

## The Influence of Quality, Price, and Promotion on Purchase Intention of PT SIG Precision Interlock Brick Products in Java

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### ABSTRACT

*This study is motivated by the need for effective marketing strategies to boost purchase intention of innovative products in the construction industry. Despite the growing demand for affordable and efficient building materials in Indonesia's housing sector, there remains limited understanding of how quality perception, pricing strategies, and promotional efforts collectively influence consumer purchase intentions for innovative products like precision interlock bricks, particularly among low-income market segments. Existing research has predominantly examined these factors in isolation or within different product contexts, leaving a gap in understanding their synergistic effects on construction material adoption. The literature review discusses theories of consumer behavior, marketing mix, and empirical findings on the effects of quality, price, and promotion on purchase decisions, supported by works from Kotler & Keller, Hair et al., and recent scholars such as Azizah & Prasetya (2023) and Setiawan & Sunaryo (2024). The research employs a quantitative approach using Partial Least Squares Structural Equation Modeling (PLS-SEM), with data collected through questionnaires from 100 users of interlock bricks in Java. The results indicate that all three independent variables—quality, price, and promotion—have a positive and significant effect on purchase intention, with an R-square value of 0.716. Product quality emerged as the dominant influence, followed by price and promotion. Validity and reliability tests confirm that all indicators meet the required thresholds. The study concludes that simultaneous efforts to enhance product quality, adjust pricing strategies, and implement educational promotions can effectively increase consumers' purchase intention toward PT SIG's precision interlock brick products.*

### KEYWORDS

*quality, price, promotion, purchase intention, interlock brick*



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### INTRODUCTION

Infrastructure and housing development is one of the key sectors in global economic growth. The construction sector contributes around 13% to the world's Gross Domestic Product (GDP) and is an important factor in poverty alleviation and improving people's quality of life (World Bank, 2022). As the population grows and urbanization accelerates, the need for innovative, cost-effective, and environmentally friendly building materials is increasing, especially in developing countries that face challenges in providing decent housing for all walks of life (Enwin & Ikiriko, 2023; Githinji & Were, 2018; Nidugala & Shukla, 2017; Zhabytay et al., 2023).

In recent decades, the development of building material technology has presented various innovations aimed at increasing efficiency and effectiveness in construction (Chaudhari et al., 2024; Fonseca Arenas & Shafique, 2023; Wang, 2024). One of the increasingly popular innovations is the use of precision interlock bricks, which are designed to provide higher durability with easier installation compared to conventional bricks. This type of brick is a top choice for subsidized housing projects and low-cost infrastructure due to its ability to reduce labor costs and shorten installation times.

However, the main challenge in the implementation of these innovative building materials lies in market acceptance, especially among low-income communities. Purchasing decisions are influenced not only by the quality of the product but also by the price and promotional strategies implemented by the manufacturer. A study shows that quality, price, product, and promotion factors have a significant influence on the purchase decision of construction products, especially in the context of providing housing for the lower-middle economic group (Angraini, 2019; Garaika et al., 2020; Limpo et al., 2018; Yanti & Astuti, 2023).

In Indonesia, the housing and construction sectors are experiencing rapid growth, driven by the growing need for affordable housing and government policies that support public housing programs. The Ministry of Public Works and Public Housing (PUPR) reported that in 2023, there was a significant increase in the demand for more economical building materials, in line with the government's efforts to provide decent housing for the community. In addition, innovations in the construction sector are increasingly needed to overcome land limitations and improve development efficiency.

Although the government has issued various policies to support housing access for the community, challenges in implementation on the ground are still considerable. The price factor is one of the main obstacles for consumers in choosing high-quality building materials. Therefore, a competitive pricing strategy is key in attracting people's buying interest in innovative products such as precision interlock bricks (Maulana & Hariasih, 2024). In addition to price, effective marketing also plays an important role in increasing product awareness and appeal. In today's digital age, social media-based promotions and e-commerce have become key strategies for many manufacturers to reach more consumers.

PT SIG stands for PT Semen Indonesia (Persero) Tbk, a State-Owned Enterprise (BUMN) engaged in the provision of building materials. PT SIG, as one of the leading manufacturers of precision interlock bricks in Indonesia, faces challenges in expanding market penetration. Precision interlock bricks are an innovative type of building material designed with a special locking system that allows for faster and more efficient installation compared to conventional bricks. These bricks are made with high-precision molding technology, resulting in more uniform size and smoother surfaces. With an interlocking design, these bricks can be arranged without requiring much mortar adhesive, which ultimately reduces material costs as well as labor time in construction projects.

The main advantage of precision interlock bricks lies in their installation efficiency. Compared to red bricks or conventional light bricks, the use of interlock bricks allows the construction process to proceed faster. The lock system makes each brick bond together firmly, reducing the need for additional adhesives such as cement. Additionally, the resulting structural strength of these bricks is higher, making them an ideal choice for earthquake-resistant buildings as well as low-cost construction projects.

Economically, precision interlock bricks offer a more affordable solution because they reduce the need for labor and additional materials. Their practicality in installation also contributes to minimal construction waste, making them more environmentally friendly. In addition, their flatter surfaces allow use without the need for thick plastering, which saves finishing costs and results in a neater, more modern finish.

Precision interlock bricks are gaining popularity in the construction sector, particularly in subsidized housing projects and small- to medium-scale infrastructure. This material is

suitable for constructing simple houses, fences, retaining walls, and modular housing projects. With advantages in efficiency, durability, and aesthetics, precision interlock bricks are one of the innovations that can support sustainable development and provide more affordable housing for the community. Consumers tend to be more selective in choosing construction products, considering durability, maintenance costs, and installation effectiveness.

**Table 1. Brick Product Price Comparison**

Types of Bricks	Price per Fruit (IDR)	Necessity per m <sup>2</sup>	Estimated Cost per m <sup>2</sup> (IDR)
<b>Precision Brick <i>Interlock</i></b>	3.500 – 5.500	25 – 30	87.500 – 165.000
<b>Red Brick</b>	800 – 1.500	60 – 75	48.000 – 112.500
<b>Brick</b>	3.000 – 5.000	20 – 25	60.000 – 125.000
<b>Light Brick (Hebel)</b>	8.000 – 12.000	8 – 12	64.0 – 144.000

Precision interlock bricks have a higher unit price compared to red bricks, standard bricks, and lightweight Hebel blocks; however, they offer significant long-term economic advantages. Their larger size and precise installation reduce the number of units needed per square meter and lower overall costs by saving on adhesive and labor time. Although materials like red bricks are cheaper per piece, they require more units and additional cement, potentially making the total cost comparable or higher. Furthermore, despite their competitive price, standard bricks lack the strength and impact resistance of interlock systems, and while Hebel blocks provide excellent insulation, they are the most expensive per unit. Thus, for modern construction, interlock bricks present a compelling economical alternative due to their installation efficiency and superior durability.

Despite these benefits, public understanding and adoption of precision interlock bricks remain relatively low, indicating a need for more intensive consumer education. PT SIG must address this by developing marketing strategies that provide clear technical data and credible user testimonials to build market trust. The interplay of quality, price, and promotion is critical in purchasing decisions within the construction sector, and PT SIG focuses on producing high-quality, dimensionally precise bricks that offer installation efficiency. However, maintaining a competitive price is essential, especially as digital promotion through social media and e-commerce becomes increasingly vital for reaching price-sensitive consumers seeking accessible product information.

This creates a research gap concerning how precisely quality, price, and promotional strategies influence buying interest, particularly among low-income segments in the construction market. While prior studies confirm these factors significantly impact decisions for building materials, more specific research is needed to understand their dynamics in a competitive market for innovative products like interlock bricks. The brick industry has seen notable developments, with studies showing that product durability, ease of installation, and cost efficiency affect consumer choice—and that competitive pricing is crucial for affordability. Simultaneously, digital promotion has emerged as a key strategy for raising product awareness, highlighting the sector’s need to continually innovate to meet growing demand for affordable, sustainable materials.

The core variables for this study—quality, price, and promotion—were selected based on literature reviews and validation from marketing and construction industry experts, confirming their relevance in influencing purchase decisions for innovative products. This aligns with marketing principles emphasizing that consumer value perception is shaped by the combination of product quality, price, and communication. The study intentionally excludes the 'Place' element from the marketing mix, as PT SIG's distribution in Java is centralized and not a primary differentiating factor for end consumers. Executive insights from PT SIG further reinforce that the main challenge lies in educating consumers about long-term benefits, underscoring the critical role of promotional education and competitive pricing alongside inherent product quality.

This research is motivated by the challenges faced by PT SIG in increasing buying interest in precision interlock brick products amid competition in the construction industry and the development of digital marketing technology. The main problem that needs to be answered is whether quality, price, and promotion affect consumer buying interest. By formulating these three questions, this study aims to thoroughly examine the factors that influence purchasing decisions and provide a basis for the development of more targeted marketing strategies.

The main purpose of this study is to analyze the influence of quality, price, and promotion on the purchase interest of PT SIG's precision interlock brick products. This research also aims to provide a deeper understanding of the contribution of each variable to increasing the attractiveness of products in the market. With the achievement of these goals, the results of this research are expected to help companies design adaptive and competitive marketing policies amid the dynamics of the construction industry.

The focus of the research includes public perception of product quality (durability, ease of installation, cost efficiency, dimensions, and environmentally friendly materials), price affordability and suitability with product benefits, as well as the effectiveness of promotions through digital media, discounts, testimonials, and distribution strategies. Theoretically, this research can enrich the literature in the field of marketing, especially related to consumer buying interest in the context of the building materials industry, and become a reference for future research. Practically, the results of this research are useful for PT SIG in developing a data-driven marketing strategy, understanding the importance of synergy between quality, price, and promotion, and providing recommendations for industry players and the government to encourage the use of efficient and environmentally friendly construction products.

## RESEARCH METHOD

This study used a quantitative approach with a causal research design and questionnaire survey techniques. The research was conducted in the Java region, specifically targeting consumers and end-users in urban and peri-urban areas of Jakarta, Bandung, Semarang, Surabaya, and Yogyakarta, where PT SIG maintained active distribution networks and where housing development projects were concentrated. These locations were selected based on their representation of diverse socio-economic profiles while maintaining accessibility to *interlock brick* products through established distribution channels.

The sample consisted of 100 respondents selected through the purposive sampling method, representing low-income communities who were the target market. The sample size of 100 respondents aligned with Hair et al.'s (2010) recommendation for PLS-SEM analysis,

which suggested a minimum sample size of 10 times the largest number of formative indicators pointing to a construct or 10 times the largest number of structural paths directed at a particular construct in the structural model. Given that this study had five indicators per construct and three structural paths directed at the dependent variable, a sample of 100 (exceeding the  $10 \times 5 = 50$  minimum) provided adequate statistical power for reliable parameter estimation and hypothesis testing.

Respondent selection criteria included: (1) individuals or families with household income in the lower-middle economic bracket (monthly income Rp 3–7 million); (2) active involvement in housing construction or renovation planning within the past 12 months or expected involvement within the next 12 months; (3) familiarity with at least one type of building material used in wall construction; and (4) residence within the Java region where PT SIG products were distributed. These criteria ensured that respondents possessed relevant knowledge and decision-making authority regarding building material purchases, enhancing the validity and practical relevance of their responses.

Data were collected through Google Forms and analyzed using SEM-PLS to test the validity, reliability, and relationships between variables, with operational definitions predefined and measured using a Likert scale from 1 to 5. Ethical considerations were carefully observed throughout the research process. All respondents provided informed consent after receiving clear explanations of the research purpose, expected time commitment, and intended use of data. Participation was entirely voluntary, with explicit assurances that respondents could withdraw at any point without consequence. Anonymity was maintained by not collecting personally identifiable information beyond demographic categories necessary for sample characterization. Data security protocols ensured that responses were stored in password-protected systems accessible only to the research team. The research design was reviewed and approved by the institutional ethics committee to ensure compliance with ethical standards for social science research involving human subjects.

## RESULTS AND DISCUSSION

### Data Analysis

In this study, the description of the research variables used includes: Product Quality ( $X_1$ ), Price ( $X_2$ ), Promotion ( $X_3$ ), and Buying Interest ( $Y$ ). The measurement of the influence of each variable was carried out using a 5-point Likert scale, ranging from Strongly Agree to Strongly Disagree.

After the data is collected through a questionnaire and responses are obtained from each respondent, the next step is to group the results of the calculation into class intervals to facilitate the interpretation of the average score of each indicator. This classification is compiled by referring to the assessment method from Umar (2014), which establishes the range of assessment categories as follows:

$$I = \frac{R}{K} = \frac{4}{5} = 0.8$$

Information:

I : Big interval class

R : Range (class)

K : Sum interval class

From this formula, research criteria were made to assess and evaluate each statement variable as follows.

**Table 1.** Assessment Criteria

Average Score	Criteria
1-1,8	Very Bad
1,81-2,6	Bad
2,61-3,4	Fairly Good
3,41-4,2	Good
4,21-5	Excellent

Source: Umar (2014:36)

***Descriptive Analysis of Product Quality Variables (X<sub>i</sub>)***

Product Quality (X<sub>i</sub>) refers to the extent to which PT SIG's precision interlock brick products are considered to have durability, ease of installation, cost efficiency, dimensional consistency, and the use of environmentally friendly materials. This aspect is especially important in the context of the construction industry, where product quality has a direct impact on project efficiency, customer trust, and end-user satisfaction.

Based on the results of data processing from 100 respondents' responses to five product quality indicators, the results were obtained as shown in Table 2 below.

**Table 2.** Descriptive Product Quality Variables (X<sub>i</sub>)

Indicators and Statements	Total Score	Average	Information
X1.01 - PT SIG precision interlock brick has good durability and strength.	389	3,89	Good
X1.02 - PT SIG precision interlock brick is easy to install.	398	3,98	Good
X1.03 - PT SIG's precision interlock brick helps with construction cost efficiency.	387	3,87	Good
X1.04 - The dimensions and shape of PT SIG's precision interlock bricks are consistent.	392	3,92	Good
X1.05 - PT SIG's precision interlock brick uses eco-friendly materials.	385	3,85	Good
<b>Total Values</b>	<b>1.951</b>	<b>19,51</b>	<b>Good</b>
<b>Grade Point Average</b>		<b>3,90</b>	<b>Good</b>

Source: Research Primary Data (2025)

Based on Table 2, the average value of the Product Quality variable (X<sub>i</sub>) of 3.90 shows that the respondents' perception of the quality of PT SIG's precision interlock bricks is relatively good. All indicators in this variable received a positive assessment, with the highest score in the aspect of ease of installation (3.98), followed by consistency of dimensions and shape (3.92), durability and strength (3.89), construction cost efficiency (3.87), and use of environmentally friendly materials (3.85). These findings show that respondents appreciate the technical excellence and sustainability of the product, thus strengthening the quality position as the main force that is able to drive buying interest in PT SIG's precision interlock brick products.

**Descriptive Analysis of Price Variables (X<sub>2</sub>)**

The Price Variable (X<sub>2</sub>) in this study reflects respondents' perception of the affordability, fairness, and balance between price and benefits of PT SIG's precision interlock brick products. In the context of marketing construction products, price is a strategic element because it can affect consumer attractiveness and purchasing decisions, especially among low-income people.

The measurement of this variable was carried out through five indicators answered by 100 respondents using the Likert scale. The results of the data analysis of the Price (X<sub>2</sub>) indicator are presented in the following Table 3.

**Table 3** Descriptive Price Variables (X<sub>2</sub>)

Indicators and Statements	Total Score	Average	Information
X2.01 - The price of precision interlock bricks corresponds to the purchasing power of consumers.	396	3,96	Good
X2.02 - The price of precision interlock bricks is more competitive than similar products.	396	3,96	Good
X2.03 - The price of precision interlock bricks is balanced with its quality.	389	3,89	Good
X2.04 - Discounts or discounts are available on the purchase of precision interlock bricks.	404	4,04	Good
X2.05 - Ease of payment or credit is available in the purchase of precision interlock bricks.	389	3,89	Good
<b>Total Values</b>	<b>1.974</b>	<b>19,74</b>	<b>Good</b>
<b>Grade Point Average</b>		<b>3,95</b>	<b>Good</b>

Source: Research Primary Data (2025)

Based on Table 3, the average value for the Price variable (X<sub>2</sub>) is 3.95. This shows that respondents' perception of the price of PT SIG's precision interlock bricks is generally in the good category. The following are the details of the assessment of each indicator:

- a. The conformity of price with purchasing power scored 3.96, indicating a positive perception that the price of the product is considered quite affordable by the target consumer.
- b. The competitive price compared to similar products also obtained a score of 3.96, reflecting PT SIG's price competitiveness in the interlock brick market.
- c. The balance between price and quality obtained a score of 3.89, indicating that consumers value the price paid according to the benefits and quality received.
- d. The availability of discounts or discounts obtained the highest score among indicators (4.04), indicating that price-based promotional strategies are quite effective in attracting buying interest.
- e. The ease of payment or credit scheme was rated good with a score of 3.89, which shows that price flexibility is an added value for consumers.

Overall, consumer perception of the Price variable (X<sub>2</sub>) is categorized as Good, with all indicators in the range of 3.89–4.04. This shows that PT SIG's price strategy is considered quite effective in attracting people's buying interest, both in terms of affordability, competitiveness,

and flexibility in payment mechanisms. A good pricing strategy is an important factor that can strengthen purchasing decisions, especially in market segments that are sensitive to the economic value of products.

***Descriptive Analysis of Promotional Variables (X<sub>3</sub>)***

Promotion (X<sub>3</sub>) in the context of this study refers to the extent to which PT SIG's marketing communication strategy, whether through digital media, discounts, agents/distributors, or customer testimonials, has succeeded in increasing consumer awareness and interest in precision interlock brick products.

In the building materials sector, effective promotion is essential to build perception, increase consumer confidence, and expand market share, especially amid competition for innovative products.

Based on the results of data processing from 100 respondents' responses to five promotion indicators, the results were obtained as shown in Table 4.9 below.

**Table 4.** Descriptive Promotional Variables (X<sub>3</sub>)

<b>Indicators and Statements</b>	<b>Total Score</b>	<b>Average</b>	<b>Information</b>
<b>X3.01 - I found out about PT SIG's precision interlock bricks through advertisements on social/digital media.</b>	394	3,94	Good
<b>X3.02 - A discount program or special offer makes me interested in buying this product.</b>	396	3,96	Good
<b>X3.03 - I learned of this product through an agent or distributor.</b>	388	3,88	Good
<b>X3.04 - Customer testimonials and word of mouth make me believe in this product.</b>	403	4,03	Good
<b>X3.05 - I have seen exhibitions or demonstrations of interlock brick products.</b>	388	3,88	Good
<b>Total Values</b>	<b>1,969</b>	<b>19,69</b>	<b>Good</b>
<b>Grade Point Average</b>		<b>3,94</b>	<b>Good</b>

Source: Research Primary Data (2025)

Based on Table 4, the Promotion variable (X<sub>3</sub>) has an average value of 3.94 which shows the respondents' perception is in the good category in all indicators. The highest score was obtained on the testimonial indicators and word of mouth strategy (4.03), indicating that customer reviews are very effective in building trust. Digital advertising and social media (3.94), as well as discount programs and special offers (3.96) were rated as attractive and relevant strategies. Information through agents or distributors (3.88) and product exhibitions (3.88) also received a positive response, indicating that the combination of digital and conventional promotions is effective in reaching consumers. These findings confirm that PT SIG's marketing communication strategy has had a positive impact on consumer perception, and strengthening digital promotions and word of mouth can further increase marketing effectiveness and expand market share.

**Descriptive Analysis of Buying Interest Variables (Y)**

Buying Interest (Y) in this study measures the extent of consumer tendency to buy PT SIG precision interlock brick products, based on perceptions of quality, price, and promotion. Buying interest is an important stage in consumer behavior that reflects an individual's readiness to make a purchase after considering various alternatives. In the context of the construction industry, buying interest in building materials is greatly influenced by the perception of benefits, previous experience, and how much confidence they have in the product.

Based on the results of data processing from 100 respondents' responses to five indicators of buying interest, the results were obtained as shown in Table 5 below.

**Table 5.** Descriptive Variables of Buying Interest (Y)

<b>Indicators and Statements</b>	<b>Total Score</b>	<b>Average</b>	<b>Information</b>
<b>Y1.01 - I am willing to buy PT SIG precision interlock bricks in the near future.</b>	396	3,96	Good
<b>Y1.02 - I am interested in looking for more information about this product.</b>	408	4,08	Good
<b>Y1.03 - I compared this product with other alternatives before buying.</b>	397	3,97	Good
<b>Y1.04 - I am willing to recommend this product to others.</b>	397	3,97	Good
<b>Y1.05 - My previous experience influenced my decision to buy this product.</b>	404	4,04	Good
<b>Total Values</b>	<b>2.002</b>	<b>20,02</b>	<b>Good</b>
<b>Grade Point Average</b>		<b>4,00</b>	<b>Good</b>

Source: Research Primary Data (2025)

Based on Table 5, the average value for the Buying Interest (Y) variable is 4.00, which is in the good category. Here is a breakdown of the assessment of each indicator:

- a. The willingness to buy in the near future was rated good with a score of 3.96, indicating that respondents had positive intentions towards actual purchases.
- b. The interest in seeking more information obtained the highest score (4.08), indicating a high curiosity about the advantages of the product.
- c. The comparison with alternative products obtained a score of 3.97, reflecting that respondents were rational and selective in making purchase decisions.
- d. Recommendations to others also obtained a score of 3.97, indicating a level of satisfaction and trust that encourages positive word-of-mouth spread.
- e. Previous experiences influencing buying decisions get a score of 4.04, showing the importance of positive experiences in forming loyalty and confidence in products.

The results of this analysis show that consumer buying interest in PT SIG's precision interlock brick products is in the good category in all indicators. This means that the strategies that have been implemented by the Company in terms of quality, price, and promotion have succeeded in creating positive perceptions and encouraging purchase intentions from consumers. By maintaining and strengthening the factors that contribute to the formation of this buying interest, PT SIG can expand its market reach and increase customer loyalty to its innovative products.

### Validity Test of Research Instruments

The validity of the indicators in this research model was measured using the Loading Factor (LF) value. Based on the rule of thumb, the indicator is declared valid if it has an LF value of  $\geq 0.70$ . However, in the context of new or exploratory model development, values between 0.50–0.60 are still tolerable (Hair et al., 2010).

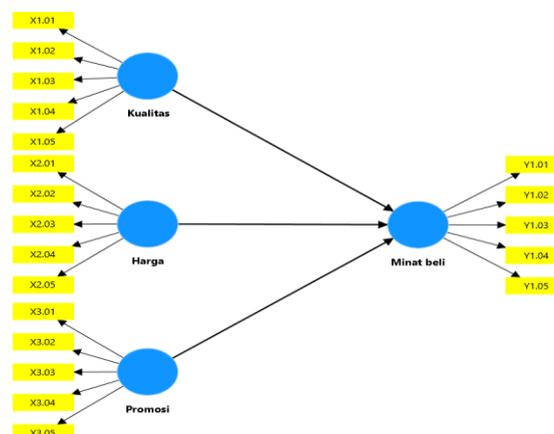
**Tabel 6.** Loading Factor

	Price	Quality	Buying interest	Promotion
X1.01		0,810		
X1.02		0,777		
X1.03		0,772		
X1.04		0,886		
X1.05		0,819		
X2.01	0,791			
X2.02	0,820			
X2.03	0,716			
X2.04	0,835			
X2.05	0,773			
X3.01				0,724
X3.02				0,816
X3.03				0,775
X3.04				0,831
X3.05				0,781
Y1.01			0,837	
Y1.02			0,848	
Y1.03			0,836	
Y1.04			0,886	
Y1.05			0,839	

Source: SmartPLS Output (2025)

The results of the analysis through the Calculate PLS Algorithm command show that all indicators have a loading factor value above 0.70, as shown in Table 6.

This indicates that all indicators in each construct (price, quality, promotion, and buying interest) are eligible for convergent validity and can be used in further hypothesis testing at the structural model stage.



**Figure 1.** Path Diagram

Source: SmartPLS Output (2025)

### Reliability Test of Research Instruments

The reliability of the constructs in this study was tested using two main measures, namely Cronbach's Alpha and Composite Reliability (CR). The construct is considered reliable if both values are greater than 0.70 (Hair et al., 2010).

**Tabel 7.** Construct Reliability dan AVE

	<b>Cronbach's alpha</b>	<b>Composite reliability (rho_a)</b>	<b>Composite reliability (rho_c)</b>	<b>Average variance extracted (AVE)</b>
<b>Price</b>	0,848	0,858	0,891	0,621
<b>Quality</b>	0,872	0,878	0,907	0,662
<b>Buying interest</b>	0,903	0,905	0,928	0,721
<b>Promotion</b>	0,845	0,852	0,890	0,618

Source: SmartPLS Output (2025)

From the results of the analysis, as seen in Table 7, all variables have Cronbach's Alpha and Composite Reliability values above 0.70, and Average Variance Extracted (AVE) values above 0.50. This shows that all indicators in each construct have good internal consistency and adequate convergent validity.

### Structural Model Analysis

Internal model testing or structural model aims to analyze the relationship between latent constructs in the research model, both in terms of the force of influence (R-square) and the contribution of each independent construct (f-square). One of the key measures in the inner evaluation of the model is the R-square ( $R^2$ ), which shows how much independent variables are able to explain the dependent variables in the model.

The R-square and R-square adjusted values for the dependent variables in this study, namely Buying Interest, are shown in the following Table 8.

**Table 8.** R-Square Values

	<b>R-square</b>	<b>R-square adjusted</b>
<b>Buying interest</b>	0,716	0,707

Source: SmartPLS Output (2025)

Based on Table 8, it is known that the R-square value for the Buying Interest variable is 0.716, which means that 71.6% of the buying interest variability can be explained by three independent constructs, namely price, quality, and promotion. Meanwhile, the remaining 28.4% is explained by factors outside of this model.

The R-square adjusted value of 0.707 indicates an adjustment to the number of variables in the model and shows that the model still has a high explanatory power even after it has been adjusted. The small difference between the R-square and R-square adjusted values indicates that the model is stable and does not overfit.

In addition, the f-square value is used to evaluate the relative influence of each independent variable on the dependent variables individually. The results of the calculation of the value of f-square are shown in Table 9 below.

**Table 9.** f-Square values

	F-Square
<b>Quality -&gt; Buying interest</b>	0,194
<b>Price -&gt; Interest in buying</b>	0,292
<b>Promotion -&gt; Interest in buying</b>	0,149

Source: SmartPLS Output (2025)

Based on Table 9 it can be interpreted that:

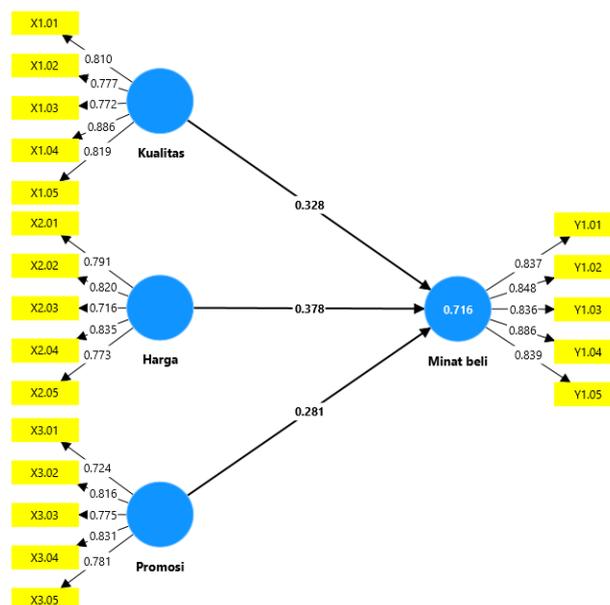
- The f-square value for the Quality variable of 0.194 also indicates a moderate influence, indicating that perceptions of product quality play an important role in consumers' purchasing decisions.
- The f-square value for the Price variable of 0.292 falls into the category of moderate to strong influence, indicating that price has a substantial contribution to the formation of buying interest.
- The f-square value for the Promotion variable of 0.149 is at the lower limit of the medium category, which means that promotions still have a significant role in shaping buying interest, although not as much as the influence of price and quality.

Overall, these results show that all three independent variables have a significant influence on Buying Interest, with Price as the variable that contributes the most, followed by Quality, and then Promotion.

### Model Evaluation Fit and Path Diagram

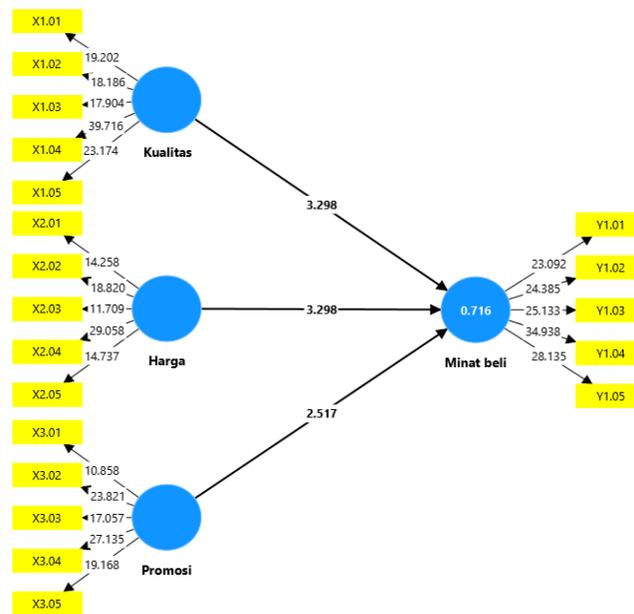
The feasibility evaluation of the structural model was further carried out by reviewing the t-statistics value of the bootstrapping results. If all paths have a t-statistic value of  $\geq 1.96$  (for a significance level of 5%) and a loading factor  $\geq 0.70$ , then the model can be said to be structurally fit.

This can be visualized through Figure 2 Loading Factor and Figure 4.3 Output T-Statistics, which are shown from the results of bootstrapping analysis using SmartPLS software.



**Figure 2.** Loading Factor of the Structural Model

Source: SmartPLS Output (2025)



**Figure 3.** Output T-Statistics  
Source: SmartPLS Output (2025)

Based on the visualization and bootstrapping results, it is known that all the influence pathways between constructs have a t-statistical value of  $\geq 1.96$  and a loading factor of  $\geq 0.70$ , so it can be concluded that this model is fit and suitable for further hypothesis testing.

### The Influence of Each Variable

To determine whether a hypothesis is accepted or rejected, a hypothesis test is carried out using the Bootstrapping technique on the SmartPLS software. A hypothesis is declared acceptable if the p-value is  $< 0.05$  or the t-statistics  $> 1.96$  (at a significance level of 5%).

This analysis aims to identify the strength of the relationship between each independent variable (price, quality, and promotion) against the dependent variable (buying interest). The results of data processing through SmartPLS can be seen in Table 10 below.

**Table 10.** Influence of each variable

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values	Hypothesis
Quality -> Buying interest	0,328	0,330	0,100	3,298	0,001	H1 Accepted
Price -> Interest in buying	0,378	0,379	0,115	3,298	0,001	H2 Accepted
Promotion -> Interest in buying	0,281	0,279	0,111	2,517	0,012	H3 Accepted

Source: Researcher (2025)

Based on the results of the hypothesis test in Table 10, it was obtained that the three independent variables of quality, price, and promotion had a positive and significant effect on the buying interest of PT SIG's precision interlock brick products. Quality has an original sample value of 0.328 with a t-value of 3.298 and a p-value of 0.001, indicating that the higher the perception of quality, the more likely consumers are to buy. The price has an original sample value of 0.378 with a t-statistic of 3.298 and a p-value of 0.001, which means that the more competitive and according to consumer perception, the higher the buying interest. Meanwhile, the promotion showed an original sample value of 0.281 with a t-value of 2.517 and a p-value of 0.012, which indicates that an effective communication strategy can increase consumer appeal. Thus, the results of the analysis confirm that the combination of good product quality, rational prices, and appropriate promotions is able to form a positive perception and encourage consumer purchase decisions for PT SIG products.

## **Discussions**

### ***The Relationship between Quality and Buying Interest***

Product quality is one of the key determinants in influencing consumers' decision to make a purchase, including in the context of PT SIG's precision interlock brick products that offer physical durability, dimensional precision, ease of installation, cost efficiency, and the use of environmentally friendly materials—important dimensions that are highly considered in the construction industry that demands efficiency, reliability, and sustainability. The results of the study showed that the quality variable had a positive and significant influence on buying interest with an original sample of 0.328, t-statistics of 3.298, and a p-value of 0.001, so that the H1 hypothesis was accepted. These findings are in line with Garvin's (1987) quality theory which emphasizes the dimensions of product performance, reliability, and suitability as the basis for consumer assessment of quality, and is supported by research by Budyanto et al. (2022), Indrawati (2020), and Setiawan & Sunaryo (2024), which shows that the perception of quality drives consumer buying interest and loyalty. In the context of interlock bricks, quality is not only a technical indicator, but also a determinant of cost efficiency and long-term use value of a construction project, so it becomes a rational consideration for contractors and end users alike. PT SIG needs to prioritize quality improvement strategies through material innovation, quality control, and product design optimization, because a high perception of quality will shape consumer confidence and encourage them to make purchases, even at higher prices. Therefore, quality has proven to be a strategic aspect in expanding market share and maintaining PT SIG's competitiveness.

### ***The Relationship of Price to Buying Interest***

Price is an important element in marketing strategies that directly affects consumer buying interest, especially in the context of PT SIG's precision interlock bricks, where price is perceived as a representation of product value rather than costs incurred. The results showed that price had a positive and significant influence on buying interest with an original sample value of 0.378, t-statistics of 3.298, and p-value of 0.001, so that the H2 hypothesis was accepted. These findings reinforce the theories of Kotler and Keller (2016) and Monroe (2003) which state that prices that are considered fair and reflect benefits will improve value

perceptions and purchasing decisions. Previous research by Azizah and Prasetya (2023), Budyanto et al. (2022), and Sari et al. (2023) also showed that competitive and effectively communicated prices have a major influence on buying interest, especially when accompanied by promotions that emphasize efficiency and long-term benefits. In this case, PT SIG is advised to adopt a value-based pricing strategy, adjust prices for various market segments, and strengthen the communication of product economic values, such as ease of installation and waste reduction. Barriers that need to be overcome include a lack of consumer information on long-term efficiency and a market tendency to focus on unit prices. Therefore, price has proven to be a strategic factor in shaping the perception of value and market attractiveness for PT SIG's precision interlock brick products.

### ***Relationship of Promotion with Buying Interest***

Promotion is a crucial element in the marketing mix that serves to communicate product value, build brand awareness, and influence consumers to be interested in buying, especially in PT SIG's precision interlock brick products which are promoted through discounts, customer testimonials, social media, and educational approaches related to technical efficiency. The results of the analysis using Partial Least Squares (PLS) with bootstrapping showed that the promotion had an original sample of 0.281 with a t-statistic of 2.517 and a p-value of 0.012, indicating a positive and significant influence on buying interest, so that the H3 hypothesis was accepted. These findings are in line with the theory of Kotler and Armstrong (2018) and the study of Ardian and Sudrartono (2021) which affirm that the right promotion is able to form positive perceptions and influence purchase intentions, especially if the promotional media is in accordance with market characteristics. Muid and Souisa's (2023) research shows that creative and appropriately targeted digital promotions increase consumer trust, while the study of Setiawan and Sunaryo (2024) emphasizes the importance of promotion in creating long-term loyalty. Sembada et al. (2022) added that the integration of testimonials and social proof in promotion strengthens consumer credibility and trust. These findings suggest that effective promotion not only introduces products, but also builds a perception of product value and excellence that is relevant to the needs of the construction market. Therefore, PT SIG is advised to develop an integrated promotional strategy that targets various market segments through digital media and technical publications to increase the competitiveness and sales volume of interlock bricks on an ongoing basis.

## **CONCLUSION**

This study analyzed how product quality, price, and promotion influence consumer buying interest in PT SIG's precision interlock brick products in the Java region, finding all three factors had a positive and significant impact, with product quality as the dominant driver. The research model explained 71.6% of buying interest variability, highlighting the strategic need for PT SIG to maintain quality through production standardization and innovation, set prices aligned with consumer value, and implement targeted digital and collaborative promotions. Recommendations include focusing on market segmentation and strengthening after-sales service to boost loyalty. Future research should explore deeper price segmentation, expand evidence-based promotional tactics, and incorporate variables like brand image and

customer experience to develop more adaptive marketing strategies suited to the evolving, competitive construction industry.

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