

Original Research Article

The Relationship between Service Quality, Brand Image, Customer Satisfaction on Customer Loyalty of iPhone Users (Study on iPhone Users in Yogyakarta)

ABSTRACT

The aim of this paper is to determine the relationship between brand image, service quality, and customer satisfaction, and customer loyalty of iPhone users in Yogyakarta. This study exerts a quantitative approach using a five-point Likert of online questionnaires. This survey was conducted in Yogyakarta in October 2023. Respondents are iPhone users in Yogyakarta, with a total of 100 respondents. The SmartPLS version 3.2.9 analysis tool was used to process the data of this study using PLS-SEM, including hypothesis testing. All hypotheses regarding the variable relationship that leads to customer loyalty in this study are supported. In this case, service quality is an antecedent of brand image, customer satisfaction, and customer loyalty. The results of this study provide a managerial implication for the Apple Company to focus on developing strategies that can increase customer perceptions of service quality, brand image, and customer satisfaction to enlarge customer loyalty of iPhone users.

Keywords: Service Quality, Brand Image, Customer Satisfaction, Customer Loyalty.

1. INTRODUCTION

Market competition in the modern global world requires companies to offer better quality service and brand image in an effort to win customers and their loyalty [1]. It happens because there are many brands available to customers. Thus, competition between companies is increasing to win the hearts of customers. Loyal customers can be a precious asset for a company. Therefore, companies need to maintain loyal customers because companies can save more costs by retaining old customers rather than looking for new customers [2]. In this case, the main driver of a company's marketing activities often has a perspective in terms of developing, maintaining, or increasing customer loyalty to products/services [3].

In the beginning, brands were widely used to differentiate the same type of goods from other businesses or manufacturers. However, from a customer's perspective, a brand can also be a powerful identity for a product and can even reveal a person's social status. According to a number of specialists, including [4], brand image has become an interesting issue in the marketing literature. As stated by [5], customers' rational and emotional views of a particular brand are known as its brand image. Customer perception of a brand is critical because it has a significant impact on purchasing decisions. Additionally, brand image is a powerful

marketing tool and is very important in helping businesses stand out from the competition [6]. A sharp brand image has supported customers to realize brand needs and differentiate the brand from its competitors. Therefore, it has increased the likelihood that customers will purchase the brand [7].

One of the main aspects that managers need to pay attention to today is customer happiness. The company's ability to please customers by fulfilling customer requests and desires better than competitors has become a competitive advantage for the company [8]. Customer satisfaction has also become an essential measure of a company's success and significantly influenced behaviour, repurchase, and word-of-mouth (WOM)[9]. In a highly competitive corporate climate, customer happiness can be seen as the key to success [10].

Customer satisfaction has a number of benefits, including strengthening the bond between a business and its clients. Additionally, it will drive business sustainability, foster client loyalty, and generate profitable WOM. Although situational factors and marketing campaigns can persuade customers to switch, loyalty is a firm determination to repurchase or support preferred goods or services in the future [11]. The existence of a company and its potential to develop in the future is directly related to the value of client loyalty.

One of the strategies for retaining customers is to build customer happiness and loyalty, which can be achieved through a favourable brand image and high-quality service. Every business wants to improve customer satisfaction and service quality. Businesses that provide high-quality services can win new clients and win existing clients through loyalty. Loyal customers enable businesses to gain a larger market share and lower operational costs [12]. [13] defines service quality as the result of comparing the perceived and expected quality levels of clients with service providers to assess overall client quality. In other words, service quality offers service excellence to meet customer needs or expectations.

Smartphones have become an essential need for every individual in the current era, especially the Indonesian people. Every year, the number of smartphone users in Indonesia increases. Based on Counterpoint research in 2022, the market share for refurbished iPhones in Indonesia has the highest ranking, controlling 49% of the market share compared to other smartphone brands [14]. It shows the large number of iPhone enthusiasts and users in Indonesia. The iPhone is a smartphone produced by the Apple company that runs the iOS operating system, a unique OS license owned by Apple. This popularity can be caused by several variables, such as unique quality, brand image, and others, which have influenced customer loyalty.

Apart from having better technology, the iPhone is supported by a number of attractive additional services (Eg.iTunes and iCloud). Besides, the iPhone prioritizes increasingly sophisticated and sharp camera quality. iPhone is also said to have a brain that is twice as fast as other smartphones, making its CPU more potent than other smartphones. Additionally, the graphics quality is twice that of the A5 CPU. With a thickness of only 7.6 mm, the Apple iPhone is also one of the smallest smartphones.

Several studies have attempted to examine the antecedents of customer loyalty [1; 7; 15; 16]. However, there are still few researchers who study this issue in Indonesia, especially for luxury electronic products such as smartphones. Therefore, this research aims to examine the relationship between brand image variables, service quality, customer satisfaction and customer loyalty. The author is curious to see how far users perceive the brand and what level of care is offered to ensure that customers are happy and remain loyal to the product. Through this research, the author attempts to identify the relationship between brand image,

service quality, and customer satisfaction on customer loyalty by conducting case studies on iPhone users, especially in the city of Yogyakarta, Indonesia.

2. LITERATURE REVIEW

2.1. Service Quality

Once consumption and manufacturing occur simultaneously, service quality is a process that the client subjectively perceives. [17] defines service quality as the ability to provide services tailored to client's needs and desires. In general, efforts to satisfy customer requests and preferences, as well as the accuracy of delivery to meet customer expectations, are the essence of service quality.

A company's ability to provide high-quality services is a critical factor in determining its success. The SERVQUAL (Service Quality) model, created by [13], is one of the service quality strategies that is often cited in marketing research. However, many researchers have conducted a review of service quality measurements. According to [18], applying SERVPERF service quality performance to measure service quality creates better results of reliability, validity, and predictive power than using SERVQUAL. This opinion is reinforced by [13], stating that SERVPERF is more reliable than the SERVQUAL scale in measuring service quality in that SERVPERF can provide better diagnostic information.

Research conducted by [7; 19] stated that the relationship between service quality is an antecedent of brand image and has a positive influence on brand image. It means that the better the quality of service provided by the company, the better the brand image and reputation will be in the minds of customers. Based on the description above, the following hypothesis can be proposed:

H1: Service Quality has a significant positive effect on Brand Image.

[9] conducted another study that supports the relationship between customer happiness and service quality. [20; 21] show that service quality has a positive effect and predicts customer happiness. Service quality can be used as a competitive weapon that differentiates a company from its competitors in a more positive way by enabling service organizations to delight customers through consistently providing quality services and then increasing customer satisfaction with the company. Thus, the following hypothesis can be proposed:

H2: Service Quality has a significant positive effect on Customer Satisfaction.

According to research conducted by [15; 22], who examined the relationship between service quality and customer loyalty, it is stated that service quality is a precursor to customer loyalty and influences customer loyalty positively. It means that customer loyalty will increase proportionally to the quality of the service provided. [13] also said that there is a relationship between customer loyalty and service excellence. According to his research, customer loyalty to a product or service is greatly influenced by the quality of the service provided. Thus, a hypothesis can be formulated as follows:

H3: Service Quality has a significant positive effect on Customer Loyalty.

2.2. Brand Image

Customers' impressions of a product's brand, or brand image, are formed by information obtained from their experiences using the product. According to [6], brand image has emerged as an exiting topic of discussion in marketing literature. Additionally, brand image has become a key differentiator for businesses and a powerful marketing tool [6]. According to [11], brand image is a customer's reaction to a brand based on the positive and negative aspects of the brand that they can still remember. Customer perceptions of a brand are developed based on their experience of the product.

A brand's image can form customers' positive views and trust in a product or service, and this will increase brand loyalty. Brand loyalty can help a company project a positive and acceptable image that aligns with customer preferences for the goods and services it offers. An image can be preserved because it is an image that captures the essence of something, such as a person's main image or impression. A strong brand is a brand that stands out from the crowd and is clearly superior to its competitors in a particular area. Customer satisfaction will increase along with customers perceive the company's brand image. On the other hand, poorer customer satisfaction is also caused by customers' negative impressions of the brand image.

Many previous studies have established a relationship between brand image and customer happiness. Brand image is a predictor of customer satisfaction and has a positive effect on customer happiness, according to [15; 19]. It means that the better the quality of service provided by the company to customers, the better the brand image will be created in the minds of customers. It will increase customer satisfaction. Thus, the following hypothesis can be formulated:

H4: Brand Image has a significant positive effect on Customer Satisfaction.

Brand image is said to be a factor in forming customer loyalty [15]. According to [23], brand image influences customer loyalty in a significant way. The relationship between brand image and customer loyalty was also researched by [7; 15; 23; 24] and obtained the results that a favorable brand image will lead to loyalty at the company. Additionally, [25] research supports it, showing that loyalty has a significant impact on brand image in addition to customer loyalty, which has a significant impact on service quality. It means that customer loyalty will increase in proportion to the strength of a company's brand image. According to research by [26], there is a relatively significant positive correlation between brand image and customer loyalty, which shows that customers who have a good perception of a company will be more loyal to that company. Thus, the following hypothesis can be formulated:

H5: Brand Image has a significant positive effect on Customer Loyalty.

2.3. Customer Satisfaction

One of the most critical factors in business is customer satisfaction, which can then become a factor in realizing client loyalty. A company's competitive advantage is its ability to exceed client expectations, serve customers more satisfactorily than its competitors, and provide superior products and services [8]. According to [27], customer satisfaction is a measure of how well a product or service meets or exceeds customer expectations. Customer satisfaction also refers to how customers feel or perceive a good or service after using it. As a link between various stages of the customer purchasing process, customer satisfaction is the primary outcome of marketing initiatives [10]. The company's competitive advantage is satisfying clients better than its competitors by exceeding client needs and providing better service than its competitors [8].

A number of research investigations have validated the correlation between loyalty and customer satisfaction [15; 20; 28; 29]. One important factor related to client loyalty is customer satisfaction [15]. Higher customer satisfaction will result in higher customer loyalty [29]. Previous research states that customer satisfaction has a positive effect on customer loyalty [15; 16; 28; 29]. The research results of [16] show that brand satisfaction influences customer loyalty in terms of repeat purchases. Furthermore, [29] found a strong positive relationship between customer satisfaction and customer loyalty. The findings of this research indicate that there is sufficient empirical data to imply that customer satisfaction significantly increases customer loyalty and trust. Thus, a hypothesis can be formulated as follows:

H6: Customer Satisfaction has a significant positive effect on Customer Loyalty.

2.4. Customer Loyalty

The concept of customer loyalty has been widely discussed in the literature with different definitions. Customer loyalty is defined as the strength of the relationship between a client's relative attitude and repurchase in a trade [4]. According to [30], customer loyalty can also be defined as a solid and ongoing commitment to regularly purchase preferred goods or services in the future, which leads to repeated purchases of the same goods or services. In other words, customer loyalty is like a guarantee of repeat purchases. It has, of course, provided sustainable benefits for the business.

3. METHODOLOGY

3.1 Measurement

This study uses a causal relationship study on variables raised as hypotheses. The research uses a quantitative approach by distributing online questionnaires to obtain primary data. The research questionnaire consists of 2 parts of questions: respondent characteristics and questions to measure variables. The variable measurement scale uses a 5-point Likert scale, which consists of an assessment scale consisting of strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5). All measurement items were adapted from

3.2 Sampling and Data Collection

This research uses primary data through the distribution of online questionnaires and secondary data collected from various current sources and previous research references. This research uses a sample of iPhone users who are residents of Yogyakarta, Indonesia. The Leshow formula was used to determine the sample calculation. and it was found that the number of samples sought was $n = 96.04$. Thus, sample results are rounded to the nearest hundred. Based on the sample calculation above, the sample that will be used for research is 100 respondents. The validity and reliability of the questionnaire used to collect data were checked first before data collection was carried out. Finally, a sample of 100 respondents was collected for the study.

3.3. Data Analysis Techniques

Data analysis in this research includes descriptive analysis and statistical analysis using PLS-SEM. Descriptive analysis to describe research respondents' answers to obtain conclusions about answer patterns. Meanwhile, in the Structural Equation Modeling (SEM) testing system, the data will be processed using the SmartPLS program for testing. [31]

stated that to process SEM-PLS data, two levels must be completed. The first stage uses a measurement model evaluation (outer model). Then, the data is processed using a structural model evaluation (inner model), which tests the hypothesis and explains the existence of a relationship between latent variables. The measurement model testing was carried out to test the validity and reliability of the data. Convergent validity is carried out by looking at loading values greater than 0.7 and AVE values above 0.5 [31]. Next, discriminant validity was carried out by looking at the cross-loading and Fornell-Larcker values. Finally, indicator reliability can be seen from the Cronbach alpha and composite reliability values, which are more than 0.70 [31].

In structural test evaluation, the path coefficients test is used to see the direction of the hypothesis. Determination coefficient test (R^2) to measure the influence of the independent variable on the dependent variable. The Q-Square test is to see predictive relevance, with the Q-square value having to be more than 0. The predictive relevance test determines how well the observation value is produced through the blindfolding process. Finally, hypothesis testing (resampling bootstrapping) is decided from the t value, which must be greater than 1.96 (t statistics >1.96).

4. RESULTS AND DISCUSSION

4.1. Respondent Profile

Analysis of respondent profiles is based on gender, age, monthly income, and motivation for using an iPhone. The results of the demographic analysis of respondents can be seen in the following respondent profile data table (Table 1).

Table 1. Respondents' Demographic Characteristics

Category	Frequency	%
Gender		
Male	75	75
Female	25	25
Age		
< 25 years	94	94
26 – 35 years	6	6
36 – 45 years	0	0
>46 years	0	0
Income per Month		
< 5 Million IDR	69	69
5 – 10 Million IDR	20	20
> 10 Million IDR	11	11
Respondent Motivation		
Identical to the upper middle class	4	4
Camera performance is good	37	37
Completeness of features	59	59

Source: Primary data (2023)

Based on Table 1, it is shown that male respondents (75%) dominated this study. Furthermore, 94% of respondents in this study were aged less than 25 years (< 25 years) and had an income of < 5 million IDR (69%). Based on respondent motivation for using an iPhone, completeness of features (59%) was the biggest motivation in this study.

4.2. Measurement Model Evaluation (Outer Model)

The evaluation of research models includes convergent validity, discriminant validity, and measurement reliability. The results of convergent validity and reliability measurements are summarized as follows (Table 2).

Table 2. Convergent Validity and Data Reliability

Variables	Item	Loadings	CA	CR	AVE
Brand Image	BI1	0.852	.927	0.942	0.732
	BI2	0.873			
	BI3	0.863			
	BI4	0.832			
	BI5	0.910			
	BI6	0.801			
ServiceQuality	SQ1	0.799	.912	0.931	0.693
	SQ2	0.848			
	SQ3	0.815			
	SQ4	0.847			
	SQ5	0.853			
	SQ6	0.831			
CustomerSatisfaction	CS1	0.876	.947	0.958	0.792
	CS2	0.869			
	CS3	0.888			
	CS4	0.902			
	CS5	0.905			
	CS6	0.899			
CustomerLoyalty	CL1	0.899	.921	0.941	0.762
	CL2	0.859			
	CL3	0.897			
	CL4	0.897			
	CL5	0.807			

Source: Primary data (2023)

Based on Table 2, the results show that the measurements in this study are convergently valid and reliable. It is known that each item produces a factor loading value greater than 0.70 and an AVE value greater than 0.50. Thus, these indicators are considered valid as measurements of latent variables in this way. Moreover, the Cronbach Alpha value and Composite Reliability value are greater than 0.70 for all research variables. Based on these results, it can be concluded that all variables have a high level of reliability, which shows that each variable has met composite reliability and Cronbach alpha.

The validity of the measurement model is also checked to display the strength of the relationship between construct indicators and indicators of other constructs, showing discriminant validity. Discriminant validity was tested using the Fornell-Larcker criteria and Cross Loading values. The results of the Fornell-Larcker estimation data are seen in the following table (Table 3).

Table 3. ValiditasDiskriminan: Fornell-Larcker

Variabel	BI	CL	CS	SQ
BI	0.856			
CL	0.833	0.873		
CS	0.852	0.844	0.890	
SQ	0.743	0.742	0.738	0.832

Source: Primary data (2023)

*Notes: *Brand Image (BI); Customer Loyalty (CL); Customer Satisfaction (CS); Service Quality (SQ)*

Table 3 shows that the Fornell-Larcker criteria are met well. It is indicated by each AVE square root value on the diagonal line having a better value than the value below it for each variable. For example, in the CS variable, the value of 0.890 is higher than the value of 0.738. Therefore, based on the Fornell-Larker test, all variables are said to be discriminantly valid.

Furthermore, the Cross-Loading test was carried out to test the discriminant validity of the measurement. According to [32], to assess discriminant validity using cross-loading, an evaluation can be carried out for each construction value, from which the certainty of the calculated value will be greater than for other constructions. The following table presents the Cross-Loading estimation results (Table 4).

Table 4. ValiditasDiskriminan: Cross-Loading

Item	BI	CL	CS	SQ
BI1	0.852	0.679	0.747	0.537
BI2	0.873	0.680	0.756	0.604
BI3	0.863	0.781	0.736	0.710
BI4	0.832	0.691	0.677	0.634
BI5	0.910	0.742	0.788	0.668
BI6	0.801	0.697	0.664	0.654
CL1	0.761	0.899	0.761	0.558
CL2	0.744	0.859	0.694	0.566
CL3	0.757	0.897	0.743	0.680
CL4	0.751	0.897	0.806	0.736
CL5	0.616	0.807	0.670	0.696
CS1	0.720	0.707	0.876	0.573
CS2	0.718	0.703	0.869	0.643
CS3	0.777	0.790	0.888	0.654
CS4	0.767	0.755	0.902	0.692
CS5	0.784	0.791	0.905	0.687
CS6	0.776	0.752	0.899	0.685
SQ1	0.518	0.477	0.484	0.799
SQ2	0.534	0.550	0.523	0.848
SQ3	0.535	0.579	0.528	0.815
SQ4	0.621	0.699	0.694	0.847
SQ5	0.691	0.606	0.660	0.853
SQ6	0.748	0.731	0.724	0.831

Source: Primary data (2023)

*Notes: *Brand Image (BI); Customer Loyalty (CL); Customer Satisfaction (CS); Service Quality (SQ)*

Table 4 shows the cross-loading value of each item is more than 0.70 and the value of each item is highest when connected to other latent variables. It shows that each variable in the research has explained the latent variables accurately and established the discriminant validity of each item.

4.3. Structural Model Evaluation (Inner Model)

The evaluation of the inner model is carried out after outer model testing. To determine the correlation between constructs, significant values, and R-square of the research model, an inner or structural model test was carried out. First, the structural model evaluation was carried out by looking at each dependent latent variable R-square and Q-Square, as shown in the following table (Table 5).

Table 5. R-Square dan Q-Square

Variable	R-Square	R-Square Adjusted	Q-Square (=1-SSE/SSO)
Brand Image	0.552	0.548	0.375
Customer Loyalty	0.773	0.766	0.573
Customer Satisfaction	0.750	0.745	0.573

Source: Primary data (2023)

Table 5 shows that the R-Square and Q-Square values are well explained. All the R-square values are above 0.50, which indicates that all dependent variables can be explained more than 50% by the independent variables. For example, the Brand Image variable (0.552) shows that independent variables can explain 55.2% of the variation, and the remaining 44.8% can be explained by factors not included in this research. Moreover, the Q-Square predictive relevance value for structural models evaluates how well the parameter estimates and conservation values produced by the model match. It is shown that the Q-square value of the dependent variable is greater than zero. Therefore, this value can mean that the research has good observational value or predictive relevance.

The final test is a hypothesis test to explain the relationship between the variables in the research. Direct hypothesis testing is based on the assumption that there is a reasonably considerable influence between exogenous variables and endogenous variables if the statistical T value > 1.960 and P value less than .05 (significance threshold = 5%) is met. A detailed explanation of hypothesis testing is shown in Table 6 and Figure 1.

Table 6. Hypothesis Testing

Hypothesis		β	T Statistic	P Value	Conclusion
SQ → BI	H1	0.743	7.378	0.000	Supported
SQ → CS	H2	0.235	2.365	0.018	Supported
SQ → CL	H3	0.176	2.236	0.026	Supported
BI → CS	H4	0.677	5.799	0.000	Supported
BI → CL	H5	0.343	2.905	0.004	Supported
CS → CL	H6	0.422	3.281	0.001	Supported

Source: Primary data (2023)

*Notes: Brand Image (BI); Customer Loyalty (CL); Customer Satisfaction (CS); Service Quality (SQ).

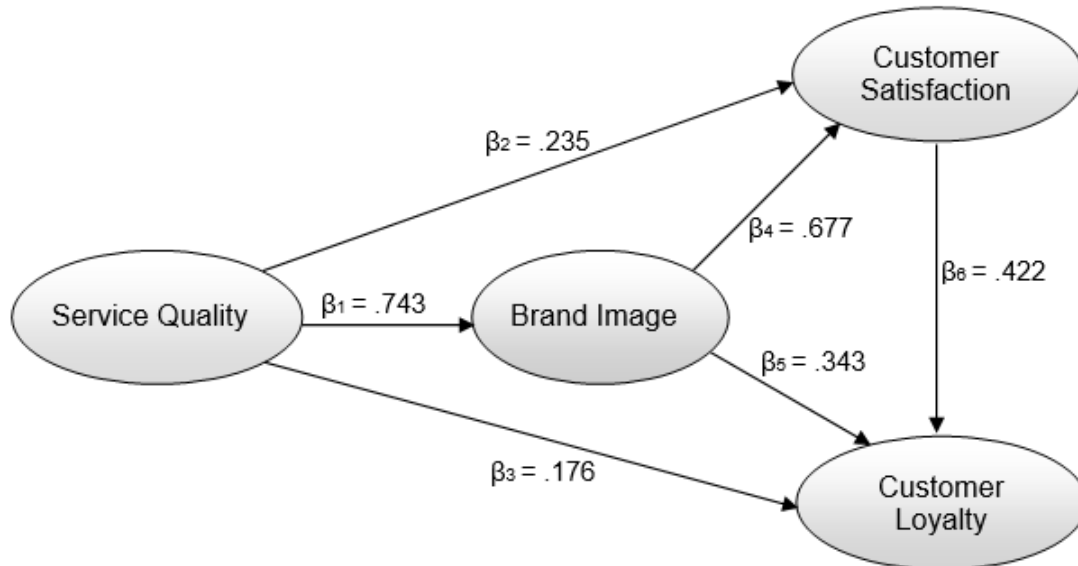


Fig. 1. Summary of the model results.

β indicates the direction of the hypothesis (path coefficient).

The research framework was adopted from Sao Mai DAM & Tri Cuong DAM (2021).

The results of the hypothesis test in Table 7 show that all variable relationships have positive path coefficients (β). In addition, the criteria for a P value of less than .05 and a T statistic of more than 1.96 were all met. It indicates that all hypotheses are supported. These results were then summarized into a research framework, as shown in Figure 1. The research framework used was adopted from [1]. The following is a more detailed explanation regarding the results of the hypothesis test:

4.3.1 The Influence of Service Quality on Brand Image

The evaluation results of the first hypothesis show that service quality has a positive and significant effect on the brand image ($\beta = .743$, P value = .00). Thus, H1 is supported. These findings indicate that the existence of good service quality will influence customers' views of brand image. This research is in line with research by [26] in the context of a company's social mission that good service quality will provide a good customer impression and shopping experience. Furthermore, this will increase good customer perceptions of the brand image. Meanwhile, [33] stated that service quality acts as a catalyst to improve customer behaviour towards brands, especially with regard to forming a brand image among customers. Therefore, service quality is a critical aspect to improve when a company wants to create an attractive brand image.

4.3.2 The Influence of Service Quality on Customer Satisfaction

The results show that service quality has a positive and significant effect on customer satisfaction ($\beta = .235$, P value = .018). These results indicate that H2 is accepted. The results of this research are in line with previous research [1] on supermarkets in Vietnam, which stated that service quality is a predictor of customer satisfaction. It is because improving service quality will have an impact on customers' experience of supermarket service quality. A good shopping experience will make customers satisfied. In the context of studies in the banking industry, to increase customer satisfaction, good service quality also needs to be improved [34]. Customer satisfaction is a goal and marketing advice for businesses that prioritize their customers. For this reason, companies need to evaluate and

improve the quality of their services to be able to meet customers' shopping experience expectations in order to make them happy.

4.3.3 The Influence of Service Quality on Customer Loyalty

The results show that service quality has a positive and significant effect on customer loyalty. ($\beta = .176$, P value = .026), so H3 is accepted. The quality of good service received by customers will have an impact on the possibility of customers being loyal. This finding is in contrast to the findings of [34] in the context of the banking industry, that service quality does not have a direct positive impact on customer loyalty decisions. However, the research results of [1] show a positive relationship between service quality and customer loyalty. Companies must pay attention to the quality of their services to build customer trust, a strong brand image, and satisfy customers, and this can make customers loyal [22]. Thus, improving service quality has many advantages, one of which has excellent potential in customer loyalty decisions.

4.3.4 Influence of Brand Image on Customer Satisfaction

The results show that brand image has a positive and significant effect on customer satisfaction ($\beta = .677$, P value = .00) and H4 is accepted. A good brand image in the eyes of customers will make customers satisfied with the brand's products. This finding is in line with [35] findings in the case study of the start-up brand Pomie Bakery, that brand image has a direct relationship to customer satisfaction. Customers feel satisfied when the product marketing process and the reality of the product obtained are appropriate. Brand image has become a powerful instrument in marketing and acts as an essential factor in determining customer satisfaction [36]. Therefore, companies that want to provide positive satisfaction for customers need to pay attention to customer perceptions of brand image and keep these perceptions positive. If related in the context of this research, the brand image of the iPhone can provide satisfaction for the buyer.

4.3.5 The Influence of Brand Image on Customer Loyalty

The results show that brand image has a positive and significant effect on customer loyalty ($\beta = .343$, P value .004), so H5 is accepted. When a brand has a strong positive image, customers will have strong confidence that the brand will meet their expectations, and they will decide to be loyal. These results are in line with research by [36] in the context of a study of telecommunications services in Mongolia, showing that customers consider the brand image of telecommunications services to be necessary. Customers tend to use telecommunications services with a strong brand image to minimize uncertainty regarding the use of services that may occur. According to [26], the company helps its brand image to reflect high values. In other words, a company with a strong positive brand image will provide good quality products to its customers. It is what then makes customers satisfied and choose to be loyal to a brand.

4.3.6 The Influence of Customer Satisfaction on Customer Loyalty

The results show that customer satisfaction has a positive effect on customer loyalty ($\beta = .422$, P value = .001). Thus, H6 is accepted. These results indicate that customers will tend to be more loyal to brands that are able to provide satisfaction both in terms of shopping experience and product quality. These results are in line with research by [37] that customer satisfaction has a strong effect on the realization of customer loyalty. In this case, customer loyalty will be realized when satisfied customers are interested in making repeat purchases of products that meet their expectations. According to [35], customer satisfaction is an

essential factor in business success, even though this satisfaction is flexible and temporary. According to [34], if companies want to increase customer loyalty, then customer satisfaction needs to be increased. Thus, if related to the context of this research, customer happiness in an iPhone purchase transaction determines the occurrence of repeat transactions as a form of loyalty.

5. CONCLUSION

The essence of this research is to determine the influence of service quality, brand image and customer satisfaction on the realization of customer loyalty among iPhone users in Yogyakarta. The research results show that all hypotheses are accepted. Apart from that, this research also proves that service quality is an antecedent of brand image, customer satisfaction and customer loyalty. As research by [1], service quality has an essential impact on brand image and customer satisfaction to create customer loyalty. The managerial implications of this research suggest that the Apple company should focus on strategies that increase customer perceptions of service quality, brand image, and customer satisfaction to increase customer loyalty. One way that companies can implement this is by improving store facilities, commitment to customers, interaction between staff and customers and also readiness to solve problems complained by customers. If customer experience regarding service quality increases, customers have a positive tendency to feel satisfied and will increase their loyalty to the company. Apart from that, companies must be more aggressive in advertising promotion, WOM, and public relations, which have an impact on customer recognition of the brand image. Finally, customer loyalty can be maintained for effective and efficient business continuity.

REFERENCES

1. Sao MD; Tri CD. Relationships Between Service Quality, Brand Image, Customer Satisfaction, And Customer Loyalty. *The Journal of Asian Finance, Economics And Business*. 2021;8(3):585-593. DOI: 10.13106/jafeb.2021.vol8.no3.0585
2. Hermawan Kertajaya. *Boosting Loyalty Marketing Performance*. Indonesia: Mizan. 2007.
3. Alan SD, Kunal B. Customer loyalty: Toward an integrated conceptual framework. *Journal of the Academy of Marketing Science*. 1994;22(2):99–113. DOI: 10.1177/0092070394222001
4. Eunjoo C; Ann Marie F; Daniel W R. Validation of a fashion brand image scale capturing cognitive, sensory, and affective associations: Testing its role in an extended brand equity model. *Psychology & Marketing*. 2015;32(1):28-48. DOI: 10.1002/mar.20762
5. George SL; Charles WL Jr. The measurement and dimensionality of brand associations. *Journal of product & brand management*. 2000; 9(6):350-370. DOI: 10.1108/10610420010356966
6. Hyeyoon P; Soyeon P. The effect of emotional image on customer attitude. *The Journal of Asian Finance, Economics and Business*. 2019; 6(3):259-268. DOI: 10.13106/jafeb.2019.vol6.no3.259
7. Sheng-Wen H; Cheng-Chih L; Yu-Hao L. A study on the relationship among brand image, service quality, customer satisfaction, and customer loyalty–Taking ‘the Bao Wei

- Zhen Catering Team'As an Empirical Study. *KnE Social Sciences*. 2018;3(10):1768-1781. DOI: 10.18502/kss.v3i10.3512
8. Youba M. Link between satisfaction and customer loyalty in the insurance industry: Moderating effect of trust and commitment. *Journal of Marketing Management*. 2018; 6(2): 25-33.
 9. Eugene S, Jamie LB. An examination of the relationship between service quality, customer satisfaction, and store loyalty. *International Journal of Retail & Distribution Management*. 2000; 28(2): 73-82. DOI: <https://doi.org/10.1108/09590550010315223>
 10. Ahmad J, Kamal N. Customer satisfaction and retail banking: an assessment of some of the key antecedents of customer satisfaction in retail banking. *International journal of bank marketing*. 2002; 20(4): 146-160. DOI: <https://doi.org/10.1108/02652320210432936>
 11. Philip K, Kevin KL. *Marketing Management (15th ed.)*. Pearson Education, Inc. 2016.
 12. David AA. Measuring brand equity across products and markets. *California management review*. 1996, 38(3): 102-120.
 13. Ananthanarayanan P, Valarie AZ, Arvind M. ES-QUAL: A multiple-item scale for assessing electronic service quality. *Journal of service research*. 2005; 7(3): 213-233.
 14. databoks.katadata.co.id. iPhone Refurbished, Produk Terlaris di Pasar Smartphone Bekas pada 2022. Accessed 20 October 2023. Available: <https://databoks.katadata.co.id/datapublish/2023/04/27/iPhone-refurbished-produk-terlaris-di-pasar-smartphone-bekas-pada-2022>
 15. Shahzad A, Li M, Gulam D. Effect of service quality, brand image, perceived value on customer satisfaction and loyalty in the Chinese banking industry. *International Journal of Business, Economics and Management Works*. 2019; 6(3): 24-30.
 16. Aysel E, Sevtap U, F Burcu C, Hatice Y. The effect of brand satisfaction, trust and brand commitment on loyalty and repurchase intentions. *Procedia-Social and Behavioural Sciences*. 2012; 58: 1395-1404. DOI: <https://doi.org/10.1016/j.sbspro.2012.09.1124>
 17. Subrata C, Dwayne W, Ken G. Understanding service quality and relationship quality in IS outsourcing: Client orientation & promotion, project management effectiveness, and the task-technology-structure fit. *Journal of Computer information systems*. 2008; 48(2): 1-15. DOI: <https://doi.org/10.1080/08874417.2008.11646004>
 18. Joseph CJr, Steven AT. Measuring service quality: a reexamination and extension. *Journal of marketing*. 1992; 56(3): 55-68. DOI: <https://doi.org/10.1177/0022242992056003>
 19. Paul W, Gary YY, Chierh-RU H. The effect of store image and service quality on brand image and purchase intention for private label brands. *Australasian Marketing Journal*. 2011; 19(1): 30-39. DOI: <https://doi.org/10.1016/j.ausmj.2010.11.001>
 20. Ilias S, Panagiotis T. Investigating the impact of service quality and customer satisfaction on customer loyalty in mobile telephony in Greece. *The TQM Journal*. 2010; 22(3): 330-343. DOI: <https://doi.org/10.1108/17542731011035550>
 21. Putro RNCA, Rachmat B. Effect of brand image and service quality on customer satisfaction and loyalty at Bank Jatim Syariah Surabaya. *Russian Journal of Agricultural and Socio-Economic Sciences*. 2019; 87(3): 152-165.
 22. Heri S, A Jalaludin S. Effects of service quality, customer trust and corporate image on customer satisfaction and loyalty: an assessment of travel agencies customer in South Sumatra Indonesia. *Iosr Journal of Business and Management (Iosr-Jbm)*. 2017; 19(5): 31-40. DOI: 10.9790/487X-1905033140
 23. Indra W, Sri SI. Pengaruh citra merek terhadap loyalitas konsumen. *Jurnal Ilmu Manajemen*. 2013; 1(3): 910-918.

24. Yu-Te T, Hsiao-Chien C. Corporate brand image and customer satisfaction on loyalty: An empirical study of Starbucks coffee in Taiwan. *Journal of social and development sciences*. 2012. 3(1): 24-32. DOI: <https://doi.org/10.22610/jsds.v3i1.682>
25. Kun-Hsi L. The casual effects of service quality, brand image, customer satisfaction on customer loyalty in the leisure resort enterprise. *China-USA Business Review*. 2012, 11(5).
26. Yi-Hsin L, Feng-Jyh L, Kuo-Hsiung W. The effect of social mission on service quality and brand image. *Journal of Business Research*. 2021; 132: 744-752. DOI: <https://doi.org/10.1016/j.jbusres.2020.10.054>
27. Claes F, et al. The American customer satisfaction index: nature, purpose, and findings. *Journal of marketing*. 1996; 60(4): 7-18. DOI: <https://doi.org/10.1177/002224299606000403>
28. Bee WY, T Ramayah, Wan NWS. Satisfaction and trust on customer loyalty: a PLS approach. *Business strategy series*. 2012; 13(4): 154-167.
29. Rahmat M. Customer trust as relationship mediation between customer satisfaction and loyalty at Bank Rakyat Indonesia (BRI) Southeast Sulawesi. *The international journal of engineering and science*. 2013; 2(5): 48-60.
30. Richard LO. Satisfaction: A Behavioural Perspective on the Customer. The McGraw-Hill Companies, Inc. 1997.
31. Joseph FH et al. A A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) (2nd ed.). SAGE Publications, Inc. 2017.
32. Imam G, Hengky L. Partial Least Squares Konsep Teknik dan Aplikasidengan Program Smart PLS 3.0. Semarang: Universitas Diponegoro Semarang. 2015.
33. Mbaye FD, Anne MS. How store service quality affects attitude toward store brands in emerging countries: Effects of brand cues and the cultural context. *Journal of Business Research*. 2018;86: 311–320. <https://doi.org/10.1016/j.jbusres.2017.08.017>
34. Achmad S, Bambang BW, Burhanuddin B. Effects of service quality and customer satisfaction on loyalty of bank customers. *Cogent Business & Management*. 2021; 8(1): 1937847. DOI: <https://doi.org/10.1080/23311975.2021.1937847>
35. David GA, Deske WM, Lefrand SP. Influence of brand image on customer attitude, intention to purchase and satisfaction: The case of start-up brand Pomie Bakery. *Enrichment: Journal of Management*. 2022; 12(5): 3907-3917.
36. Undrakhbuyan A, Tsend-Ayush M. Relationships of brand image, customer satisfaction and brand loyalty: in case of telecommunication sector. *International Journal of Business Management and Economic Review*. 2019; 2(3): 39-48. DOI: <http://doi.org/10.35409/IJBMER.2019.3948>
37. Nurul FN, Sugeng S, Tanti SA, Unique C, Nurfadillah. The effect of product quality, service quality, customer satisfaction on customer loyalty. *Journal of customer sciences*. 2022; 7(1): 34-50. DOI: <https://doi.org/10.29244/jcs.7.1.34-50>

APPENDIX

The measurement items used in the questionnaire were adapted from Sao Mai DAM & Tri Cuong DAM (2021) (Table 7)

Table 7. Item Scale of the Measurement

Variables	Item Scale
Service Quality	SQ1 Apple Store provides a clean place & attractive interior design.
	SQ2 Apple store employees provide good service.
	SQ3 Apple store employees handle transactions accurately.
	SQ4 Apple store employees serve customer orders and complaints

		quickly.
	SQ5	Apple store employees are always friendly in providing service.
	SQ6	Consumers feel safe when buying at Apple stores.
Brand Image	BI1	The Apple/iPhone brand is a quality brand.
	BI2	The Apple/iPhone brand is easy to remember.
	BI3	The Apple/iPhone brand is trustworthy.
	BI4	The Apple/iPhone brand has real advantages when compared to other brands.
	BI5	The Apple/iPhone brand has a good reputation.
	BI6	iPhone smartphones have a different appearance from other brands.
Customer Satisfaction	CS1	Compared to other brand smartphones, I am happy with this brand.
	CS2	The overall feeling I received from the iPhone's performance was very satisfying.
	CS3	My purchasing choice of iPhone smartphone was the right choice.
	CS4	iPhone/Apple products always try to provide the best for their customers.
	CS5	I feel that the Apple store has met my expectations in terms of the services offered.
	CS6	I feel that the features of the iPhone smartphone are very superior and useful, so I feel satisfied.
Customer Loyalty	CL1	I will come back to buy an iPhone/Apple smartphone in the future.
	CL2	I would rather buy at an Apple Store than anywhere else.
	CL3	I will recommend the iPhone smartphone to family, friends and relations.
	CL4	I will express positive things about the iPhone smartphone to others.
	CL5	I am not interested in switching to another brand of smartphone even though it offers a more competitive price