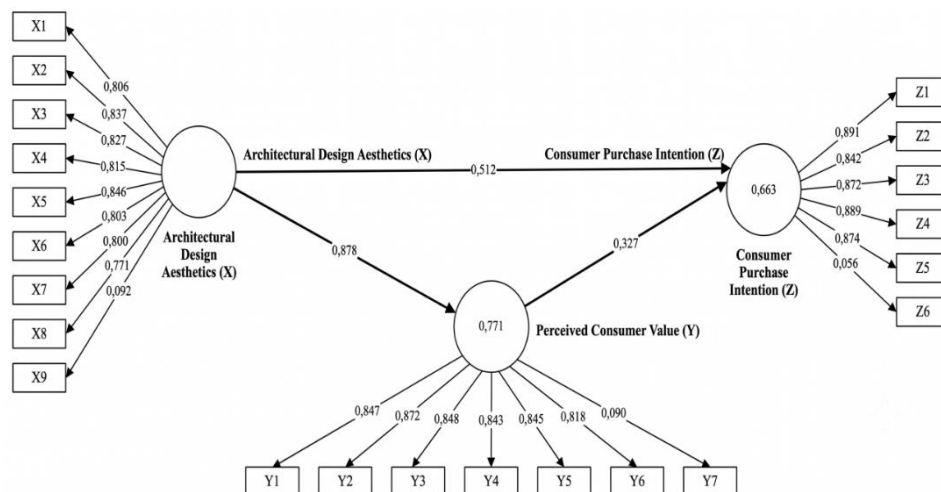


Figure 2. Structural Model of the Study.

Coefficient of Determination (R^2)

The coefficient of determination (R^2) was used to evaluate the extent to which exogenous constructs explain the variance of endogenous constructs. The results of the R^2 analysis are presented in Table 6.

Table 6. Coefficient of Determination (R^2).

Endogenous Variable	R^2	R^2 Adjusted	Interpretation
Consumer Perceived Value	0.771	0.770	Strong
Housing Purchase Intention	0.663	0.660	Moderate

Based on Table 6, Architectural Design Aesthetics explains 77.1% of the variance in Consumer Perceived Value. Furthermore, the combination of Architectural Design Aesthetics and Consumer Perceived Value explains 66.3% of the variance in Housing Purchase Intention. These findings indicate that the proposed research model has a strong explanatory capability in describing consumer evaluation processes and housing purchase intention in the context of modern residential markets.

Effect Size (f^2)

Effect size analysis was conducted to determine the magnitude of the contribution of each structural relationship among the constructs in the research model.

Table 7. Effect Size (f^2) Values.

Variable Relationship	f^2	Interpretation
Architectural Design Aesthetics → Consumer Perceived Value	3.367	Large
Architectural Design Aesthetics → Housing Purchase Intention	0.178	Medium
Consumer Perceived Value → Housing Purchase Intention	0.073	Small

The results indicate that the relationship between Architectural Design Aesthetics and Consumer Perceived Value has the largest contribution within the structural model. This finding demonstrates that architectural aesthetic elements represent a dominant factor in shaping consumers' perceived value of residential properties. Meanwhile, the effect of Architectural Design Aesthetics on Housing Purchase Intention shows a medium contribution, indicating that attractive architectural design directly influences consumers' purchasing considerations. Consumer Perceived Value contributes a smaller effect; however, it remains an important factor in strengthening consumers' intention to purchase a residential property.

Predictive Relevance (Q^2)

Predictive relevance analysis was conducted to evaluate the predictive capability of the research model in explaining the endogenous constructs.

Table 8. Predictive Relevance (Q^2 Predict) Values.

Endogenous Variable	Q^2 Predict	RMSE	MAE
Consumer Perceived Value	0.775	0.487	0.339
Housing Purchase Intention	0.634	0.618	0.401

The Q^2 Predict values for all endogenous variables were greater than zero, with values of 0.775 for Consumer Perceived Value and 0.634 for Housing Purchase Intention. These results indicate that the proposed research model has good predictive relevance and is capable of explaining consumer perceptions and purchase intentions in the context of modern residential properties.

Hypothesis Testing

Hypothesis testing was conducted using the bootstrapping procedure in SmartPLS. The hypotheses were considered supported when the t-statistic value exceeded 1.96 and the p-value was below 0.05.

Table 9. Hypothesis Testing Results.

Hypothesis	Variable Relationship	Path Coefficient	T Statistic	P Value	Decision
H1	Architectural Design Aesthetics → Consumer Perceived Value	0.878	26.062	0.000	Supported
H2	Architectural Design Aesthetics → Housing Purchase Intention	0.512	4.584	0.000	Supported
H3	Consumer Perceived Value → Housing Purchase Intention	0.327	2.819	0.005	Supported

The hypothesis testing results indicate that all proposed hypotheses were supported. Architectural Design Aesthetics was found to have a positive and significant effect on Consumer Perceived Value ($\beta = 0.878$; $p < 0.05$). This finding indicates that better architectural aesthetic quality leads to higher perceived value among consumers. Furthermore, Architectural Design Aesthetics also demonstrated a positive and significant effect on Housing Purchase Intention ($\beta = 0.512$; $p < 0.05$), indicating that attractive visual characteristics of residential properties can increase consumers' interest in considering a purchase. Consumer Perceived Value was also found to have a positive and significant effect on Housing Purchase Intention ($\beta = 0.327$; $p < 0.05$). This result indicates that higher perceived benefits, comfort, and emotional value associated with a residential property will increase consumers' intention to purchase the property.

Mediation Effect Testing

Mediation analysis was conducted to examine the role of Consumer Perceived Value in explaining the relationship between Architectural Design Aesthetics and Housing Purchase Intention.

Table 10. Mediation Testing Results.

Mediation Relationship	Coefficient	T Statistic	P Value	Decision
Architectural Design Aesthetics → Consumer Perceived Value → Housing Purchase Intention	0.287	2.776	0.006	Supported

The mediation test results demonstrate that the indirect effect of Architectural Design Aesthetics on Housing Purchase Intention through Consumer Perceived Value is statistically significant. Since the direct effect of Architectural Design Aesthetics on Housing Purchase Intention remains significant, Consumer Perceived Value functions as a partial mediator in this relationship.

This finding indicates that architectural design aesthetics influence consumers' purchase intention not only directly but also through the process of developing perceived value toward the residential property. Therefore, attractive architectural design can generate functional, emotional, and social value perceptions that strengthen consumers' willingness to purchase modern housing.

Qualitative Analysis Results

The qualitative analysis was conducted as the subsequent phase of the mixed methods sequential explanatory design to provide deeper insights into the quantitative findings. Data were collected through semi-structured interviews with five participants who possessed professional experience in architecture, property development, property marketing,

construction, and interior design. The interview findings were used to explain the underlying mechanism of the relationship between Architectural Design Aesthetics, Consumer Perceived Value, and Housing Purchase Intention identified through the SEM-PLS analysis.

Participant Profile

Table 11. Interview Participant Profile.

Code	Field	Profession
P1	Architecture	Architect
P2	Property Development	Property Development/Drafter
P3	Property Marketing	Property Consultant
P4	Construction	Structural Engineer
P5	Interior Design	Interior Designer

The interview analysis generated three main themes explaining the mechanism underlying the relationship between Architectural Design Aesthetics, Consumer Perceived Value, and Housing Purchase Intention. The summary of interview themes is presented in Table 12.

Table 12. Summary of Interview Findings.

Main Theme	Interview Findings	Relationship with Research Model
Architectural design aesthetics as a determinant of consumers' initial perceptions	Visual elements such as façade, building form, materials, colors, and design harmony represent initial aspects considered by consumers when evaluating residential properties. Visual appearance is perceived as an initial indicator of product quality.	Supports the positive influence of Architectural Design Aesthetics on Consumer Perceived Value (H1).
Architectural design aesthetics enhances consumer perceived value	Modern, harmonious designs that align with consumers' lifestyles can improve perceptions of quality, comfort, pride, and social value associated with a residential property.	Explains that aesthetics are not merely visual attributes but also contribute to the emotional and functional value of housing.
Consumer perceived value as a pathway toward purchase intention	Consumers demonstrate stronger purchase intention when design, quality, benefits, and price are perceived as providing appropriate value. Aesthetic design acts as an initial stimulus, while perceived value strengthens purchase decisions.	Supports the mediating role of Consumer Perceived Value between Architectural Design Aesthetics and Housing Purchase Intention (H4).

Based on the interview findings, Architectural Design Aesthetics is perceived not merely as a visual attribute but also as an element capable of shaping consumers' perceptions of housing quality, comfort, and value. The participants explained that façade characteristics and the overall visual identity of a building represent initial factors that attract consumers' attention before they evaluate other aspects, such as price, location, and facilities.

Furthermore, Consumer Perceived Value emerged as an important mechanism explaining how architectural aesthetics influence purchasing decisions. Residential properties with attractive designs were perceived to provide greater value because they offer emotional experiences, a sense of pride, and alignment with consumers' lifestyles. These qualitative findings reinforce the SEM-PLS results, which demonstrate that Architectural Design Aesthetics positively influences Consumer Perceived Value and Housing Purchase Intention.

Moreover, the interview results provide further explanation that this influence occurs through the process of value formation, thereby supporting the mediating role of Consumer Perceived Value in the proposed research model.

Discussion

The Influence of Architectural Design Aesthetics on Consumer Perceived Value

The hypothesis testing results indicate that Architectural Design Aesthetics has a positive and significant influence on Consumer Perceived Value. This finding demonstrates that higher-quality architectural aesthetics, including façade appearance, form composition, materials, colors, and design harmony, lead to higher perceived value among consumers toward residential properties. The qualitative findings further support this result by indicating that visual elements represent an initial aspect used by consumers in evaluating housing quality. The participants explained that façade characteristics, design identity, and spatial experience are important factors in shaping consumers' perceptions of housing quality, comfort, and attractiveness.

This finding is consistent with the concept of perceived value proposed by Zeithaml, which explains that consumers evaluate products based on the benefits received compared with the sacrifices made. In the context of residential properties, architectural design aesthetics function not only as visual attributes but also provide emotional and social benefits by enhancing perceived quality, pride of ownership, and the compatibility between housing characteristics and consumers' lifestyles. The results also support previous studies by Y. Li & Li (2022) and Y. Wang et al. (2023), which demonstrate that visual design quality contributes to the improvement of consumers' perceived value toward products.

In the context of first-home buyers in Surabaya, this study reveals that younger consumers increasingly consider aesthetic aspects as an integral component of housing value, rather than focusing solely on conventional factors such as price, location, and building functionality. Therefore, property developers should position architectural design as a value-creation strategy to enhance residential attractiveness and strengthen positive consumer perceptions toward modern housing products.

The Effect of Consumer Perceived Value on Housing Purchase Intention

The hypothesis testing results indicate that Consumer Perceived Value has a positive and significant effect on Housing Purchase Intention. This finding demonstrates that the higher the value perceived by consumers toward a housing product, the greater their tendency to consider and proceed with the purchase decision. The qualitative findings support this result by revealing that consumers do not evaluate housing solely based on physical attributes, but

also consider the benefits obtained, including design quality, living comfort, lifestyle compatibility, and the long-term value associated with the property.

This finding is consistent with the Theory of Consumption Values proposed by Luo et al., (2021), which explains that consumer decisions are influenced by various dimensions of perceived value, including functional, emotional, and social values. In the context of housing, perceived value is established when consumers perceive that the characteristics and benefits offered by a property are proportional to the financial costs and sacrifices required. This result also supports previous studies by C. Wang et al., (2023) and Prakoso & Roostika (2022), which demonstrate that perceived value is an important determinant in shaping consumer purchase intention.

In the context of first-home buyers in Surabaya, this study indicates that perceived value represents a crucial factor in the decision-making process for purchasing a first home. Young consumers are more likely to develop stronger purchase intentions when a housing product provides a combination of design quality, comfort, emotional benefits, and compatibility with their financial capacity. Therefore, property developers need to communicate housing value comprehensively, not only by emphasizing physical building attributes but also by highlighting the experiences and benefits that consumers can obtain from owning the property.

The Effect of Architectural Design Aesthetics on Housing Purchase Intention

The hypothesis testing results indicate that Architectural Design Aesthetics has a positive and significant effect on Housing Purchase Intention. This finding demonstrates that visually attractive architectural designs are able to increase consumers' interest in considering a housing product as a potential purchase choice. The qualitative findings support this result, as participants explained that visual elements such as façade characteristics, design identity, and the compatibility between housing concepts and consumer preferences represent initial factors that attract potential buyers. A visually appealing design can encourage consumers to seek further information and conduct evaluations of the residential projects offered.

This finding is consistent with the study by Regina & Anindita (2022), which states that the visual attractiveness of a product can enhance consumer purchase intention. Furthermore, this result supports the findings of Barreca (2022), which demonstrate that architectural design has a direct influence on residential property purchasing decisions. In the context of first-home buyers in Surabaya, architectural design aesthetics are not merely perceived as decorative elements, but also function as an initial stimulus that shapes emotional attraction and encourages the housing purchase decision-making process.

The Mediating Role of Consumer Perceived Value in the Relationship between Architectural Design Aesthetics and Housing Purchase Intention

The mediation analysis results indicate that Consumer Perceived Value plays a mediating role in the relationship between Architectural Design Aesthetics and Housing Purchase Intention. This finding demonstrates that architectural aesthetics influence purchase intention not only through a direct pathway but also through the process of developing consumers' perceived value toward housing products. The qualitative findings further support this result by indicating that attractive designs enhance consumers' perceptions of housing quality, comfort, residential image, and investment value. Therefore, consumers are not only attracted by the visual appearance of a residence but also consider the benefits and values obtained before making a purchase decision.

This finding is consistent with Y. Li & Li (2022), who explain that perceived value represents a psychological mechanism connecting design attractiveness with consumer purchasing behavior. Furthermore, the result supports Kepakisan et al. (2026) theory, which states that purchase decisions are influenced by consumers' evaluation of the balance between received benefits and perceived sacrifices. In the context of first-home buyers in Surabaya, this study indicates that the development of architectural design aesthetics needs to be accompanied by the creation of meaningful consumer value. Thus, architectural design should not only provide visual appeal but also strengthen consumers' confidence in making housing purchase decisions.

Managerial Implications

Based on the research findings, the managerial implications indicate that modern housing development needs to consider architectural design aesthetics as an integral part of consumer value creation strategies. The SEM-PLS analysis demonstrates that architectural design aesthetics has a strong influence on Consumer Perceived Value and Housing Purchase Intention. Therefore, property developers should pay greater attention to design elements such as façades, materials, building composition, visual quality of residential areas, and spatial experience. In addition, marketing strategies should not only emphasize conventional attributes such as price and location but also communicate the emotional, functional, and social benefits obtained through housing ownership.

The quantitative findings are further supported by qualitative results, which reveal that first-home buyers increasingly consider visual quality, spatial comfort, and residential image during the decision-making process. Therefore, developers and marketing teams should implement a customer-oriented development approach through attractive design presentation,

informative project visualization, spatial experience enhancement through show units or virtual tours, and evaluation of consumer perceived value as an indicator of project success. Consequently, the competitiveness of modern housing projects is determined not only by technical construction aspects but also by the ability of developers to create value that aligns with consumers' needs and expectations

5. CONCLUSION AND RECOMMENDATION

This study concludes that architectural design aesthetics plays an important role in influencing consumer decision-making in the modern residential property market. The SEM-PLS analysis results demonstrate that architectural design aesthetics has a positive effect on consumer perceived value and housing purchase intention. These findings indicate that consumers evaluate residential properties not only based on functional aspects, but also through visual attractiveness, spatial comfort, architectural identity, and emotional experiences generated by the design. Therefore, architectural design aesthetics becomes an important strategic factor for developers in creating residential products that are attractive and competitive, particularly for first-home buyers.

Furthermore, this study confirms that consumer perceived value has a significant role in shaping housing purchase intention and mediates the relationship between architectural design aesthetics and purchase intention. This finding indicates that attractive architectural design increases consumers' perception of quality, benefits, and overall residential value, which subsequently strengthens their intention to purchase. The interview results support these findings by showing that consumers tend to associate appealing architectural designs with better housing quality, modern lifestyle representation, and long-term investment value.

Overall, this research contributes to a better understanding of consumer behavior in the residential property sector by emphasizing that architectural design aesthetics is not merely a visual element but also a mechanism for creating consumer value. The findings provide practical implications for property developers that integrating aesthetic, functional, and emotional aspects in residential design can enhance market attractiveness and influence consumer purchasing decisions.

Based on the findings, property developers are recommended to consider architectural design aesthetics as an integral part of residential development strategies. Design planning should focus not only on external appearance but also on functional layouts, comfort, environmental adaptation, and lifestyle needs of consumers. In addition, developers should strengthen consumer perceived value by ensuring that aesthetic features are supported by other

important attributes, such as construction quality, residential facilities, location advantages, and sustainable development concepts.

Future research is recommended to expand the study context by involving different regions, larger respondent groups, and more diverse consumer characteristics. Further studies may also incorporate additional variables that potentially influence housing purchase intention, such as price perception, location preference, developer reputation, residential satisfaction, customer loyalty, and property value. These extensions are expected to provide a more comprehensive understanding of consumer behavior and decision-making processes in the residential property market.

REFERENCES

- Barreca, A. (2022). Architectural quality and the housing market: Values of the late twentieth century built heritage. *Sustainability*, 14(5), 2565. <https://doi.org/10.3390/su14052565>
- Chayadi, Y. D. (2025). *Dasar-dasar manajemen (Teori, praktik, dan penerapan dalam organisasi)*. PT Penerbit Naga Pustaka.
- Chen, C., Wang, W., & Xu, X. (2024). Impact of facade color and material on consumer preference for condominium buildings. *Buildings*, 14, 557. <https://doi.org/10.3390/buildings14020557>
- Creswell, J. W., & Creswell, J. D. (2022). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publications.
- Gou, B., Chen, X., Wang, S., Zhang, H., Wong, C. U. I., Zhao, R., & Wang, X. (2025). Artistic perspectives on display design and service environments as purchase stimuli: Evidence from millennials in the improved housing market. *Buildings*, 15(17), 3189. <https://doi.org/10.3390/buildings15173189>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). SAGE Publications.
- Kepakisan, I. N. B. Y., Putra, I. B. U., Amerta, I. M. S., & Setini, M. (2026). Perceived value mediation on price and product quality toward purchase intention of Balinese masks. *International Journal of Management and Business Applied*, 5(1), 1–19. <https://doi.org/10.54099/ijmba.v5i1.1789>
- Kim, J., & Heo, W. (2021). Interior design with consumers' perception about art, brand image, and sustainability. *Sustainability*, 13(8), 4557. <https://doi.org/10.3390/su13084557>
- Kotler, P., & Keller, K. L. (2021). *Marketing management* (15th global ed.). Pearson Education Limited.
- Li, Y., & Li, J. (2022). The influence of design aesthetics on consumers' purchase intention toward cultural and creative products: Evidence from the Palace Museum in China. *Frontiers in Psychology*, 13, 939403. <https://doi.org/10.3389/fpsyg.2022.939403>
- Li, Z., Zhang, J., & Tang, J. (2025). The risk-value trade-off: Impact of risk perception, perceived value on consumers' purchase intention: A meta-analysis. *Sustainability*, 18(13), 6447. <https://doi.org/10.3390/su18136447>

- Liang, M., Yu, J., & Jin, C. (2024). Effects of perceived benefits, value, and relationships of brands in an online-to-offline context: Moderating effect of ESG activities. *Sustainability*, 16(23), 10294. <https://doi.org/10.3390/su162310294>
- Lindenthal, T., & Johnson, E. B. (2021). Machine learning, architectural styles and property values. *The Journal of Real Estate Finance and Economics*, 71(3), 353–384. <https://doi.org/10.1007/s11146-021-09845-1>
- Luo, B., Li, L., & Sun, Y. (2021). Understanding the influence of consumers' perceived value on energy-saving products purchase intention. *Frontiers in Psychology*, 12, 640376. <https://doi.org/10.3389/fpsyg.2021.640376>
- Mohammad, M., Zheng, G.-W., Siddik, A. B., Alam, S. S., & Akter, A. (2021). Perceived environmental responsibilities and green buying behavior: The mediating effect of attitude. *Sustainability*, 13(2), 35. <https://doi.org/10.3390/su13010035>
- Montañana, A., Nolé, M. L., & Llinares, C. (2024). Strategic design approaches for eliciting the perception of “prestige” in housing consumers. *Buildings*, 14(3), 853. <https://doi.org/10.3390/buildings14030853>
- Prakoso, R. F., & Roostika, R. R. R. (2022). The influences of perceived food quality, price fairness, and satisfaction on customers revisit intentions towards consume organic food restaurants in Yogyakarta. *Syntax Literate: Jurnal Ilmiah Indonesia*, 7(10). <https://doi.org/10.36418/syntax-literate.v7i10.13355>
- Regina, & Anindita, R. (2022). The influence of attractiveness, credibility and brand attitudes towards consumer buying intentions on skincare products. *Target Journal Management and Business*, 4(1), 11–20. <https://doi.org/10.30812/target.v4i1.1903>
- Ren, H., Minqi, S., & Zhang, J. (2024). Research contents, methods and prospects of emotional architecture based on a systematic literature review. *Buildings*, 14(4), 997. <https://doi.org/10.3390/buildings14040997>
- Vrtana, D., & Krizanova, A. (2023). The power of emotional advertising appeals: Examining their influence on consumer purchasing behavior and brand-customer relationship. *Sustainability*, 15(18), 13337. <https://doi.org/10.3390/su151813337>
- Wang, C., Liu, T., Zhang, Y. Z., Wang, H., Wang, X., & Zhao, S. (2023). The influence of consumer perception on purchase intention: Evidence from cross-border e-commerce platforms. *Heliyon*, 9(11), e21617. <https://doi.org/10.1016/j.heliyon.2023.e21617>
- Wang, Y., Jiang, J., Gong, X., & Wang, J. (2023). Simple = authentic: The effect of visually simple package design on perceived brand authenticity and brand choice. *Journal of Business Research*, 166, 114078. <https://doi.org/10.1016/j.jbusres.2023.114078>
- Wang, Z.-X., Chee, W. M., Jantan, A. H. B., & Xia, Y.-H. (2024). Impact of perceived value in virtual brand communities on purchase intention of domestic electric vehicles. *Acta Psychologica*, 248, 104371. <https://doi.org/10.1016/j.actpsy.2024.104371>