

THE SYNERGISTIC EFFECTS OF PRODUCT QUALITY AND BRAND IMAGE ON CONSUMER SATISFACTION AND PURCHASE DECISIONS

Aam Halimtar ^a, Asep Rokhyadi Permana Saputra ^{b*}

Abstract

The smartphone industry has experienced rapid growth and has become an integral part of modern lifestyles, serving not only as a communication tool but also as a reflection of personal identity. Although numerous studies have examined product performance and marketing strategies, the combined influence of product quality and brand image on purchase decisions, with customer satisfaction as a moderating variable, has not been extensively explored.

This study aims to investigate these relationships among smartphone users in Yogyakarta, Indonesia. It is grounded in Expectation Confirmation Theory (ECT), which posits that satisfaction occurs when product performance meets or exceeds consumer expectations. A quantitative research design was employed using purposive sampling, involving 400 respondents obtained through online questionnaires. Data were analyzed using Structural Equation Modeling (SEM) with SmartPLS 4, including tests for validity, reliability, and hypothesis verification through bootstrapping.

The findings reveal that product quality and brand image significantly and positively affect customer satisfaction and purchase decisions, while satisfaction further strengthens the influence of these two variables on consumer buying behavior. The results support ECT by emphasizing that both functional factors (product quality) and emotional factors (brand image) play crucial roles in shaping consumer decisions.

From a managerial perspective, smartphone companies are advised to ensure consistent product quality and develop a strong brand image to meet consumer expectations and enhance satisfaction, which ultimately fosters purchase decisions and customer loyalty.

Keywords: Product Quality, Brand Image, Customer Satisfaction, Purchase Decision, Expectation Confirmation Theory.

Author Affiliation: ^a Student of Magister Management, Management program Study, Faculty of Economics, Marcu Buana University, Yogyakarta, Indonesia.

^{b*} Management program Study, Faculty of Economics, Marcu Buana Yogyakarta University, Yogyakarta, Indonesia.

Corresponding Author: Asep Rokhyadi Permana Saputra, Management program Study, Faculty of Economics, Marcu Buana Yogyakarta University, Yogyakarta, Indonesia.

Email: asepm@mercubuana-yogya.ac.id

How to cite this article: Aam Halimtar, Asep Rokhyadi Permana Saputra, The Synergistic Effects of Product Quality and Brand Image on Consumer Satisfaction and Purchase Decisions, Journal of Management and Science, 16(1) 2026 24-37. Retrieved from <https://jmseleyon.com/index.php/jms/article/view/924>

Received: 12 August 2025 **Revised:** 1 September 2025 **Accepted:** 5 October 2025 **Published:** 30 March 2026

1. INTRODUCTION

The rapid development of the smartphone industry in Indonesia has intensified competition among brands seeking to attract consumer interest. Smartphones have become an inseparable part of modern life, serving not only as tools for communication but also for entertainment, education, and access to information. According to the International Data Corporation (IDC),

smartphone sales in Indonesia reached 40 million units in 2024, marking a 15.5% increase from the previous year (Worldwide Quarterly Mobile Phone Tracker, 2024). This growth highlights the attractiveness of the Indonesian market for global smartphone manufacturers.

A smartphone is defined as an advanced mobile device equipped with computing capabilities similar to those of a computer, allowing users to operate various

© The Author(s). 2026 Open Access This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and non-commercial reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The Creative Commons Public Domain Dedication waiver (<http://creativecommons.org/publicdomain/zero/1.0/>) applies to the data made available in this article, unless otherwise stated.

applications that support their daily activities (Murni et al., 2023). The wide range of available applications for communication, entertainment, education, and work has made smartphones increasingly essential in everyday life (Basit et al., 2022). Their popularity has also been driven by the abundance of affordable brands and models in the market (Haque et al., 2024).

The fierce competition in this industry is reflected in the market share dominated by a few leading brands. Bisnis.com (2024) illustrate the intense rivalry among smartphone companies competing for Indonesian consumers. This situation compels firms to develop precise marketing strategies based on a deep understanding of the factors influencing consumer purchase decisions. According to Populix, (2023), the main factors considered by Indonesian consumers when choosing a smartphone include RAM capacity (78%), memory capacity (65%), affordable price (60%), battery life (56%), camera quality (55%), and trusted brand reputation (52%). These findings demonstrate that purchase decisions involve a combination of both functional and emotional considerations.

Among the various determinants of consumer behavior, product quality remains one of the most frequently examined factors. A product can be defined as anything produced by a company to fulfill consumer needs and wants (Budiarno et al., 2022). High product quality is believed to attract customers and enhance purchase decisions (Ngoc & Thuy, 2023). However, previous studies have yielded mixed results. Rahayu et al., (2023) found that product quality does not always have a significant impact on smartphone purchase decisions, while (Rahmadani et al., 2025) revealed that poor product quality may discourage repeat purchases. This inconsistency indicates that although product quality is important, other factors such as brand image also play a vital role.

Brand image serves as a benchmark for consumers in evaluating whether a product or service can meet their expectations (Andrian & Fadillah, 2021). A strong brand image enables consumers to recognize and differentiate brands, thereby fostering trust and preference (Dam & Dam, 2021). Conversely, a weak or negative brand image may reduce technology adoption and diminish customer loyalty (Juliyando & Saputra, 2023). Therefore, companies must carefully manage brand perception, particularly in the digital era, where information spreads rapidly and influences consumer opinions.

In addition to product quality and brand image, customer satisfaction is another crucial factor in purchase decision-making. Customer satisfaction is defined as the level of contentment that arises after comparing actual experiences with prior expectations (Kharisma et al., 2023). It is widely recognized as a

key indicator of successful marketing performance. Previous research has shown that satisfaction and loyalty are strongly influenced by product quality and price (Bali, 2022). However, negative experiences such as delayed delivery or poor after-sales service may decrease satisfaction and drive consumers to switch to competing brands (Wicaksari et al., 2024). Moreover, inadequate service quality has been found to negatively affect customer satisfaction (Gil-Saura et al., 2025).

This phenomenon is particularly relevant when examined through the lens of Expectation-Confirmation Theory (ECT) developed by Oliver (1980). ECT posits that customer satisfaction results from comparing prior expectations of a product or service with the actual performance experienced after consumption. When performance meets or exceeds expectations, satisfaction increases, leading to repeat purchases and brand loyalty. Conversely, when performance falls short, dissatisfaction arises, prompting consumers to switch to alternative brands. Within the context of Indonesia's smartphone market, ECT is particularly relevant for explaining how product quality, brand image, and after-sales service influence customer satisfaction and purchase decisions.

Therefore, this research seeks to explore in greater depth how product quality, brand image, and customer satisfaction interact to shape purchase decisions in Indonesia's highly competitive smartphone market. By employing the framework of Expectation Confirmation Theory, this study aims to identify the key determinants that drive consumer behavior. The findings are expected to help companies design more targeted marketing strategies enhancing product quality to meet consumer needs, strengthening brand image to align with market expectations, and providing superior services that meet or exceed customer expectations.

Theoretically, this study contributes to the literature on consumer behavior in the smartphone industry by extending the application of Expectation Confirmation Theory. Practically, the results offer valuable insights for companies seeking to formulate effective marketing strategies to enhance competitiveness and foster long-term customer loyalty in Indonesia's smartphone market.

In conclusion, this study not only addresses the empirical phenomenon of Indonesia's rapidly expanding smartphone market but also integrates the theoretical foundation of Expectation Confirmation Theory (Oliver, 1980) to better understand consumer behavior. Through this comprehensive analysis, companies are encouraged to anticipate market dynamics by focusing on improving product quality, reinforcing brand image, and managing customer satisfaction as the key drivers of sustainable success.

2. Theory And Hypothesis Development

This study is grounded in the Expectation-Confirmation Theory (ECT) proposed by [Oliver, \(1980\)](#). According to this theory, consumer satisfaction arises when the actual performance of a product or service meets or exceeds prior expectations. In this context, product quality and brand image play pivotal roles in shaping those expectations. Product quality influences consumers' initial expectations through perceptions of performance, reliability, and durability ([Zhang et al., 2022](#)), whereas brand image establishes emotional associations and value perceptions that also affect expectation formation ([Kim & Lee, 2021](#)).

When perceived product quality and brand image deliver outcomes that surpass consumer expectations, satisfaction increases, which in turn becomes a strong driver of purchase decisions ([Nguyen et al., 2023](#)). This process of expectation confirmation not only enhances consumers' purchase intentions but also fosters repeat buying behavior and customer loyalty ([Wang et al., 2024](#)). Furthermore, satisfaction acts as a crucial mediating variable linking perceived quality and purchase decisions ([Luo & Meng, 2021](#)). Therefore, satisfaction is widely recognized as a key mediator in contemporary models of digital consumer behavior ([Hassan et al., 2025](#)).

2.1. The Effect of Product Quality and Brand Image on Customer Satisfaction

Product quality and brand image are two essential factors that strongly influence consumer satisfaction. High product quality reflects durability, performance, reliability, and consistency—attributes that shape consumers' perceptions of value and determine the level of satisfaction they experience after using a product ([Rohmat et al., 2022](#)). Products that meet or exceed consumer expectations are more likely to generate positive user experiences, which in turn enhance satisfaction and foster long-term loyalty ([Nurhayati et al., 2022](#)). Meanwhile, brand image serves as a signal of quality and value, representing the promise that consumers associate with a product ([Naveen & Ramesh, 2022](#)). A strong brand image builds trust and loyalty while providing emotional and social value that further enhances consumer satisfaction ([Martin & Nasib, 2021](#)). Consumers who hold positive perceptions of a brand tend to experience higher satisfaction because they believe the brand can meet or even surpass their standards ([Manyanga et al., 2022](#)).

Furthermore, superior product quality and a favorable brand image often interact synergistically to reinforce consumer satisfaction ([Begum et al., 2023](#)). When reliable product performance is complemented by a strong brand image, consumers develop greater

confidence in the product's value and are more inclined to purchase and repurchase it ([Gelderman et al., 2021](#)). This synergy not only enhances satisfaction but also promotes customer loyalty and encourages word-of-mouth recommendations, thereby strengthening the brand's competitive position in the marketplace ([Chauhan, 2023](#)).

In line with Expectation-Confirmation Theory proposed by [Oliver, \(1980\)](#), consumer satisfaction arises when both product performance and brand image confirm or exceed prior expectations. Product quality shapes functional expectations, whereas brand image influences emotional and symbolic expectations. When both dimensions surpass consumer anticipation, satisfaction increases significantly, driving purchasing decisions, repurchase intentions, and long-term loyalty.

Based on this reasoning, the initial hypothesis of this study can be formulated as follows:

H1: Product quality and brand image have a positive and significant effect on consumer satisfaction.

2.2. The Influence of Product Quality and Brand Image on Purchasing Decisions Mediated by Consumer Satisfaction

Product quality and brand image are key factors that shape consumer perceptions and influence purchasing behavior. Consumer satisfaction acts as a mediating variable that links these two factors to purchase decisions. High product quality reflected in durability, reliability, and performance consistency enhances satisfaction by meeting or exceeding consumer expectations ([Lina, 2022](#)). Similarly, a strong brand image generates symbolic and emotional value that fosters consumer trust and attachment ([Ghorbanzadeh & Rahehagh, 2021](#)). Consumers who perceive high product quality and a favorable brand image tend to be more satisfied, more loyal, and more likely to make repeat purchases ([Park et al., 2022](#)).

Therefore, consumer satisfaction strengthens the relationship between product quality, brand image, and purchase decisions ([Benhart Nainggolan, 2023](#)). When consumers experience satisfaction, they are not only inclined to repurchase but also to recommend the product to others. Superior product quality and a strong brand image thus enhance satisfaction and increase the likelihood of repurchase ([Letellier et al., 2022](#)).

Based on the discussion above, the second hypothesis of this study is formulated as follows:

H2: Product quality and brand image have a positive and significant effect on purchasing decisions, with consumer satisfaction as a mediator.

2.3. The Impact of Customer Satisfaction on Purchasing Decisions

Consumer satisfaction is the outcome of evaluating a product or service experience that meets or exceeds expectations and plays a crucial role in influencing consumer purchasing decisions (Hadiantini et al., 2021). Satisfaction encompasses not only the functional benefits of a product but also emotional dimensions such as feelings of contentment, comfort, and pleasure following a purchase (Agarwal, 2023). Satisfied consumers tend to exhibit stronger brand loyalty and are more likely to engage in repeat purchases due to their trust in the brand's quality and consistency (Bahadur and Ali, 2023). Moreover, consumer satisfaction reflects the extent to which a product successfully fulfills market needs and preferences, thereby influencing future purchasing behavior both directly through repurchase and indirectly through positive word-of-mouth (Malarvizhi et al., 2022). In addition, satisfaction shapes consumers' perceived value and overall experience, which significantly affect their final decisions when choosing among competing products (Manisera et al., 2020). Therefore, consumer satisfaction serves as a critical factor in fostering long-term customer relationships and enhancing the effectiveness of experience-based marketing strategies. The higher the level of consumer satisfaction, the greater the likelihood of repurchasing and maintaining preference for the same brand over its competitors (Anggoro and Saputra, 2023).

Based on the explanation above, the third hypothesis of this study is formulated as follows:

H3: Consumer satisfaction has a positive and significant effect on buying decisions.

3. Research Methods

3.1. Research Model

This study employs product quality variables adopted from (Raditya et al., 2019), brand image variables adopted from Hokky and Bernarto, (2021), consumer satisfaction variables adopted from Christian and Wijaya, (2024), and purchasing decision variables adopted from Adhikari, (2018).

3.2. Population, Sample, Method, Technique, and Sampling Method

The respondents in this study consisted of smartphone users residing in the Special Region of Yogyakarta (DIY), Indonesia. According to data reported by the National Statistics Agency (BPS, 2023), the proportion of individuals in DIY who own or use mobile phones in 2023 reached 70.37%. With the total population of DIY estimated at 3,759,500 (Kementerian, 2024), the approximate number of smartphone users in the region is 2,645,000. The

study employed a non-random sampling method, specifically purposive sampling combined with a quota sampling technique. The purposive sampling criteria applied in this research were as follows:

1. Residents of the Special Region of Yogyakarta;
2. At least 17 years old;
3. Own and actively use a smartphone.

As for the sample calculation with Slovin's formula that is:

$$n = \frac{N}{1 + N(e^2)}$$

$$n = \frac{2.645.000}{1 + (2.645.000 \times 0.05)^2}$$

$$n = 400$$

Information:

n : size sample

N : total population (2.645.000)

e : desired margin of error (5% or 0.05)

Therefore, based on the results of the above calculation, the researcher established a total sample size of 400 respondents.

3.3. Analysis Tools

This study employs the Structural Equation Modeling (SEM) approach, using SmartPLS version 4 software for analysis (Henseler, 2017). The research instrument used is a questionnaire based on a five-point Likert scale (1–5) to measure respondents' perceptions of the research variables. The validity test was conducted in two stages, namely convergent validity and discriminant validity (Rigdon et al., 2017). Convergent validity was assessed using factor loading values, where an indicator is considered valid if it has a loading value above 0.70. Meanwhile, discriminant validity was examined using the Fornell–Larcker Criterion, which requires that the square root of the AVE for each construct be greater than the correlation between that construct and other constructs.

Reliability testing was conducted by examining the Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE) values (Sarstedt et al., 2021). A construct is considered reliable if both the Cronbach's Alpha and Composite Reliability values are ≥ 0.70 , and the AVE value is ≥ 0.50 (Brereton and Lloyd, 2014).

3.4. Operational Definition of Research Variables, Indicators, Measurement Scales

The following section presents the operational definitions used in this study, including the indicators and measurement scales applied for each research variable.

Table 1. Operational Definitions

Variabel	Definisi	Indikator	Skala
Product Quality (X1)	Consumer perception refers to the extent to which a product meets expected standards in terms of performance, durability, reliability, and functional suitability.	1. Product durability 2. Design & Comfort 3. Functional reliability 4. Product safety & specifications (Raditya et al., 2019)	Likert 1-5
Brand Image (X2)	Customer attitudes and associations towards brands influence their decisions in choosing a product.	1. Brand reputation 2. Unique image 3. Positive associations 4. Brand recognition (Hokky and Bernarto, 2021)	Likert 1-5
Consumer Satisfaction (Z)	The final actions of consumers in selecting, purchasing, and using products are influenced by both psychological and emotional factors	1. Satisfaction with quality 2. Satisfaction with price 3. Loyalty 4. Brand reputation (Christian and Wijaya, 2024)	Likert 1-5
Purchasing Decisions (Y)	The degree of conformity between consumer expectations and their actual experiences after using a particular product.	1. Interest 2. Decision to try 3. Decision to purchase 4. Reuse (Adhikari, 2018)	Likert 1-5

4. Results

4.1. Respondent Demographics

Table 2 shows that among the 400 respondents, the majority were female, totaling 225 individuals (56.25%). Most respondents were aged between

22 and 26 years (108 people or 27%), with 166 respondents (41.50%) earning a monthly income ranging from Rp. 3,200,000 to Rp. 5,000,000, and 146 respondents (36.5%) working as private sector employees.

Table 2. Respondent Demographics Data

Category	Frequensy	Percentage (%)
Type sex		
Man	175	43.75
Woman	225	56.25
This moment of age		
17 – 21 years	72	18.0
22 – 26 years	108	27.0
27 – 30 years	100	25.0
35 – 40 years	65	16.25
> 40 years	55	13.75
Income per month		
< Rp.1.000.000,-	53	13.25
Rp.1.100.000,- – Rp.3.000.000,-	65	16.25
Rp.3.200.00- – Rp.5.000.000,-	166	41.50
> Rp.5.000.000	118	29.50
work		
Students	60	15.0
Employee Private	146	36.5
Civil Servants / State-Owned Enterprise Employed	100	25

Self-Employed	91	22.75
Other	4	1.0
Amount	400	100%

Source: Processed primary data, 2025

4.2. Research Instrument Results

Table 3 shows that when the outer loading factor value exceeds 0.70, it indicates that all indicators are valid. Furthermore, if the Average

Variance Extracted (AVE) value is greater than 0.50, the construct is considered to have achieved convergent validity ([Henseler et al., 2015](#)).

Table 3. Outer Loading and Average Validity Test

Variables	Indicators	Outer Loading	Mean
Product Quality(X1)	X1.1: The smartphone I use performs as expected.	0.839	3.82*
	X1.2: The smartphone I use is durable enough for long-term use.	0.877	3.88
	X1.3: My smartphone functions reliably and rarely breaks down.	0.840	3.90
	X1.4: The features and specifications offered by my smartphone meet my needs.	0.843	3.91**
	X1.5: I feel that the quality of my smartphone is commensurate with the price I paid.	0.848	3.87
Brand Image (X2)	X2.1: I consider the smartphone brand I use to have a good reputation in the community.	0.853	3.82
	X2.2: My smartphone brand has a unique image compared to other brands.	0.854	3.81*
	X2.3: I have positive associations when I hear the name of the smartphone brand I use.	0.823	3.87
	X2.4: My smartphone brand is easily recognized and remembered by consumers.	0.854	3.90
	X2.5: I feel proud to use a smartphone from this brand because it is considered high-quality by the community.	0.839	3.92**
Consumer Satisfaction (Z)	Z.1: I feel content with my choice to buy the smartphone I am using.	0.860	3.85
	Z.2: The smartphone I purchased met my expectations in terms of quality and performance.	0.841	3.82*
	Z.3: I am happy with my overall experience using this smartphone.	0.813	3.86**
	Z.4: I would consider purchasing this smartphone brand again in the future because I am satisfied with its quality.	0.849	3.84
Purchasing Decisions (Y)	Y1: I decided to purchase this smartphone after considering its quality and brand image.	0.878	3.86*
	Y2: My decision to purchase this smartphone was the right and satisfying choice.	0.856	3.93**
	Y3: I feel confident in my decision to purchase this brand of smartphone over other brands.	0.856	3.88

* Lowest mean

** Higher mean

Source: Processed primary data, 2025

Table 4. Average Variance Extracted Test (AVE) and Cronbach's Alpha Test

Variables	(AVE)	Cronbach's Alpha	rho_A	Composite Reliability	Results
Product Quality (X1)	0.722	0.904	0.904	0.928	Valid / Reliable
Brand Image (X2)	0.714	0.900	0.900	0.926	Valid / Reliable
Consumer Satisfaction (Z)	0.746	0.829	0.830	0.898	Valid / Reliable
Purchasing Decisions (Y)	0.707	0.862	0.863	0.906	Valid / Reliable

Source: Processed primary data, 2025

Table 4 shows that the AVE values exceeding 0.50 indicate that all variables meet the validity criteria. In addition, the composite reliability and Cronbach's

alpha values greater than 0.70 demonstrate that all variables are reliable.

Table 5. Discriminant Validity Test (Fornell Larcker Criterion)

	Product Quality (X1)	Brand Image (X2)	Consumer Satisfaction (Z)	Purchasing Decisions (Y)
Product Quality (X1)	0.850			
Brand Image (X2)	0.911	0.841	0.863	0.845
Consumer Satisfaction (Z)	0.836		0.857	0.853
Purchasing Decisions (Y)	0.852			0.867

Source: Processed primary data, 2025

Table 5 shows that the construct values are greater than those of other variable constructs, indicating that all variables are valid. Thus, the

construct estimation in the model satisfies the discriminant validity criteria (Fornell and Larcker, 1981).

Table 6. Goodness of Fit Test

Indicator	Results	Information
SRMR	0.044	acceptable if ≤ 0.08
d_ULS	0.301	acceptable if ≥ 0.95
d_G	0.282	acceptable if $P \geq 0.05$
Chi-Square	598.191	close to zero
NFI	0.894	acceptable if ≥ 0.90

Source: Processed primary data, 2025

Table 6 shows that the model fit value is 0.044 and the NFI value is 0.894, which is close to

1, indicating that the model used in this study has a good fit.

Table 7. Hypothesis Test (T-statistic)

	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Results
Direct Effect				
Product Quality (X1) -> Consumer Satisfaction (Z)	0.085	2.291	0.022	Significant
Brand Image (X2) -> Consumer Satisfaction (Z)	0.085	4.239	0.000	Significant

Consumer Satisfaction (Z) -> Purchase Decision (Y)	0.071	4.318	0.000	Significant
Indirect Effect				
Consumer Satisfaction (Z) X Product Quality (X1) -> Purchase Decision (Y)	0.079	6.788	0.000	Significant
Consumer Satisfaction (Z) X Brand Image (X2) -> Purchase Decision (Y)	0.078	5.431	0.000	Significant

Source: Processed primary data, 2025

Table 7 indicates that the Product Quality variable has a positive and significant effect on Consumer Satisfaction, as evidenced by a standard deviation of 0.085, a t-statistic of 2.291, and a p-value of 0.022, which is below the 0.05 threshold. The Brand Image variable also shows a positive and significant influence on Consumer Satisfaction, with a standard deviation of 0.085, a t-statistic of 4.239, and a p-value of 0.000. Furthermore, Consumer Satisfaction exerts a positive and significant impact on Purchasing Decisions, indicated by a standard deviation of 0.071, a t-statistic of 4.318, and a p-value

of 0.000, confirming its statistical significance.

Regarding the indirect effects, the Product Quality variable, through the mediation of Consumer Satisfaction, has a positive and significant influence on Purchasing Decisions, as reflected by a standard deviation of 0.079, a t-statistic of 6.788, and a p-value of 0.001. Similarly, Brand Image, mediated by Consumer Satisfaction, also exhibits a positive and significant effect on Purchasing Decisions, with a standard deviation of 0.078, a t-statistic of 5.431, and a p-value of 0.000.

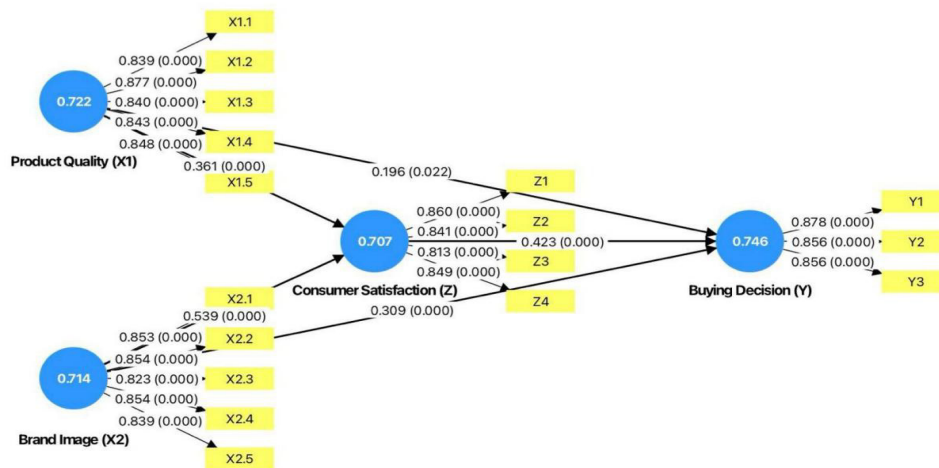


Figure 1. T-test

5. Discussion

5.1. The quality of a product and the strength of its brand image positively and significantly influence consumer satisfaction.

The first finding of this study reveals that consumers are more satisfied when smartphone features and specifications align with their needs. This is illustrated by indicator X1.4, "The features and specifications offered by my smartphone meet my needs", which obtained the highest mean score within the product quality variable. This result suggests that consumer satisfaction is determined not only by technical performance, such as processor speed, RAM capacity, and battery endurance, but

also by the relevance of features to consumers' functional and lifestyle requirements, such as high-quality cameras for content creators, large screens for entertainment, or enhanced security systems for professional use (Zhao and Chan, 2023). The alignment between product features and user needs substantially enhances both satisfaction and loyalty (Prayetno et al., 2025). Moreover, consumers tend to experience greater satisfaction when a product fulfills not only functional expectations but also delivers symbolic value through a strong brand image (Kotler and Keller, 2021). When consumers perceive that a product meets their needs, positive cognitive evaluations emerge, which in turn stimulate

repurchase intentions and strengthen brand loyalty. The second finding demonstrates that pride is a significant emotional response when consumers view the smartphone brand they use as high-quality and socially esteemed. Indicator X2.5, "I feel proud to use a smartphone from this brand because it is considered high-quality in the eyes of the public", also achieved a high mean score within the brand image variable. This indicates that a strong and positive brand image fosters emotional attachment between consumers and the product, serving as both a source of confidence and a symbol of social status (Úbeda-García et al., 2022). Brand equity, therefore, is shaped not only by perceived quality but also by the pride embedded in a brand that enjoys high social regard (Aaker, 2021). Such emotional attachment strengthens long-term relationships with the brand and enhances consumers' intentions to repurchase (Shyju et al., 2023). Consequently, a sense of pride in the brand promotes positive word-of-mouth, sustained loyalty, and the integration of the brand into consumers' personal identities. In sum, product feature quality and brand image strength operate synergistically to generate comprehensive consumer satisfaction both functional and emotional. These results are consistent with prior studies indicating that consumers experience higher satisfaction when products deliver superior performance and originate from credible, reputable brands (Sahoo et al., 2023). Therefore, companies must continuously maintain product quality and reinforce brand image to foster enduring positive consumer experiences and promote long-term loyalty.

5.2. Product Quality and Brand Image Positively and Significantly Affect Purchasing Decisions, Mediated by Consumer Satisfaction

The third finding of this study demonstrates that product quality and smartphone brand image play a crucial role in shaping purchasing decisions, with consumer satisfaction acting as a mediating factor. This is reflected in indicators X1.4, "The features and specifications offered by my smartphone meet my needs", and X2.5, "I feel proud to use a smartphone from this brand because it is considered high-quality by the public", which recorded the highest mean scores. These indicators highlight that both the functional and emotional dimensions of the product significantly influence consumer satisfaction. Additionally, indicator Y3, "I feel confident in my decision to purchase this brand of smartphone compared to other brands", also achieved the highest score among the purchasing decision items, confirming that perceptions of quality and brand image enhance consumer confidence in making purchase decisions.

These findings suggest that product quality not only fulfills consumers' technical and performance requirements but also reinforces post-purchase satisfaction, which subsequently drives repurchase behavior and strengthens brand loyalty (D'Angelo et al., 2023). Consumers tend to make purchasing decisions based on prior experiences with product quality and brand reputation, both of which foster satisfaction and emotional attachment to the brand (Chiarini and Bag, 2024). High product quality serves as a foundation for satisfaction, forming a strong basis for repeat purchases (Abbas et al., 2021). Meanwhile, a strong brand image contributes to shaping consumer identity and enhancing perceived product value, serving as an emotional and social driver in the decision-making process (Mousa et al., 2025). Therefore, consumer satisfaction plays a pivotal mediating role in linking product quality and brand image with purchasing decisions. Positive post-purchase experiences enhance consumer trust and increase the likelihood of repurchase. Companies must therefore manage both product quality and brand image concurrently to ensure that consumers not only make purchase decisions but also experience satisfaction and confidence in those choices.

5.3. Customer Satisfaction Positively and Significantly Affects Purchase Decisions

The fourth finding of this study indicates that consumer satisfaction has a strong and significant influence on smartphone purchasing decisions. This is reflected in the results of the descriptive analysis, where indicators Z1, "I feel content with my choice to purchase the smartphone I currently use", and Z4, "I would consider purchasing this smartphone brand again in the future because I am satisfied with its quality", recorded the highest average scores in the consumer satisfaction variable. These findings suggest that positive post-purchase experiences not only generate satisfaction but also strengthen repurchase intentions. Perceptions of quality that meet or exceed expectations, along with reliable product performance, serve as key determinants of satisfaction.

Furthermore, indicator Y3, "I feel confident in my decision to purchase this brand of smartphone compared to other brands", also scored high in the purchase decision variable, demonstrating that satisfaction strongly influences consumers' confidence and justification in their buying decisions. This result aligns with previous studies emphasizing that consumer satisfaction functions as a critical mediating factor in the decision-making process (Abualigah et al., 2023). Consistent with findings by Trivedi and Sharma, (2023) satisfaction with technology products significantly affects repurchase

intentions. Satisfied consumers tend to display greater loyalty and confidence in their purchasing decisions, particularly for brands with strong reputations (Kim et al., 2022). Satisfaction also shapes perceived value, strengthens brand trust, and enhances the likelihood of repeat purchases (Riva et al., 2022). In today's digital and highly competitive market, satisfaction is not merely a measure of product success but a foundation for building enduring consumer-brand relationships. Therefore, companies must proactively manage the overall customer experience to sustain high satisfaction levels, as this satisfaction not only fosters loyalty but also reinforces rational and sustainable purchasing behavior.

6. Conclusion

This study concludes that product quality and brand image significantly influence consumer satisfaction, which in turn strengthens purchasing decisions in the smartphone industry. First, the findings highlight that consumer satisfaction is achieved when smartphone features and specifications are aligned with users' functional and lifestyle needs, while at the same time, a positive brand image provides symbolic and emotional value that enhances consumer pride and loyalty. Second, the results confirm that both product quality and brand image jointly affect purchasing decisions, mediated by consumer satisfaction, where functional performance and emotional attachment create a strong foundation for repeat purchases and long-term brand relationships. Third, consumer satisfaction is shown to play a pivotal role in reinforcing purchase confidence and future buying intentions, emphasizing its mediating function in the decision-making process. Overall, these results underscore the necessity for companies to consistently deliver superior product quality while strengthening brand image in order to build positive consumer experiences, foster long-term loyalty, and ensure sustainable competitiveness in the increasingly dynamic smartphone market.

7. Implications

7.1. Implications Theoretical

Findings from this study show that consumers' perceptions of the quality of the product and the brand's image are highly relevant in shaping the belief that the chosen smartphone brand is superior compared to competitors. Within the framework According to the Expectation Confirmation Theory (ECT), this indicates that belief components specifically the alignment between expected and actual product performance, as well as the emotional value provided by a strong brand image encourage the formation of positive attitudes toward the product. These positive

attitudes, in turn, enhance purchase decisions and foster brand loyalty. Theoretically, these findings reinforce the core assumption of ECT that purchase decisions result from a rational process beginning with consumers' beliefs about the positive outcomes of their actions. In this case, customer satisfaction acts as a mediator connecting product quality and brand image (external factors) with purchase decisions. This shows that perceptions of functional quality and symbolic values directly shape consumer attitudes while also mediating the link between external factors and purchasing behavior.

7.2. Practical Implications

Based on research findings, there are several practical applications that smartphone industry players can implement to increase satisfaction and drive consumer purchasing decisions, particularly through approaches to product quality and brand image:

1. Product Development Based on Consumer Functional Needs

Companies need to align product development with consumers' actual needs and lifestyles. Features such as long-lasting battery capacity, high-quality cameras, data security, and processor speed should be prioritized in line with target market preferences. Matching specifications to consumer needs will increase satisfaction, strengthen positive product perceptions, and encourage repeat purchases. Information about these features also needs to be clearly communicated through digital and offline media so consumers can experience the functional advantages offered.

2. Strengthening Brand Image through Emotional and Social Strategies

A strong brand image is formed not only by product quality but also by consumers' emotional and social perceptions. Therefore, companies need to build a brand narrative that emphasizes values of pride, exclusivity, and trust. This can be achieved through campaigns featuring user testimonials, collaborations with public figures or influencers, and involvement in social activities that strengthen the identity of the brand in the eyes from the public. This strategy will strengthen consumers' emotional ties to the brand and increase long-term loyalty.

3. Optimizing the Post-Purchase Experience to Increase Satisfaction

Research indicates that favorable post-purchase experiences significantly mediate the impact of product quality and brand image on consumer purchasing decisions. Therefore, companies need to provide excellent after-sales service, such as a quick response to complaints, easily accessible service

centers, and quality assurance through transparent warranties. This support will increase consumer satisfaction, strengthen confidence in purchasing decisions, and increase repeat purchase intentions.

ACKNOWLEDGEMENT

The authors declare that there are no potential conflicts of interest that could have influenced the research design, data collection, analysis, interpretation, or reporting of this study.

KONFLIKT OF INTEREST

The authors would like to express their gratitude to the Ministry of Education, Culture, Research, and Technology (Kemendikristek) of Indonesia, LLDikti Region V Yogyakarta, and the Management Study Program, Mercu Buana University Yogyakarta, Indonesia, for providing the "Payung" research permit No. 97/B.02/H.1/V/2025.

REFERENCES

1. Aaker, D. A. (2021). *Building Strong Brands*. Free Press.
2. Abbas, A., Afshan, G., & Aslam, I. (2021). The impact of product quality on customer satisfaction and purchase intention: A moderated mediation model. *Journal of Management and Research*, 8(1), 123–140. <https://doi.org/10.29145/jmr/81/080106>
3. Abualigah, A., Koburtay, T., Bourini, I., Badar, K., & Gerged, A. M. (2023). Towards sustainable development in the hospitality sector: Does green human resource management stimulate green creativity? A moderated mediation model. *Business Strategy and the Environment*, 32(6), 3217–3232. <https://doi.org/10.1002/bse.3296>
4. Adhikari, N. S. (2018). Effectiveness of Advertising and Sales Promotion on Buying Decision of Smartphones in Kathmandu Valley. *Journal of Business and Social Sciences Research*, 1(2), 169. <https://doi.org/10.3126/jbssr.v1i2.20923>
5. Agarwal. (2023). Role of Consumption Emotions on "Customer Satisfaction": An Empirical Stud. *PsychologyandEducation*, 55(1). <https://doi.org/10.48047/pne.2018.55.1.84>
6. Andrian, W., & Fadillah, A. (2021). Pengaruh Citra Merek, Pengalaman Merek, Dan Nilai Pelanggan Terhadap Kepuasan Pelanggan Airasia. *Jurnal Ilmiah Pariwisata Kesatuan*, 2(1), 53–60. <https://doi.org/10.37641/jipkes.v2i1.586>
7. Anggoro, I. T., & Saputra, A. R. P. (2023). Self Efficacy, Entrepreneur Knowledge dan Motivasi Terhadap Keberhasilan Usaha Pengrajin Gerabah di Kasongan pada Masa Pandemi Covid-19. *Jurnal Perilaku Dan Strategi Bisnis*, 11(2), Article 2. <https://doi.org/10.26486/jpsb.v11i2.3798>
8. Bahadur, W., & Ali, A. (2023). Investigating the effect of service quality dimensions on travellers' satisfaction with couchsurfing accommodation and subjective well-being in a sharing economy. *Economic Research-Ekonomska Istraživanja*, 36(3), 2217892. <https://doi.org/10.1080/1331677X.2023.2217892>
9. Bali, A. Y. (2022). Pengaruh Kualitas Produk dan Harga Terhadap Loyalitas Konsumen Dengan Kepuasan Konsumen Sebagai Variabel Intervening. *Jurnal Akuntansi, Manajemen dan Ekonomi*, 1(1), 1–14. <https://doi.org/10.56248/jamane.v1i1.7>
10. Basit, A., Purwanto, E., Kristian, A., Pratiwi, D. I., Krismira, Mardiana, I., & Saputri, G. W. (2022). Teknologi Komunikasi Smartphone Pada Interaksi Sosial. *LONTAR: Jurnal Ilmu Komunikasi*, 10(1), 1–12. <https://doi.org/10.30656/lontar.v10i1.3254>
11. Begum, S., Ashfaq, M., Asiaei, K., & Shahzad, K. (2023). Green intellectual capital and green business strategy: The role of green absorptive capacity. *Business Strategy and the Environment*, 32(7), 4907–4923. <https://doi.org/10.1002/bse.3399>
12. Benhart Nainggolan. (2023). The Influence Of Brand Image On Consumer Satisfaction With Purchasing Decisions As Intervening Variables (Case Study on Students of STIE Bina Karya Kota Tebing Tinggi). *MORFAI JOURNAL*, 2(4), 827–841. <https://doi.org/10.54443/morfai.v2i4.697>
13. Brereton, P., & Lloyd, B. (2014). An overview of reliability and validity in quantitative research.
14. Budiarno, B., Udayana, I. B. N., & Lukitaningsih, A. (2022). Pengaruh Kualitas Layanan, Kualitas Produk Terhadap Kepuasan Pelanggan Dalam Membentuk Loyalitas Pelanggan. *Equilibrium: Jurnal Penelitian Pendidikan dan Ekonomi*, 19(02), 226–233. <https://doi.org/10.25134/equi.v19i02.4531>
15. Chauhan, J. S. (2023). Brand Loyalty and Its Impact on Repeat Purchase Behaviour of Customers: A Cross-Sectional Study in the FMCG Context. *PsychologyandEducation*, 55(1). <https://doi.org/10.48047/pne.2018.55.1.83>
16. Chiarini, A., & Bag, S. (2024). Using green human resource management practices to achieve green performance: Evidence from Italian manufacturing context. *Business Strategy and the Environment*, 33(5), 4694–4707. <https://doi.org/10.1002/bse.3724>
17. Christian, C., & Wijaya, E. (2024). The Effect of Brand Awareness, Brand Image, and Product Quality on Consumer Satisfaction of Oppo Smartphone Users in Pekanbaru. *Nexus Synergy: A Business Perspective*, 1(4), 207–219. <https://doi.org/10.61230/nexus.v1i4.79>
18. Dam, S. M., & Dam, T. C. (2021). Relationships between Service Quality, Brand Image, Customer Satisfaction, and Customer Loyalty. *The Journal of Asian Finance, Economics and Business*, 8(3), 585–593. <https://doi.org/10.13106/JAFEB.2021.VOL8.NO3.0585>
19. D'Angelo, V., Cappa, F., & Peruffo, E. (2023). Green manufacturing for sustainable development: The

- positive effects of green activities, green investments, and non-green products on economic performance. *Business Strategy and the Environment*, 32(4), 1900–1913. <https://doi.org/10.1002/bse.3226>
20. Data Jumlah Penduduk Indonesia per Provinsi Semester I Tahun 2024. (2024). Kementerian Dalam Negeri Republik Indonesia.
21. Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800104>
22. Gelderman, C. J., Schijns, J., Lambrechts, W., & Vijgen, S. (2021). Green marketing as an environmental practice: The impact on green satisfaction and green loyalty in a business-to-business context. *Business Strategy and the Environment*, 30(4), 2061–2076. <https://doi.org/10.1002/bse.2732>
23. Ghorbanzadeh, D., & Rahehagh, A. (2021). Emotional brand attachment and brand love: The emotional bridges in the process of transition from satisfaction to loyalty. *Rajagiri Management Journal*, 15(1), 16–38. <https://doi.org/10.1108/RAMJ-05-2020-0024>
24. Gil-Saura, I., Berenguer-Contró, G., Gallarza, M., & Ruiz-Molina, M. (2025). Testing comparative business-to-business value co-creation models: Differences in hotels and travel agencies in Spain: differences in hotels and travel agencies in Spain. *European Journal of Tourism Research*, 40, 4002–4002. <https://doi.org/10.54055/ejtr.v40i.3497>
25. Hadianitini, R., Silalahi, & Hendrayati, H. (2021). The Importance of Consumer Satisfaction for E-Commerce Users: How That Affects Consumer Behavior on Consumer Satisfaction?: First International Conference on Science, Technology, Engineering and Industrial Revolution (ICSTEIR 2020), Bandung, Indonesia. <https://doi.org/10.2991/assehr.k.210312.016>
26. Haque, M. A., Islam, M. A., & Soh, S. (2024). Green HRM practices and green work engagement: The roles of green knowledge sharing and green group cohesion. *Global Business and Organizational Excellence*, 44(1), 16–31. <https://doi.org/10.1002/joe.22266>
27. Hassan, M., Anwar, N., & Rehman, K. (2025). The mediating role of customer satisfaction in online consumer decisions. *Electronic Commerce Research and Applications*, 59, 101238. <https://doi.org/10.1016/j.elerap.2025.101238>
28. Henseler, J. (2017). Bridging design and behavioral research with variance-based structural equation modeling. *Journal of Advertising*, 46(1), 178–192. <https://doi.org/10.1080/00913367.2017.1281780>
29. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
30. Hokky, L. A., & Bernarto, I. (t.t.). The Role of Brand Trust and Brand Image on Brand Loyalty on Apple Iphone Smartphone Users in DKI Jakarta.
31. Juliando, D., & Saputra, A. R. P. (2023). The effect of green transformational leadership on service employees in Indonesia. *International Journal of Service Management and Sustainability (IJSMS)*, Vol. 8(No.1), Article No.1. <https://doi.org/10.24191/ijsms.v8i1.21896>
32. Kharisma, D., Simatupang, S., & Hutagalung, H. (2023). Pengaruh Kualitas Pelayanan Terhadap Kepuasan Konsumen Pada UD. Restu Mulia Pandan. *Jurnal Manajemen Dan Akuntansi Medan*, 5(1), 32–42. <https://doi.org/10.47709/jumansi.v5i1.2210>
33. Kim, H., Lee, J., & Choi, Y. (2022). The impact of customer satisfaction on brand loyalty and repurchase intention: Evidence from consumer electronics. *Journal of Retailing and Consumer Services*, 64, 102756. <https://doi.org/10.1016/j.jretconser.2021.102756>
34. Kim, J., & Lee, H. (2021). Brand image and consumer expectation: A moderated mediation model. *Journal of Retailing and Consumer Services*, 62, 102621. <https://doi.org/10.1016/j.jretconser.2021.102621>
35. Kotler, P., & Keller, K. L. (2021). *Marketing management* (16 ed.). Pearson Education.
36. Letellier, S., Boyer, F., Bacqueville, D., Duplan, H., Perrin, L., & Lapalud, P. (2022). How to ensure consumers will be satisfied with a new sustainable sun care product developed for extreme environmental conditions. *Food Quality and Preference*, 102, 104661. <https://doi.org/10.1016/j.foodqual.2022.104661>
37. Lina, R. (2022). Improving Product Quality and Satisfaction as Fundamental Strategies in Strengthening Customer Loyalty. *Akademik: Jurnal Mahasiswa Ekonomi & Bisnis*, 2(1), 19–26. <https://doi.org/10.37481/jmeh.v2i1.245>
38. Luo, X., & Meng, Q. (2021). Product quality and customer satisfaction: Testing mediation in mobile phone markets. *Journal of Consumer Marketing*, 38(4), 451–461. <https://doi.org/10.1108/JCM-12-2020-4245>
39. Malarvizhi, C. A., Al Mamun, A., Jayashree, S., Naznen, F., & Abir, T. (2022). Modelling the significance of social media marketing activities, brand equity and loyalty to predict consumers' willingness to pay premium price for portable tech gadgets. *Heliyon*, 8(8), e10145. <https://doi.org/10.1016/j.heliyon.2022.e10145>
40. Manisera, M., Zuccolotto, P., & Brentari, E. (2020). How perceived variety impacts on choice satisfaction: A two-step approach using the CUB class of models and best-subset variable selection (Versi 1.0) [Dataset]. University of Salento. <https://doi.org/10.1285/I20705948V13N2P519>
41. Manyanga, W., Makanyeza, C., & Muranda, Z. (2022). The effect of customer experience, customer satisfaction and word of mouth intention on customer loyalty: The

- moderating role of consumer demographics. *Cogent Business & Management*, 9(1), 2082015. <https://doi.org/10.1080/23311975.2022.2082015>
42. Martin, M., & Nasib, N. (2021). The Effort to Increase Loyalty through Brand Image, Brand Trust, and Satisfaction as Intervening Variables. *Society*, 9(1), 277–288. <https://doi.org/10.33019/society.v9i1.303>
43. Mousa, S. K., Fernandez-Crehuet, J. M., & Thaher, Y. A. Y. (2025). Advancing Sustainable Performance in Healthcare: Mediating Roles of Green HRM and Green Innovation Under Green Transformational Leadership. *Business Strategy and the Environment*, 34(5), 5260–5282. <https://doi.org/10.1002/bse.4238>
44. Mr. Naveen H. N & Prof. H. N Ramesh. (2022). Brand Image – An Extended Arm for Customer Building. *International Journal of Advanced Research in Science, Communication and Technology*, 100–106. <https://doi.org/10.48175/IJARSC-7761>
45. Murni, D., Jamna, J., Handican, R., & Solfema, S. (2023). Pemanfaatan Smartphone dalam Pembelajaran Matematika: Bagaimana Persepsi Mahasiswa? *Jurnal Cendekia : Jurnal Pendidikan Matematika*, 7(1), 590–603. <https://doi.org/10.31004/cendekia.v7i1.2153>
46. Ngoc Quang, N., & Thuy, D. C. (2023). Justice and trustworthiness factors affecting customer loyalty with mediating role of satisfaction with complaint handling: Zalo OTT Vietnamese customer case. *Cogent Business & Management*, 10(2), 2211821. <https://doi.org/10.1080/23311975.2023.2211821>
47. Nguyen, H., Tran, D., & Vo, T. (2023). The impact of brand perception on consumer decision making: Mediating role of satisfaction. *Journal of Consumer Behaviour*, 22(3), 295–310. <https://doi.org/10.1002/cb.2001>
48. Nurhayati, M., Saputra, A. R. P., Santosa, A., Rahmani, S., & Ariyanto, E. (2022). Impact of Work-School Conflict to Employee Performance: Moderation of Perception Organizational Support and Work Characteristics. *Mix: Jurnal Ilmiah Manajemen*, 12(2), 237–246. https://doi.org/10.22441/jurnal_mix.2022.v12i2.005
49. Oliver, R. L. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research*, 17(4), 460–469. <https://doi.org/10.1177/002224378001700405>
50. Park, Y., Kim, C., & Yoon, J. (2022). Exploring the relationship between an emotional experience with everyday products and its contribution to people's well-being and life satisfaction. 13th International Conference on Applied Human Factors and Ergonomics (AHFE 2022). <https://doi.org/10.54941/ahfe1001809>
51. Persentase Penduduk yang Memiliki/Menguasai Telepon Seluler Menurut Provinsi dan Klasifikasi Daerah. (2023). Badan Pusat Statistik. <https://www.bps.go.id/id/statistics-table/2/Mzk1Izl=>
52. Prayetno, J., Saputra, A. R. P., & Arifin, B. (2025). Organizational support of sub-district tourism awareness groups (Pokdarwis) in Indonesia. *Tourism and Rural Development Studies - Turisztikai És Vidékfejlesztési Tanulmányok*, 10(1), Article 1. <https://doi.org/10.15170/TVT.2025.10.01.06>
53. Raditya, B., Yuliati, L. N., & Krisnatuti, D. (2019). Analysis Of The Effect Of Brand Image, Product Quality And After-Sales Service On Repurchase Decision Of Samsung Smartphones. *Russian Journal of Agricultural and Socio-Economic Sciences*, 92(8), 19–32. <https://doi.org/10.18551/rjoas.2019-08.03>
54. Rahayu, B., Lisaria Putri, R., & Sutrisno, J. (2023). Product Quality Price and Image Brands Against Purchase Decisions. *Journal of Industrial Engineering and Management*, 1(1), 21–30. <https://doi.org/10.52088/jaiem.v1i1.6>
55. Rahmadani, Y., Saputra, A. R. P., & Abdullah, S. M. (2025). Green Transformational Leadership, Organizational Commitment and Green Human Resource Management on Green Innovation Performance at the Government Sector. *Journal of Human Resource Management - HR Advances and Developments*, 28(1), 49–61. <https://doi.org/10.46287/hvuh5474>
56. Rigdon, E. E., Sarstedt, M., & Ringle, C. M. (2017). On comparing results from CB-SEM and PLS-SEM: Five perspectives and five recommendations. *Marketing ZFP – Journal of Research and Management*, 39(3), 4–16. <https://doi.org/10.15358/0344-1369-2017-3-4>
57. Riva, F., Magrizos, S., Rubel, M. R. B., & Rizomyliotis, I. (2022). Green consumerism, green perceived value, and restaurant revisit intention: Millennials' sustainable consumption with moderating effect of green perceived quality. *Business Strategy and the Environment*, 31(7), 2807–2819. <https://doi.org/10.1002/bse.3048>
58. Rohmat, Sudarmiatin, & Titis Shinta Dhewi. (2022). The Influence of Product Quality on Consumer Loyalty with Customer Satisfaction and Brand Trust as Mediating Variables (Case Research on Samsung Smartphone Consumers in Malang City). *International Journal Of Humanities Education and Social Sciences (IJHESS)*, 2(1). <https://doi.org/10.55227/ijhess.v2i1.232>
59. Sahoo, S., Kumar, A., & Upadhyay, A. (2023). How do green knowledge management and green technology innovation impact corporate environmental performance? Understanding the role of green knowledge acquisition. *Business Strategy and the Environment*, 32(1), 551–569. <https://doi.org/10.1002/bse.3160>
60. Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial least squares structural equation modeling. Dalam C. Homburg, M. Klarmann, & A. Vomberg (Ed.), *Handbook of Market Research* (hlm. 587–632). Springer. https://doi.org/10.1007/978-3-319-05542-8_15-2
61. Shyju, P. J., Singh, K., Kokkrankal, J., Bharadwaj, R., Rai, S., & Antony, J. (2023). Service Quality and Customer Satisfaction in Hospitality, Leisure, Sport and Tourism: An Assessment of Research in Web of

- Science. *Journal of Quality Assurance in Hospitality & Tourism*, 24(1), 24–50. <https://doi.org/10.1080/1528008X.2021.2012735>
62. Trivedi, R. H., & Sharma, R. (2023). Customer satisfaction in technology-enabled services: A pathway to repurchase behavior. *International Journal of Technology Marketing*, 18(2), 178–198. <https://doi.org/10.1504/IJTMKT.2023.10056678>
63. Úbeda-García, M., Marco-Lajara, B., Zaragoza-Sáez, P. C., Manresa-Marhuenda, E., & Poveda-Pareja, E. (2022). Green ambidexterity and environmental performance: The role of green human resources. *Corporate Social Responsibility and Environmental Management*, 29(1), 32–45. <https://doi.org/10.1002/csr.2171>
64. Wang, R., Li, Y., & Huang, X. (2024). Customer loyalty and expectation confirmation: A meta-analytic review. *International Journal of Consumer Studies*, 48(1), e12984. <https://doi.org/10.1111/ijcs.12984>
65. Wicaksari, P., Saputra, A. R. P., & Rahmah, A. N. (2024). The influence of green quality of work life, green employee engagement, and green rewards on green employee retention in SME employees. *Small Business International Review*, 8(1), Article 1. <https://doi.org/10.26784/sbir.v8i1.627>
66. Worldwide Quarterly Mobile Phone Tracker. (2024).
67. Zhang, Y., Xu, L., & Chen, Y. (2022). Product reliability and customer behavior: A PLS-SEM analysis. *Journal of Business Research*, 145, 321–330. <https://doi.org/10.1016/j.jbusres.2022.03.04>
68. Zhao, W., & Chan, C. S. (2023). What interpretation service are cultural tourists willing to pay for? A choice-experiment approach for cultural heritage sites in China. *Tourism Management Perspectives*, 46, 101091. <https://doi.org/10.1016/j.tmp.2023.101091>