| **RESEARCH ARTICLE**

The Impact of Service Quality Using the Carter Model on Customer Satisfaction in Indonesian Islamic Banks

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| **ABSTRACT**

This study explores the impact of service quality, as evaluated using the CARTER model, on customer satisfaction at Bank Syariah Indonesia. Among the six initial hypotheses, only two were confirmed, yielding significant insights. Notably, the research revealed that neither sharia compliance nor tangible aspects significantly influenced customer satisfaction. Assurance and empathy also displayed no substantial impact. Conversely, two pivotal factors emerged as major drivers of customer satisfaction: reliability and responsiveness. This intriguing finding may be linked to a recent hacker attack on Bank Syariah Indonesia, which occurred a month before the study, although further research is required to confirm this hypothesis. Despite the rigor of the research procedures, some limitations emerged, including the use of online questionnaires via Google Forms, which hindered detailed explanations to respondents and potentially affected their understanding. Additionally, the study focused exclusively on the service quality components outlined by the CARTER model, neglecting other important variables like trust, awareness, and loyalty. In light of these findings, the study offers vital recommendations. Bank Syariah Indonesia is encouraged to focus more on the various components of the CARTER service quality model to potentially foster higher customer trust and loyalty. Furthermore, the bank should consider introducing flagship programs and comprehensive approaches to enhance customer satisfaction. Future researchers are encouraged to explore additional factors influencing customer satisfaction, such as product quality and brand image, and to expand the sample to include a more diverse range of respondents. In summary, this study summarizes its findings, limitations, and recommendations, providing valuable insights for Bank Syariah Indonesia and future researchers seeking to enhance their understanding of service quality and customer satisfaction in this context.

| **KEYWORDS**

Service quality, CARTER model, customer satisfaction, Bank Syariah Indonesia, limitations, recommendations

| **ARTICLE INFORMATION**

1. Introduction

The background of the problem discussed in this text is the growth and development of Islamic finance in Indonesia, which has the largest Muslim population in the world. The establishment of Shariah banks, such as pawnshops, insurance companies, and other financial institutions, indicates the rapid growth of the Islamic banking industry in the country. Shariah banks operate based on Islamic principles and have been regulated by laws in Indonesia. The three main functions of Shariah banks are to collect funds from the public, distribute funds to those in need, and provide Shariah banking services.

Recently, three Shariah banks in Indonesia, namely Bank Negara Indonesia Syariah, Bank Rakyat Indonesia Syariah, and Bank Mandiri Syariah, merged to form Bank Syariah Indonesia. This merger raised concerns among the customers of these banks regarding the transition process, including fund transfers, transactions, and operational services. The quality of service provided by both conventional and Shariah banks, especially the latter, is crucial in meeting customer needs and expectations.

The importance of improving service quality in Islamic banking is highlighted by several reasons, including the perception of high-quality products and services, the relationship between cost, profitability, customer satisfaction, customer retention, and word-of-mouth marketing. However, recent events have affected the satisfaction of Bank Syariah Indonesia's customers. The bank was allegedly attacked by a dangerous ransomware virus, resulting in disruptions to mobile banking services. This incident has led to customer dissatisfaction and highlights the need for the bank. The statement aligns with a study titled "Measuring the Influence of CARTER Service Quality on Customer Satisfaction in Indonesian Islamic Banking," which states that the service quality of Islamic banks has a significant relationship with customer satisfaction, and the empathy dimension has the strongest influence on customer satisfaction in Islamic banks (Fauzi, 2016). This research shows that service quality is a positive factor that affects customer satisfaction.

One of the factors that contribute to customer satisfaction is the provision of services that meet customer expectations. There are several models used to measure service quality, including the service quality method and the CARTER method. The service quality method consists of five dimensions that measure the level of service quality: tangibles, reliability, responsiveness, assurance, and empathy. However, measuring service quality in companies that operate based on Sharia principles is inadequate when using the servqual method. Othman and Owen, as cited in Fauzi (2019), have developed the CARTER model by modifying the servqual dimensions to make service quality measurement in Islamic banking appropriate (Fauzi, 2019).

The CARTER model includes the same dimensions as the servqual model, with an additional dimension called compliance. Compliance refers to the expertise of adhering to Islamic law and operating in line with the principles of Islamic banking and economics. The CARTER model allows Sharia-based banks to have distinct characteristics that differentiate them from conventional banks (Hasibuan, 2023).

Despite being relatively new in the banking industry, Islamic banking has quickly emerged and competes fiercely with conventional banking due to its unique features. One of the reasons for its survival and success so far is its focus on customer care. Considering this fact, this research aims to determine the level of influence of service quality using the CARTER model in Bank Syariah Indonesia on customer satisfaction. The researchers are interested in using the CARTER model because it is considered the most suitable for measuring service quality in Islamic banking, as it includes the sharia compliance dimension, which is not present in the servqual method.

2. Literature Review

Bank Syariah Indonesia is a newly formed bank resulting from the merger of three existing Islamic banks in Indonesia: Bank Negara Indonesia Syariah, Bank Rakyat Indonesia Syariah, and Bank Mandiri Syariah. The merger took place on February 1, 2021, and raised concerns among the customers of these banks regarding the transition process, fund transfers, customer transactions, and operational services during the transition to Bank Syariah Indonesia.

The fundamental difference between conventional banks and Islamic banks, such as Bank Syariah Indonesia, lies in their approach to certain religious beliefs. Islamic banks adhere to the principles of Islam, which include the rejection of interest (riba), injustice, and immorality in financing activities. Conventional banks, on the other hand, commonly employ interest-based transactions, which are considered riba and are prohibited in Islam.

Despite these differences, the roles and functions of Islamic banking are similar to those of conventional banks. Islamic banks play a strategic role in economic and trade activities, serving as safe depositors for companies, government bodies, and individuals. They also provide financing services and facilitate the flow of goods and services from producers to consumers. Additionally, Islamic banks contribute to the circulation of money as a medium of exchange and support monetary policies.

The functions of Bank Syariah Indonesia align with those of conventional banks, including mobilizing domestic and foreign savings, effectively channeling funds into productive and financially viable activities that comply with Islamic principles, and regulating the distribution of funds according to Bank Indonesia's policies to maintain a healthy monetary environment.

In summary, Bank Syariah Indonesia is an Islamic bank formed through the merger of three existing Islamic banks. It operates based on Islamic principles, which prohibit interest-based transactions. Despite these differences, the bank performs similar functions to conventional banks, including mobilizing savings, providing financing services, regulating fund distribution, and contributing to economic development. The merger process raised concerns among customers regarding the transition and operational services, which the bank aims to address. Customer satisfaction is a crucial aspect of any business. It is the result of comparing customers' expectations with their actual experience. When customers perceive that the performance of a product or service meets or exceeds their expectations, they feel satisfied. On the other hand, if the product or service does not meet their expectations, they may feel disappointed.

2.1. Customer satisfaction

Customer satisfaction is a subjective value that is based on objective measurements of service quality and how well it meets customers' desired expectations. In the context of Islamic banking, customer satisfaction refers to the satisfaction experienced by customers when they perceive that the service they receive exceeds their expectations.

There are five factors that contribute to determining customer satisfaction. The first factor is product quality. Customers feel satisfied when they evaluate the quality of the product they use and find it to be of good quality. A good product quality adds value to the customer experience.

The second factor is service quality. In the case of services, customers feel satisfied when they receive good service that meets their expectations. Satisfied customers are more likely to repurchase the same product and have positive perceptions of the company.

The third factor is emotional satisfaction. Customers may feel proud and confident when they use a product with a particular brand that has a higher satisfaction level. This satisfaction is not solely based on product quality but also on the social value associated with the brand.

The fourth factor is price. Customers perceive higher value when a product with the same quality is priced relatively lower compared to other alternatives.

The fifth factor is cost. Customers are more satisfied when they do not have to incur additional costs or waste time to obtain a product or service.

In conclusion, customer satisfaction is the result of comparing customers' expectations with their actual experience. It is influenced by factors such as product quality, service quality, emotional satisfaction, price, and cost. Businesses should strive to meet or exceed customer expectations in order to achieve high levels of customer satisfaction.

2.2 Service Quality

Service quality refers to the level of service provided by a company based on customer expectations. It involves meeting customer needs and desires and delivering them in a timely manner to meet customer expectations. Service quality is an important aspect for companies to consider, as it encompasses all the resources a company possesses.

According to Wyckof in Lovelock (1988), service quality is the level of excellence expected and controlled by a company in order to meet customer needs. It is measured by comparing customer perceptions of the service received with their actual expectations. Quality starts with customer needs and ends with customer perceptions, making it crucial for companies to seriously consider service quality (Lupiyoadi, 2013).

Kotler defines service as any action or activity offered by one party to another which is intangible and does not result in ownership. Service is the producer's behavior aimed at meeting consumer needs and desires to achieve customer satisfaction (Kotler, 2002).

Experts in marketing such as Parasuraman, Zeithalm, and Berry (1990) have conducted various studies on different types of services and identified 10 factors that influence service quality, known as service quality dimensions. These dimensions include:

1. Reliability: Consistency and dependability of service performance.
2. Responsiveness: Willingness of employees to provide needed service.
3. Tangibles: Physical evidence of the service, such as facilities, equipment, and physical representation.
4. Security: Safety from harm, risk, or doubt, including physical, financial, and confidentiality aspects.
5. Credibility: Honesty and trustworthiness, including company reputation, personal characteristics, and customer interactions.
6. Communication: Providing information in a language customers can understand and actively listening to customer

This research aims to investigate the impact of various factors on customer satisfaction in the banking industry. The factors examined include compliance, assurance, reliability, tangibles, empathy, and responsiveness.

2.3 Hypothesis

The first hypothesis suggests that compliance, which refers to the ability to operate in accordance with Islamic principles and banking laws, significantly influences customer satisfaction. Previous research supports this hypothesis, indicating a positive relationship between compliance and customer satisfaction.

The second hypothesis focuses on assurance, which involves the knowledge, politeness, and ability of employees to instill trust in customers. The research suggests that assurance does not have a significant impact on customer satisfaction. However, it is important to note that this finding contradicts other studies that have found a positive relationship between assurance and customer satisfaction.

The third hypothesis examines the influence of reliability, which refers to the ability to deliver promised services accurately and dependably. The research indicates that reliability significantly affects customer satisfaction, based on previous findings that highlight the positive relationship between sharia reliability and customer satisfaction.

The fourth hypothesis investigates the impact of tangibles, which include physical aspects such as office appearance, facilities, and efficient transactions. The research supports the hypothesis that tangibles have a significant positive influence on customer satisfaction.

The fifth hypothesis focuses on empathy, which involves the personal care and attention provided by employees to customers. Previous research suggests that empathy has a significant positive impact on customer satisfaction, particularly in the context of ATM services provided by banks.

The sixth and final hypothesis examines responsiveness, which refers to the willingness to assist customers, provide prompt service, and offer clear information. The research supports the hypothesis that responsiveness significantly influences customer satisfaction based on previous findings indicating a positive relationship between responsiveness and customer satisfaction in the banking industry.

Overall, this research provides valuable insights into the factors that impact customer satisfaction in the banking industry. It highlights the importance of compliance, reliability, tangibles, empathy, and responsiveness in enhancing customer satisfaction. However, the findings regarding assurance warrant further investigation due to the contradictory results.

2.4 Framework Research

This passage discusses the framework for a research study evaluating the quality of services provided by Bank Syariah Indonesia to the people of Karanganyar Regency. The framework aims to identify the extent to which the bank's services adhere to six dimensions of service quality: sharia compliance, assurance, reliability, tangible, empathy, and responsiveness.

The first dimension, sharia compliance, evaluates the bank's adherence to Islamic principles in its operations, including financial principles and other regulations related to customer fund management. The second dimension, assurance, measures customer trust in the bank, considering factors such as reliability, integrity, staff competence, and transparency in operational processes.

The third dimension, reliability, assesses the availability and dependability of the bank's products and services, including the availability of ATMs, reliable online banking systems, and the alignment between promises and performance. The fourth dimension, tangible, considers the physical and material aspects of Bank Syariah Indonesia's services, including the quality of buildings and physical facilities, product appearance, and cleanliness and tidiness of service areas.

The fifth dimension, empathy, evaluates the bank's ability to show empathy and concern for its customers, including staff's ability to understand and respond to customer needs and provide support in a friendly and caring manner. The sixth dimension, responsiveness, measures the bank's speed and skill in responding to customer needs and requests, including response time to inquiries and complaints, problem-solving abilities, and flexibility in meeting specific customer demands.

The research will utilize the Structural Equation Modeling method with the Partial Least Squares (SemPLS) approach to examine the influence of these six dimensions on customer satisfaction. The study aims to provide insights into the quality of services provided by Bank Syariah Indonesia to its customers in Karanganyar Regency. The findings can be valuable input for the bank to improve its services and enhance overall customer satisfaction.

3. Methodology

3.1 Research Design

This research design is explanatory research, according to Sugiyono (2018). Explanatory research is a type of research that explains the causal relationship (cause-effect) between variables that influence it (Ayun & Suryoko, 2020). The cause-effect relationship in this study is the relationship between the influence of the CARTER Service Quality model on the satisfaction of customers of Bank Syariah Indonesia.

The type of research in this study is quantitative research. Quantitative research is systematic scientific research on a part and a phenomenon that is happening and the relationships to the phenomenon. Quantitative research aims to develop and use mathematical models, theories, and hypotheses related to the phenomenon that is occurring.

Quantitative research, as stated by Sugiyono (2018), is defined as research based on the positivism philosophy, used to study a specific population or sample, data collection using research instruments, and quantitative/statistical data analysis, with the aim of describing and testing predetermined hypotheses.

3.2. Operational Definition and Variable Measurement
An operational definition is a definition based on observed characteristics of the defined object, and the measurable characteristics are the key to operational definition (Nursalam, 2017). The variables in this study consist of independent variables and dependent variables. The independent variable (X) is service quality, which consists of 6 dimensions: Compliance, Assurance, Reliability, Tangible, Empathy, and Responsiveness. The dependent variable (Y) is customer satisfaction. These variables will be developed into several indicators. In conducting the research, the researcher uses a Likert scale, which is useful for measuring attitudes, opinions, influences, as well as perceptions about social phenomena (Sugiyono, 2009).

3.2.1. Independent Variable
The independent variable in this study is the quality of service of the CARTER model, which has 6 dimensions or indicators to measure the quality of service in Islamic banking (Othman & Owen, 2001).

3.2.1.1. Sharia Compliance
Sharia compliance is the ability to adhere to Islamic law and operate based on the principles of Islamic economics and banking. It assesses the ability of Islamic banking institutions in Indonesia to implement Sharia or Islamic principles in their business operations. The indicators used for this variable are as follows:

- Islamic banks in Indonesia provide services based on the principle of mutual assistance.
- Opening a savings account in an Islamic bank in Indonesia is free of charge.
- Opening a savings account in an Islamic bank in Indonesia is free from ambiguous elements (gharar).
- Opening a savings account in an Islamic bank in Indonesia is free from speculation (maysir).

The researcher measures these statements using a 5-point Likert scale, ranging from strongly disagree to strongly agree.

3.2.1.2. Sharia Assurance
Sharia assurance refers to the knowledge and politeness of employees, as well as their ability to instill customer trust in the company. It assesses the ability of Indonesian Islamic banking employees to build confidence and trust with their customers. The indicators in this dimension are as follows:

- Customers can trust employees of Bank Syariah Indonesia.
- Employees of Bank Syariah Indonesia have a friendly attitude.
- Bank Syariah Indonesia can guarantee the security of customer funds.
- Bank Syariah Indonesia can ensure the confidentiality of customer data.

The researcher used 4 statements for measurement, which were assessed using a 5-point Likert scale ranging from strongly disagree to strongly agree.

3.2.1.3. Sharia Reliability
Sharia reliability is the ability to provide services as promised accurately and reliably so that customers will perceive that the performance of the bank is guaranteed and trustworthy, precise, and provides convenience for its customers. It assesses the ability of Islamic banking in Indonesia to provide accurate services to its customers. The indicators used for this variable are:

- Indonesian Islamic banks provide a wide range of service products.
- Employees of Indonesian Islamic banks understand the needs of customers.
- Employees of Indonesian Islamic banks provide clear information.
- Employees of Indonesian Islamic banks provide accurate services.

The researcher uses 4 statements for measurement. The statements are measured using a 5-point Likert scale ranging from strongly disagree to strongly agree.

3.2.1.4. Sharia Tangible

Sharia tangible refers to the physical appearance, equipment, personnel, and communication materials of a company, as well as its ability to demonstrate its existence to external parties. The assessment of customers towards the ability of Indonesian Islamic banks to provide excellent appearances of physical facilities, staff, and equipment. The indicators in this variable are as follows:

- Bank Syariah Indonesia provides good service facilities.
- Employees of Bank Syariah Indonesia have a neat appearance.
- Bank Syariah Indonesia uses queue machines money counting machines with modern equipment.
- The location of Bank Syariah Indonesia is strategically positioned for easy access.

The researcher uses 4 statements to measure this. The statements are measured using a 5-point Likert scale, ranging from strongly disagree to strongly agree.

3.2.1.5. Sharia Empathy

Sharia empathy is the willingness to care and provide personal attention to customers. It assesses the perception of Indonesian Islamic banking's ability to build excellent relationships with its customers. The indicators used in this variable are:

- Employees of Indonesian Islamic banks do not differentiate their services to all customers.
- Employees of Indonesian Islamic banks serve customers with a sense of family.
- Employees of Indonesian Islamic banks pay good attention to customers.
- Employees of Indonesian Islamic banks are able to handle complaints regarding their services.

The researcher measures these statements using a 5-point Likert scale, ranging from strongly disagree to strongly agree.

3.2.1.6. Sharia Responsiveness

Sharia responsiveness is the ability to assist customers and provide services quickly, along with clear information. It assesses the ability of Indonesian Islamic banks to provide fast service to their customers. The indicators for this variable are as follows:

- Employees of Bank Syariah Indonesia are responsive in serving customers.
- Employees of Bank Syariah Indonesia are responsive in responding to customer requests.
- Bank Syariah Indonesia always opens on time.
- Bank Syariah Indonesia's call center is easily reachable.

The researcher used 4 statements to measure this. The statements were measured using a 5-point Likert scale, ranging from strongly disagree to strongly agree.

3.2.2. Dependent Variable

The dependent variable in this study is customer satisfaction. Customer satisfaction is a comparison made by a customer based on their expectations and the performance they directly experience (Kotler & Armstrong, 2012). Indicators were used to assess the Complaint and Suggestion System and customer satisfaction survey. The indicators used in this variable are:

- I feel satisfied with the services provided by Bank Syariah Indonesia.
- I use Bank Syariah Indonesia because the services provided meet my expectations.
- I am satisfied with the facilities provided by Bank Syariah Indonesia.
- I have never complained about the services provided by Bank Syariah Indonesia.
- I will conduct transactions at this bank again in the future.
- I will recommend this bank to others.

The researcher used 4 statements. The statements were measured using a 5-point Likert scale ranging from strongly disagree to strongly agree.

3.3. Data and Data Resources
3.3.1. Primary Data
The data used in this research is primary data. Primary data is data obtained or collected by the researcher or the person conducting the research (Sugiyono, 2018).

In this study, primary data or empirical data obtained from the distribution of questionnaires in the Karanganyar District Community were used. The questionnaire used in this study is a closed-ended questionnaire, where the community is provided with questions or statements about the quality of the CARTER service model and customer satisfaction based on indicators through the questionnaire.

3.3.2. Secondary Data
Secondary data refers to data obtained from existing sources. Data is in the form of reports, statistics, and the like (Sugiyono, 2018).

The data used as data sources were obtained through literature studies, internet media, published articles, journals, literature, and others, which, in conclusion, are relevant to the research conducted on the quality of the CARTER service model towards customer satisfaction in Bank Syariah Indonesia.

3.4. Data Collection Method
The method used to collect data in this research is a questionnaire. The data collection technique involves preparing a list of questions or written questions posed to the sample respondents to be studied (Sugiyono, 2018).

Data collection was done by distributing questionnaires to the Karanganyar District Community based on the questions or statements provided through Google Forms. The data obtained were then processed to obtain results and analysis for drawing research conclusions. This research analyzes the extent of the influence of the CARTER Service Model Quality, which we refer to as variable X, on Customer Satisfaction in Bank Syariah Indonesia, which is variable Y mediated by awareness.

3.5. Population and Sample
3.5.1. Population
The population is a generalization area consisting of objects/subjects that have certain quantities and characteristics determined by the researcher to be studied, and then conclusions are drawn. Population is used to refer to all elements/members of an area that are the subject of research or the entire research object. Thus, a population can be understood as the entire objects used in the research (Sugiyono, 2018). The population in this research is the community of Karanganyar, Central Java, who are customers of Bank Syariah Indonesia.

3.5.2. Sample
The sample presented in this research represents a part of the total characteristics possessed by the population. Therefore, the sample must be able to represent the population used as information in the research (Sugiyono, 2019). The sampling technique used is a non-probability sampling technique because the population of this research is not yet known for certain. By using the purposive sampling technique, the sample is determined based on certain criteria, namely individuals who are considered experts or most knowledgeable and can provide accurate information to the researcher (Sugiyono, 2016). The targeted sample criteria are individuals in the Karanganyar regency, at least 18 years old, and are or have been customers of Bank Syariah Indonesia. This will provide accurate information regarding the data processing that the researcher will study.

The sampling technique used in this research for the population of the Karanganyar community, according to the criteria mentioned by the researcher, is unknown for certain. Therefore, the Cochran formula is used in this research to determine the research sample (Osman, 2002).

$$n: \frac{Z^2 pq}{e^2}$$

Explanation:
n: Required sample size
Z: Standard value from the normal distribution table Z with a 5% margin of error, with a value of 1.96
p: True probability 50% (0.5)
q: False probability 50% (0.5)

e: Sample error rate 10% (0.1), from a 90% confidence level

$$n: \frac{(1,96)^2 \, (0,5) \, (0,5)}{(0,1)}$$

n: 96.4

Based on the calculation, the number of samples used is rounded to a minimum of 100 respondents.

3.6. Data Analysis Method
The research used multiple linear regression analysis to determine the relationship between independent and dependent variables and predict the dependent variable's value. The analysis approach used was a Structural Equation Model Partial Least Square (SEM-PLS) with SMART PLS software.

3.6.1. Partial Least Square Analysis
The author of this text discusses the use of Partial Least Square (PLS) analysis in data analysis. PLS is a statistical method that is gaining popularity because it does not require normally distributed data and is commonly used in research. PLS-SEM has several advantages, such as its ability to analyze small sample sizes, handle non-normally distributed data, and estimate complex research models with multiple variables and relationships. The software SmartPLS 3 is used for PLS analysis.

3.6.2. Measurement Model (Outer Model)
The measurement model, also known as the outer model, is used to ensure that the measurement used is valid and reliable. It represents the relationship between constructs (variables) and their indicators. There are two types of measurement models used in the analysis, namely, the reflective model and the formative model.

The reflective model, also known as the scale, uses indicators that represent the concept of a variable. All the items in the reflective model are related and have a common basis in forming a construct. On the other hand, the formative model, also known as the index, uses items or indicators that determine the meaning of a construct. The items in the formative model do not have to be related, but they still represent a construct.

In this study, all the constructs used are reflective models. Therefore, the analysis of the outer model with reflective models involves several steps.

Convergent validity is a type of validity test used to assess the extent to which a construct can explain the variance of its indicators or the extent to which positive correlations occur between constructs within a variable. In the context of Partial Least Squares (PLS) analysis, convergent validity can be analyzed by looking at the Average Variance Extracted (AVE) values of each variable. A rule of thumb for measuring convergent validity is that the AVE value should be greater than 0.50.

In simpler terms, convergent validity is a way to check if a measurement tool accurately reflects the concept it is intended to measure. It examines how well different items or indicators related to a specific construct are correlated with each other. The higher the correlation between the indicators, the stronger the convergent validity.

3.6.2.1. Discriminant Validity
Discriminant validity is a form of validity test used to assess the extent to which a construct is truly different from other constructs or measures the uniqueness of a construct and how well it captures phenomena not represented by other constructs. In Partial Least Squares (PLS) analysis, discriminant validity can be analyzed using the Fornell-Larcker criterion and cross loadings of variables. The Fornell-Larcker criterion states that the construct's square root of the average variance extracted should be greater than its correlations with other constructs, indicating discriminant validity. Additionally, the cross loadings of indicators within a construct should be higher than their associations with other constructs, further supporting discriminant validity. These measures help ensure that the construct being studied is distinct from others and accurately captures unique aspects of the phenomenon. Discriminant validity is important in research as it demonstrates the ability of a construct to measure what it intends to measure and distinguishes it from similar constructs.

3.6.2.2 Internal Consistency
Internal consistency is a measure of reliability used to assess the consistency of the results obtained from items in a research questionnaire. In the context of Partial Least Squares (PLS) analysis, internal consistency can be evaluated using composite reliability

and Cronbach's Alpha. Composite reliability ranges from 0 to 1, with higher values indicating greater reliability. For exploratory research, composite reliability values between 0.60 and 0.70 are considered acceptable, while values between 0.70 and 0.90 are deemed satisfactory for advanced research. This means that if the composite reliability value is within the acceptable range, it suggests that the items in the questionnaire are measuring the construct consistently. Researchers use internal consistency analysis to ensure that the items in their questionnaire are reliable and produce consistent results.

3.6.3. Structure Model (Inner Model)
The analysis of the inner model/structural model analysis is conducted to ensure that the built structural model is robust and accurate (Hussein, 2015). When developing the structural model, there are two issues that need to be considered, according to Hair et al., 2014):

a. Sequence of constructs (Variables) means constructing a model based on the theory, logic, or researcher's experience. In this study, there are two constructs that will be analyzed, namely:

      1. CARTER service quality as an exogenous latent variable (independent variable)
      2. Customer satisfaction of Bank Syariah Indonesia as an endogenous latent variable (dependent variable)

b. The relationship between constructs refers to the direction that explains the relationship between the variables to be analyzed. In this study, CARTER service quality as an exogenous latent variable and Customer Satisfaction as an endogenous latent variable (dependent variable) will be analyzed.

The evaluation analysis of the structural model is used to assess the ability of a model to predict a hypothesis and the relationship between constructs (Hair et al., 2014). The main evaluation criteria used to assess the results of PLS calculations are Coefficient of Determination (R2)

The most commonly used measurement for evaluating a structural model is the coefficient of determination. This coefficient is a measure of the predictive accuracy of a model and is calculated as the square of the correlation between the actual values of a construct and its predicted values (Hair et al., 2014). The R2 value ranges between 0 and 1, with higher values approaching 1, indicating a higher level of predictive accuracy.

3.6.4. Hypothesis Testing
In this research, there are two types of hypotheses that will be tested: direct effect hypotheses and indirect effect hypotheses, which involve mediating effects. Direct effect hypotheses consist of hypotheses 1-5, and the indirect effect hypothesis is hypothesis 6. To test the hypotheses in this study, the procedure to be used is Bootstrapping Procedure

The bootstrapping procedure is used to examine the significance of hypotheses and is also used to assess mediation effects in the relationship analysis in PLS-EM (Lim et al., 2017). In the field of marketing, researchers typically use a significance level assumption of 5% (Hair et al., 2014). Therefore, the bootstrapping procedure for two-tailed tests used in this study has a critical value or t-table value of 1.96 at a significance level of 5%. Thus, the acceptance/rejection criteria for hypotheses are that Ha is accepted and H0 is rejected when the t-statistic > 1.96. To reject/accept a hypothesis using probabilities, Ha is accepted if the p-value < 0.05 (Hussein, 2015).

3.6.4. Predictive Relevance
Predictive relevance is a value that indicates how well the observed values are generated. Predictive relevance values can be determined via blindfolding tests. According to experts, if the predictive relevance value obtained through blindfolding tests is above zero (0), it means that the value has good observed value, and if the predictive relevance value obtained through blindfolding tests is below zero (0), it means that the value has poor observed value (Hair et al., 2014).

3.6.5 Model Fit
Model fit, or the accuracy of the model with the data, is a measure of how well the developed model explains the data. In model fit, the value of NFI or the Normed Fit Index can be observed. NFI values range from 0 to 1 and are derived from the comparison between the hypothesized model and a certain independent model. A model has a high fit if the value approaches 1 (Hair et al., 2014).

To meet the criteria for model fit, the SMSR value must be less than 0.05 (Cangur & Ercan, 2015). However, based on explanations from the SMARTPLS website, the constraints or criteria for model fit include Root Mean Square Theta (RMS Theta) < 0.102, Standardized Root Mean Square Residual (SRMR) < 0.10 or < 0.08, and Normed Fit Index (NFI) > 0.9.

4. Research Results and Discussion

4.1. Respondent Description

This research aims to analyze the influence of service quality using the CARTER model on customer satisfaction at Bank Syariah Indonesia. The study utilizes a sample of at least 100 individuals from the Karanganyar regency who are customers of Bank Syariah Indonesia. The gathered sample for this study consists of 144 respondents. The collected respondents are categorized into several groups based on gender, age, highest education level, occupation, and annual income.

4.1.1. Characteristics based on gender

Based on the study conducted on 144 obtained and researched respondents, the results are presented in the following table:

Characteristics Based On Gender		
Gender	Frequency	Percentage
Male	57	39,6
Female	87	60,4
Total	144	100,0

4.1.2. Characteristics based on age

Based on the study conducted on 144 obtained and researched respondents, the results are shown in the following table:

Age Characteristic		
Age	Frequency	Percentage
18-27 old	30	20,8
28-37	38	26,4
38-47	62	43,1
48-57	11	7,6
More Than	3	2,1
Total	144	100,0

4.1.3. Characteristics based on the Highest Education Level

Based on the study conducted on 144 obtained and researched respondents, the results are shown in the following table:

Characteristics Based On The Highest Education Level		
Education Level	Frequency	Percentage
Senior High Scholl	34	23,6
Diploma	21	14,6
Bachelor	74	51,4
Master	15	10,4
Total	144	100,0

4.1.4. Characteristics Based on Occupation

Based on the study conducted on 144 obtained and researched respondents, the results are shown in the following table:

Occupation Characteristic

Occupation	Frequency	Percentage
Student/Graduated Student	1	0,7
Entrepreneur	8	5,6
Private Sector Employee	45	31,3
Public Sector Employee	18	12,5
Others	72	50,0
Total	144	100,0

4.1.5. Characteristics Based on Annual Income

Based on the study conducted on 144 obtained and researched respondents, the results are shown in the following table:

Annual Income Characteristic

		Frequency	Percent
Valid	<81 Million (Less Than)	136	94.4
	>81 Million (More Than)	8	5.6
	Total	144	100,0

4.2. Partial Least Squares (PLS) Model Scheme

In this research, hypothesis testing was conducted using the Partial Least Squares (PLS) analysis technique with the smartPLS 3.0 software. The following is the schematic representation of the PLS model that was tested:
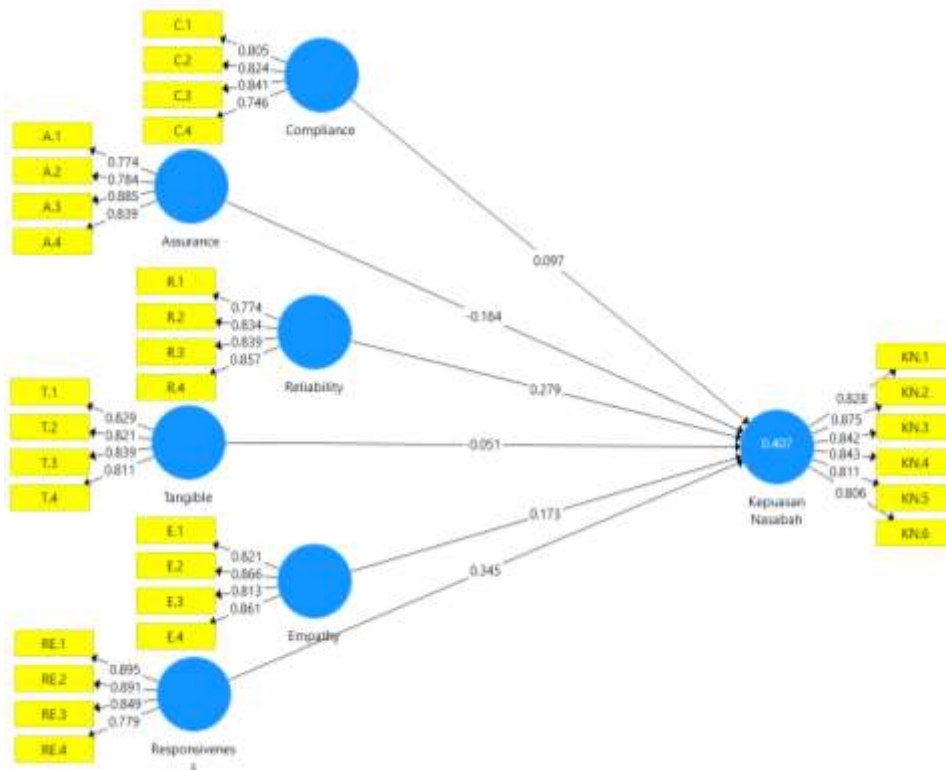
4.3. Outer Model Analysis
4.3.1. Convergent Validity
Convergent validity testing utilized the values of outer loading or loading factor. An indicator is deemed to meet convergent validity in the good category if it possesses an Average Variance Extracted (AVE) value for each variable. The rule of thumb employed to measure convergent validity is an AVE value > 0.50 (Hair et al., 2014). The following are the outer loading values for each indicator in the research variables:

Table 4.6. Average Variance Extracted Value

Average Variance Extracted (AVE)	
Assurance	0,675
Compliance	0,648
Empathy	0,707
Service Excelence	0,696
Reliability	0,683
Responsiveness	0,731
Tangible	0,681

4.3.2. Discriminant Validity
Discriminant validity testing is a validity assessment to evaluate the extent to which a construct is truly distinct from other constructs or measures the uniqueness of a construct and how it captures phenomena not represented by other constructs. Analyzing discriminant validity in PLS can be observed through the values of the Fornell-Larcker Criterion and the cross-loadings of each variable. The rule of thumb used to measure discriminant validity is that a construct's Fornell-Larcker Criterion value must be greater than its associations with other constructs, and the cross-loading values of indicators within a construct must be greater than their associations with other indicators.

Table 4.7 *Fornell-Larcker Criterion*

	A	C	E	K N	R	Re	T
Assurance	**0,822**						
Compliance	0,634	**0,805**					
Empathy	0,639	0,516	**0,841**				
Customer Service	0,404	0,434	0,558	**0,834**			
Reliability	0,715	0,661	0,665	0,550	**0,827**		
Responsiveness	0,667	0,565	0,844	0,595	0,706	**0,855**	
Tangible	0,668	0,552	0,729	0,474	0,683	0,765	**0,825**

Table 4.8 *Cross Factor Loading*

	A	C	E	K N	R	Res	T
A.1	**0,774**	0,515	0,540	0,226	0,552	0,532	0,528
A.2	**0,784**	0,459	0,518	0,278	0,591	0,560	0,567
A.3	**0,885**	0,498	0,534	0,377	0,592	0,554	0,568
A.4	**0,839**	0,603	0,529	0,397	0,619	0,558	0,545
C.1	0,437	**0,805**	0,404	0,396	0,550	0,430	0,313
C.2	0,488	**0,824**	0,382	0,335	0,496	0,423	0,438
C.3	0,585	**0,841**	0,468	0,359	0,543	0,501	0,547
C.4	0,547	**0,746**	0,407	0,295	0,542	0,472	0,507
E.1	0,587	0,413	**0,821**	0,343	0,532	0,663	0,603
E.2	0,531	0,408	**0,866**	0,453	0,514	0,650	0,629
E.3	0,507	0,415	**0,813**	0,503	0,549	0,710	0,622
E.4	0,543	0,487	**0,861**	0,534	0,627	0,793	0,600
KN.1	0,405	0,405	0,607	**0,828**	0,533	0,580	0,481
KN.2	0,344	0,375	0,545	**0,875**	0,535	0,571	0,479
KN.3	0,347	0,402	0,433	**0,842**	0,401	0,476	0,415
KN.4	0,297	0,341	0,378	**0,843**	0,420	0,423	0,277
KN.5	0,265	0,279	0,378	**0,811**	0,382	0,426	0,290
KN.6	0,342	0,353	0,383	**0,806**	0,439	0,455	0,375
R.1	0,613	0,523	0,490	0,375	**0,774**	0,543	0,535
R.2	0,669	0,585	0,535	0,405	**0,834**	0,597	0,618
R.3	0,562	0,562	0,547	0,441	**0,839**	0,615	0,568
R.4	0,551	0,530	0,610	0,561	**0,857**	0,585	0,551
RE.1	0,576	0,487	0,769	0,550	0,655	**0,895**	0,701
RE.2	0,613	0,505	0,782	0,586	0,656	**0,891**	0,682
RE.3	0,561	0,454	0,723	0,418	0,522	**0,849**	0,685
RE.4	0,526	0,484	0,597	0,451	0,559	**0,779**	0,544
T.1	0,607	0,580	0,621	0,442	0,693	0,653	**0,829**
T.2	0,498	0,387	0,544	0,330	0,558	0,566	**0,821**
T.3	0,547	0,484	0,639	0,391	0,522	0,710	**0,839**
T.4	0,537	0,343	0,592	0,386	0,463	0,584	**0,811**

Based on the table, it can be seen that the loading factor results for all indicators within each construct have satisfied discriminant validity, as all loading factor values meet the category >0.70 and the cross-loading values of indicators within a construct are greater than their associations with other indicators. This demonstrates that each question item within the research variables has been proven to have a high level of significance and is greater than the standard error. As a result, it can proceed to the next data processing stage.

4.3.3. Internal Consistency

Table 4.9 *Construct Reliability and Validity Value*

	Cronbach's Alpha	rho_A	Composite *Reliability*	Average Variance Extracted (AVE)
Assurance	0,843	0,874	0,892	0,675
Compliance	0,819	0,827	0,880	0,648
Empathy	0,863	0,876	0,906	0,707
Customer Service	0,913	0,923	0,932	0,696
Reliability	0,847	0,869	0,896	0,683
Responsiveness	0,877	0,894	0,915	0,731
Tangible	0,844	0,850	0,895	0,681

Based on the table, all indicators and variables in the study can be considered good, as they have composite reliability values and Cronbach's Alpha values greater than 0.7. All values for each variable are above 0.8. In other words, the results of the reliability test indicate that each variable has a very high level of reliability.

4.5. Indicator Reliability

Indicator reliability represents the amount of variation captured by items (Hair et al., 2014), or in other words; it measures how much the indicators forming a construct have in common. Analyzing indicator reliability in PLS can be observed through the outer loading values of each indicator. The rule of thumb used to measure indicator reliability is an outer loading value > 0.708. However, if the outer loading value is between 0.4 and 0.7 and still meets the specified Average Variance Extracted (AVE) value, it remains valid (Hair et al., 2014).

Table 4.10 *Outer Loading Value*

	A	C	E	K N	R	Res	T
A.1	0,774						
A.2	0,784						
A.3	0,885						
A.4	0,839						
C.1		0,805					
C.2		0,824					
C.3		0,841					
C.4		0,746					
E.1			0,821				
E.2			0,866				
E.3			0,813				
E.4			0,861				
KN.1				0,828			
KN.2				0,875			
KN.3				0,842			
KN.4				0,843			
KN.5				0,811			
KN.6				0,806			
R.1					0,774		
R.2					0,834		
R.3					0,839		
R.4					0,857		
RE.1						0,895	
RE.2						0,891	
RE.3						0,849	
RE.4						0,779	
T.1							0,829
T.2							0,821
T.3							0,839
T.4							0,811

The results of the processing using SmartPLS are presented in the Table. The scores for each indicator of the constructs have met the required indicator reliability criterion, which is higher than 0.7. If the outer loading value is between 0.4 and 0.7 but still meets the specified Average Variance Extracted (AVE) value, it remains valid (Hair et al., 2014). Consequently, the indicators utilized adequately depict each construct or variable that is intended to be measured.

4.4. Inner Model Analysis

The analysis of the inner model or structural model analysis is conducted to ensure that the constructed structural model is robust and accurate (Hussein, 2015). When developing the structural model, two issues need to be considered: first, the sequence of constructs (variables), meaning the construct model is based on theory, logic, or the researcher's experience. Second, the relationships between constructs which explain the direction of the relationships between the variables under analysis (Hair et al., 2014).
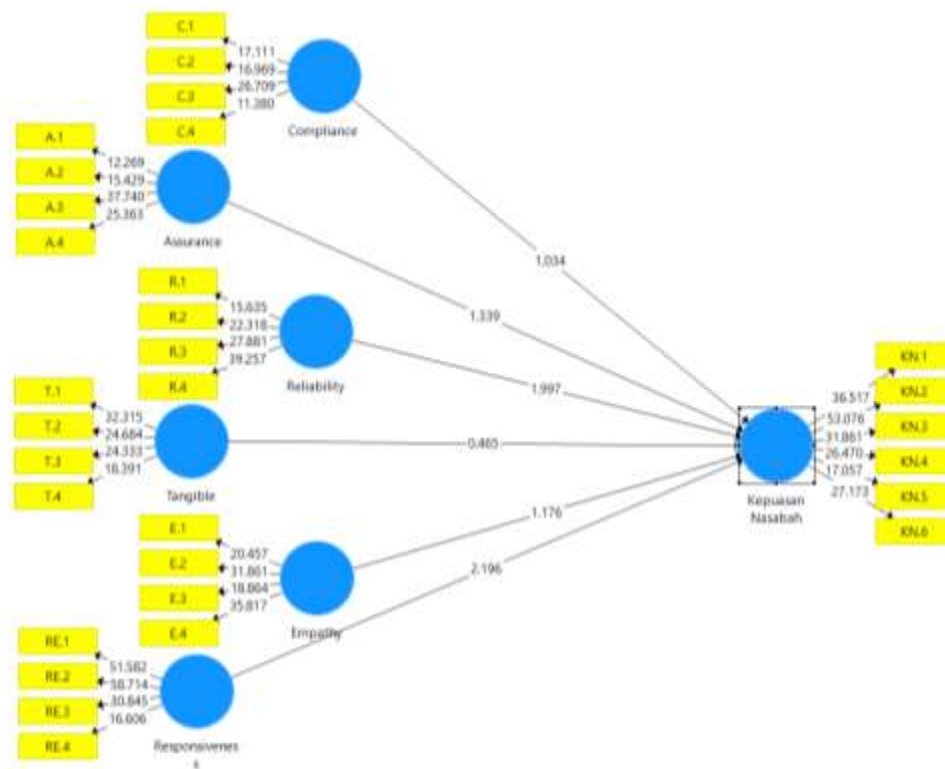
4.4.1. Coefficient of Determination (R2)

The most commonly used measurement for evaluating a structural model is the coefficient of determination. This coefficient is a measure of the predictive accuracy of a model and is calculated as the square of the correlation between the actual value of a construct and its predicted value (Hair et al., 2014). The R2 value ranges from 0 to 1, with higher values approaching 1, indicating higher levels of predictive accuracy.

Table 4.11 *R Square Value*

	R Square	R Square Adjusted
Customer Satisfaction	0,407	0,381

Based on the data presented in the table above, it can be observed that the R-Square value for the Customer Satisfaction variable is 0.407. This value indicates that approximately 40.7% of the variation in customer satisfaction can be explained by service quality, while the remaining 59.3% is explained by other factors.

4.5. Hypothesis Analysis

In this study, there are two types of hypotheses to be tested: direct effect hypotheses and indirect effect hypotheses in the form of mediating influences. The procedure for testing direct effect hypotheses is conducted using bootstrapping. The bootstrapping procedure for two-tailed tests utilized in the research has a critical value or t-table value of 1.96 at a significance level of 5%. Therefore, the criteria for accepting/rejecting hypotheses are as follows :

1). Ha is accepted when the t-statistic > 1.96, and H0 is rejected when the t-statistic < 1.96. To accept/reject a hypothesis using probabilities, Ha is accepted if the p-value < 0.05 (Hussein, 2015).
2). The values of path coefficients range from -1 to 1. If the value falls between 0 and 1, the relationship is positive. If the value falls between 0 and -1, the relationship is negative (Hair et al., 2014).

Table 4.12 *Path Coefficients Direct Effect Value*

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Assurance -> Customer Satisfaction	-0,164	-0,164	0,122	1.339	0,183
Compliance -> Customer Satisfaction	0,097	0,108	0,094	1.034	0,303
Empathy -> Customer Satisfaction	0,173	0,163	0,147	1.176	0,242
Reliability -> Customer Satisfaction	0,279	0,264	0,140	1.997	0,048
Responsiveness -> Customer Satisfaction	0,345	0,351	0,157	2.196	0,030
Tangible -> Customer Satisfaction	-0,051	-0,036	0,110	0,465	0,642

Based on the data analysis conducted, the results can be used to address the hypotheses in this study. The obtained results reveal that out of the six hypotheses proposed in this research, five out of six hypotheses cannot be accepted due to having P-values > 0.05, while only one hypothesis can be accepted as the influence demonstrated has a P-value < 0.05.

H1: Compliance does not have a significant effect on customer satisfaction, as evidenced by the estimation p-value with a significance level of 0.303 above 0.05. This indicates that the first hypothesis, H1, is rejected, and it can be concluded that sharia compliance has an insignificant influence on customer satisfaction.

H2: Assurance does not have a significant effect on customer satisfaction, as indicated by the estimation p-value with a significance level of 0.183 above 0.05. This implies that the second hypothesis, H2, is rejected, and it can be concluded that sharia assurance has an insignificant influence on customer satisfaction.

H3: Reliability significantly affects the Decision to Pay Zakat, evidenced by the coefficient sig = 0.048 < 0.05. Thus, the third hypothesis, H3, which states that Reliability significantly affects Customer Satisfaction in paying zakat, is accepted.

H4: Tangible does not have a significant effect on customer satisfaction, as shown by the estimation p-value with a significance level of 0.642 above 0.05. This indicates that the fourth hypothesis, H4, is rejected, and it can be concluded that tangible has an insignificant influence on customer satisfaction.

H5: Empathy does not have a significant effect on customer satisfaction, as indicated by the estimation p-value with a significance level of 0.242 above 0.05. This implies that the fifth hypothesis, H5, is rejected, and it can be concluded that empathy has an insignificant influence on customer satisfaction.

H6: Responsiveness significantly affects customer satisfaction, as evidenced by the estimation p-value with a coefficient sig = 0.030 < 0.05. This indicates that the sixth hypothesis, H6, which states that Responsiveness significantly affects Customer Satisfaction in paying zakat, is accepted.

In summary, based on the data analysis, it is revealed that only the third and sixth hypotheses are supported by the data, indicating that Reliability and Responsiveness have a significant influence on Customer Satisfaction in paying zakat. The other hypotheses, which involve Compliance, Assurance, Tangible, and Empathy, did not show significant effects on customer satisfaction. These findings provide insights into the factors influencing customer satisfaction in the context of sharia compliance and services in relation to paying zakat.

4.6. Predictive Relevance
Predictive relevance is a value that indicates how well the generated observation values perform. The predictive relevance value can be assessed through blindfolding tests. According to experts, if the predictive relevance value obtained through blindfolding tests is above zero (0), it means that the value has good observation performance. Conversely, if the predictive relevance value obtained through blindfolding tests is below zero (0), it signifies poor observation performance.
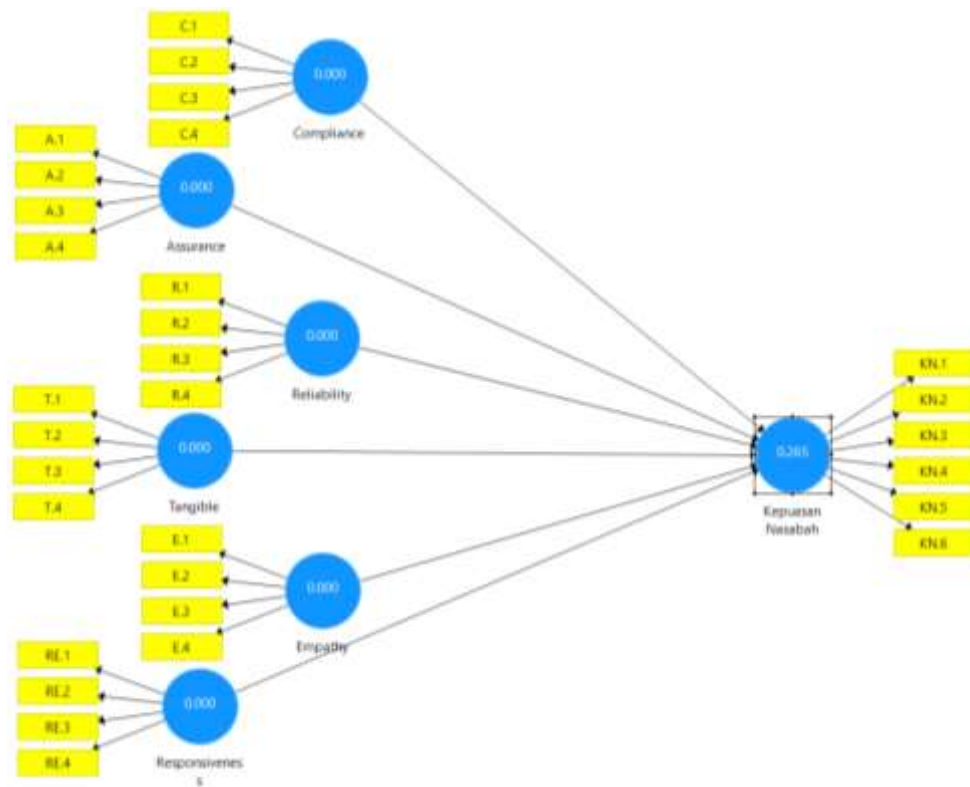
Table 4.13 *Predictive Relevance Value*

	SSO	SSE	Q² (=1-SSE/SSO)
Assurance	576,000	576,000	
Compliance	576,000	576,000	
Empathy	576,000	576,000	
Customer Satisfaction	864,000	634,669	0,265
Reliability	576,000	576,000	
Responsiveness	576,000	576,000	
Tangible	576,000	576,000	

Based on the table above, it is evident that the predictive relevance value assessed through blindfolding tests is above zero (0), specifically at 0.265. This signifies that the predictive relevance value obtained through blindfolding tests demonstrates good observation performance.

4.7. Model Fit
Model fit, or the adequacy of the model with the data, is a measure that indicates how well the developed model can explain the data. In model fit assessment, the Normed Fit Index (NFI) can be observed. The NFI value ranges from 0 to 1 and is derived from the comparison between the hypothesized model and a certain independent model. A model has a high fit if the value approaches 1.

To fulfill the criteria of model fit, the value of the Standardized Mean Square Residual (SMSR) should be less than 0.05 (Cangur & Ercan, 2015). However, based on explanations from the SMARTPLS website, the boundaries or criteria for model fit include Root Mean Square Theta (RMS Theta) value < 0.102, Standardized Root Mean Square Residual (SRMR) value < 0.10 or < 0.08, and NFI value > 0.9.

Table 4.14 *Model Fit Value (Fit Summary)*

	Saturated Model	Estimated Model
SRMR	0,072	0,072
d_ULS	2,390	2,390
d_G	1,119	1,119
Chi-Square	894,891	894,891
NFI	0,738	0,738

Table 4.15 *Model Fit Value (rms Theta)*

rms Theta	0,155

According to the model fit graph above, the value of Root Mean Square Theta (RMS Theta) is 0.155, which is greater than 0.102, and the NFI value is 0.738, which is less than 0.9. Thus, based on these two model evaluations, the criteria for model fit are not met. However, based on the value of Standardized Root Mean Square (SRMR), which is 0.072 and is less than 0.10, the model can be considered to fit the data. Therefore, it can be concluded that the model fits the data.

Based on the table above, the NFI value for this model is 0.738. This means that the research model is 73.8% fit.

5. Discussion
After undergoing the process of testing and analyzing the research results, the next step is to discuss the findings of the study in relation to existing theories and previous research conducted.

5.1. Impact of Compliance on Customer Satisfaction
The results of the testing in this study indicate that Compliance significantly does not influence customer satisfaction. Thus, the first hypothesis suggesting that Compliance affects customer satisfaction is rejected. This finding contrasts with Aldila's (2018) study which found a significant relationship between sharia compliance and customer satisfaction. However, it aligns with Suherman's (2018) study, indicating that sharia compliance's impact on customer satisfaction is not significant. This discrepancy suggests complex variations in understanding the relationship between sharia compliance and customer satisfaction in the context of Islamic banks in Indonesia.

5.2. Impact of Assurance on Customer Satisfaction
The study's testing results indicate that Assurance does not significantly impact customer satisfaction. Consequently, the second hypothesis stating that Assurance affects customer satisfaction is rejected. This result contradicts Nada's (2021) study, which found a significant impact of Assurance on customer satisfaction. However, it aligns with Hasibuan's (2023) and Suherman's (2018) studies, both of which concluded that Assurance does not significantly influence customer satisfaction. This diversity highlights the complexity of understanding Assurance's role in the context of customer satisfaction in Islamic banks.

5.3. Impact of Reliability on Customer Satisfaction
The testing conducted shows that Reliability significantly affects customer satisfaction. Thus, the third hypothesis stating that Reliability influences customer satisfaction is accepted. This result aligns with Suherman's (2018) and Nada's (2021) studies, both of which found a significant relationship between Reliability and customer satisfaction. This consistency suggests that higher levels of reliability provided by Islamic banks lead to increased customer satisfaction.

5.4. Impact of Tangible on Customer Satisfaction
The study's testing results indicate that Tangible does not significantly impact customer satisfaction. Therefore, the fourth hypothesis suggesting that Tangible significantly influences customer satisfaction is rejected. This outcome contradicts Nada's (2021) study but aligns with Suherman's (2018) and Arslan's (2022) studies, both of which found no significant impact of the tangible dimension on customer satisfaction.

5.5. Positive Impact of Empathy on Customer Satisfaction
The testing and data analysis in this study show that Empathy does not significantly impact customer satisfaction. Thus, the fifth hypothesis stating that Empathy significantly influences customer satisfaction is rejected. This result contradicts Nada's (2021) study and Yilmaz et al.'s (2018) study, both of which found a significant impact of empathy on customer satisfaction. However, it aligns with Hasibuan's (2023) and Suherman's (2018) studies, both of which concluded that Empathy does not significantly impact customer satisfaction.

5.6. Impact of Responsiveness on Customer Satisfaction
The results of this study show that Responsiveness significantly impacts customer satisfaction. Therefore, the sixth hypothesis suggesting that Responsiveness significantly affects customer satisfaction is accepted. This finding aligns with Hasibuan's (2023) and Suherman's (2018) studies, both of which found a significant relationship between Responsiveness and customer satisfaction.

In conclusion, the discussion summarizes the findings and their alignment or disparity with previous research. The complex variations in results emphasize the need for further exploration and understanding of the factors influencing customer satisfaction in the context of Islamic banks in Indonesia. The implications for the banking institutions include enhancing reliability, responsiveness, and understanding the multifaceted nature of customer satisfaction drivers. For researchers, these diverse findings provide insights into the dynamic landscape of customer satisfaction in Islamic banking, contributing to the advancement of knowledge in this area.

6. Conclusion
The results of the study regarding the influence of service quality using the CARTER model on customer satisfaction of Bank Syariah Indonesia have been obtained. Among the six hypotheses proposed by the researchers, only two hypotheses were accepted, while the remaining four were rejected. Several conclusions can be drawn from this study, including :

1. Sharia compliance does not significantly influence customer satisfaction of Bank Syariah Indonesia.
2. Assurance does not significantly influence customer satisfaction of Bank Syariah Indonesia.
3. Reliability significantly influences customer satisfaction of Bank Syariah Indonesia.
4. Tangible does not significantly influence customer satisfaction of Bank Syariah Indonesia.
5. Empathy does not significantly influence customer satisfaction of Bank Syariah Indonesia.
6. Responsiveness significantly influences customer satisfaction of Bank Syariah Indonesia.

7. Limitations of the Study
This research was conducted with maximal effort and adhered to proper procedural processes. However, there are certain limitations to this study, including :

1. The online distribution of questionnaires through Google Forms hindered the researcher from explaining the questionnaire's content in detail to respondents and limited respondents' ability to ask for detailed explanations.
2. This study only focused on the service quality of the CARTER model in relation to customer satisfaction. There are other variables that could be considered, such as trust, awareness, and loyalty.

8. Recommendations
Based on the conclusions above, the researcher offers the following recommendations:

8.1. For Institutions
1. Bank Syariah Indonesia is advised to pay more attention to each variable in the CARTER service quality model, aiming to evoke customer satisfaction. This could lead customers to develop high levels of trust and loyalty toward the bank.
2. Bank Syariah Indonesia should consider introducing flagship programs and comprehensive approaches to enhance customer satisfaction.

8.2. For Future Researchers

1. Future researchers are encouraged to conduct in-depth studies to explore other factors influencing customer satisfaction, such as product quality and brand image.
2. Subsequent researchers are advised to gain comprehensive understanding of similar studies to validate or clarify current research findings.
3. Since this study's sample was drawn from the Karanganyar community, future researchers should consider expanding the sample to include more diverse respondent data.

In conclusion, this section summarizes the study's findings limitations and offers recommendations for both institutions and future researchers to enhance the understanding and management of service quality and customer satisfaction in the context of Bank Syariah Indonesia.

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References

[1] Abdullah, M. M. (2006). *Hukum Perbankan dan Perkembangan Bank Syariah di Indonesia.* Banjarmasin: Antasari Press.
[2] Aldila, S. A. (2018). Analisis Kualitas Pelayanan Terhadap Kepuasan Nasabah Menggunakan Model Leuwiliang Bogor. *Jurnal Ekonomi Syariah*, *04*(02), 53–72.
[3] Andriyani, M., & Ardianto, R. E. (2020). Pengaruh Kualitas Layanan dan Kualitas Produk Terhadap Kepuasan Nasabah Bank. *Jurnal Ekonomi Manajemen Bisnis.*
[4] Arslan, R. (2022). Analisis Pengaruh Kualitas Pelayanan Terhadap Kepuasan Nasabah Bank Syariah Indonesia. *Jurnal Maneksi* 11(2). 465-470,
[5] Ayun, Q., & Suryoko, S. (2020). Pengaruh Kualitas Produk Dan Harga Terhadap Loyalitas Mitra Melalui Kepuasan Mitra (Studi Pada Mitra Leker Joker Corporation di Yogyakarta). *Jurnal Ilmu Administrasi Bisnis*, *9*(1), 343–350,
[6] Azidni R, Vydika H, Addinata, D. N. S. (2021). Pengaruh kualitas pelayanan terhadap loyalitas dengan kepercayaan dan kepuasan sebagai variabel mediator bank syariah di ponorogo. *Etihad: Journal of Islamic Banking and Finance*, *1*(1), 1–11.
[7] CNBC, I. (2023). *BSI Diserang Ransomware, Nasib Uang Nasabah Gimana?* CNBC Indonesia. https://www.cnbcindonesia.com/tech/20230510174928-37-436279/bsi-diserang-ransomware-nasib-uang-nasabah-gimana
[8] F Hidayat, K. E. . P. (2022). Pengaruh Kepercayaan Merek dan Kualitas Pelayanan Terhadap Kepuasan Nasabah Cicil Emas Pada Bank Syariah Indonesia. *Bisma: Jurnal Manajemen*, *8*(3). http://journal.um-surabaya.ac.id/index.php/JKM/article/view/2203
[9] Fauzi, A. A. (2016). Mengukur pengaruh kualitas layanan model CARTER terhadap kepuasan nasabah perbankan syariah Indonesia. *Journal of Business & Banking*, *6*(2), 301–314. https://doi.org/10,14414/jbb.v6i2.718
[10] Fauzi, A. A., & Suryani, T. (2019). Measuring the effects of service quality by using CARTER model towards customer satisfaction, trust and loyalty in Indonesian Islamic banking. *Journal of Islamic Marketing*, *10*(1), 269–289. https://doi.org/10,1108/JIMA-04-2017-0048
[11] Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, *26*(2), 106–121. https://doi.org/10,1108/EBR-10-2013-0128
[12] Hasan, M. I. (2002). *Pokok-pokok materi metodologi penelitian dan aplikasinya.* Jakarta: Ghalia Indonesia.
[13] Hasibuan, A. F. H. (2023). *Kualitas Pelayanan Model Carter Dan Pengaruhnya Terhadap Kepuasan Nasabah Bank Syariah Indonesia Kota Lhokseumawe Dengan Pendekatan Sem-Pls*. *6*(1), 58–82.
[14] Ismail. (2011). *Perbankan Syariah.* Jakarta: Kencana Prenadamedi Group.
[15] Kotler. (2002). *Manajemen Pemasaran di Indonesia (Analisis Perencanaan, Implementasi, dan Pengendalian).* Jakarta: Salemba Empat.
[16] Kuswati, R., Putro, W. T., Mukharomah, W., & Isa, M. (2021). The Effects of Brand Image on Consumer Loyalty: The Role of Consumer Satisfaction and Brand Trust as Intervening Variables. *Urecol Journal. Part B: Economics and Business*, *1*(2), 58–71. https://doi.org/10,53017/ujeb.91
[17] Lupiyoadi, R. (2013). *Manajemen Pemasaran Jasa.* Jakarta: Salemba Empat.
[18] Margaretha A, S. V. (2022). Pengaruh Kepercayaan Dan Kepuasan Terhadap Loyalitas Nasabah Bank Syariah Indonesia. *Jurnal Istiqro: Jurnal Hukum Islam, Ekonomi Dan Bisnis*, *8*(1).
[19] Muhammad S, N. A. (2022). Consumer's Perceptions of Service Quality in Surakarta's Bus Terminal during New Normal Era. *Journal of Business and Management Studies*, *4*(4), 120–132. https://doi.org/10,32996/jbms
[20] Nada, Z. (2021). *Analisis Kualitas Pelayanan Dengan Model Carter Dan Pengaruhnya Terhadap Kepuasan Nasabah Bank Syariah Mandiri (Studi Kasus Wilayah DKI Jakarta)*. Universitas Islam Negeri Syarif Hidayatullah Jakarta.
[21] Nadya A, Apritama, I. S. (2023). Analisis Pengaruh Brand Image, Customer Service, Dan E-Wom Terhadap Repurchase Intention Dengan Kepuasan Pelanggan Sebagai Variabel Mediasi. *Jurnal Media Wahana Ekonomika*, *20*(1), 135–151.
[22] Novitasari, A. E., Wiyadi, W., & Setiawan, I. (2020). Pengaruh Kepuasan terhadap Loyalitas Pasien di Poliklinik Gigi RSUD Kabupaten Karanganyar yang Dimediasi oleh Kepercayaan Pasien. *Proceeding of The URECOL*, hlm. 304-309.
[23] Nursalam. (2017). *Metodologi Penelitian Ilmu Keperawatan: Pendekatan Praktis.* Jakarta: Salemba Medika.
[24] Osman, E. R., & William, G. (2002). *Teknik penarikan sampel/William G. Cochran; Penerjemah, Rudiansyah, Erwin R.* Osman. 9, 9557.
[25] Perdana, R. W., & Fahrullah, A. (2020). Pengaruh Kualitas Pelayanan Islami Terhadap Kepuasan Nasabah Bank Syariah Bukopin Kcp Gresik. *Jurnal Ekonomika dan Bisnis Islam.*
[26] Rachmy, F. S. (2018). Pengaruh Social Media Influencer terhadap Purchase Intention pada merek kosmetik Wardah dengan Brand Image

sebagai Variabel Mediasi. *Skripsi, 10*(1), 279–288.

[27] Setiawan, N., & dkk. (2016). Analisis Hubungan Antara Kepuasan Pelanggan Berdasarkan Kualitas Layanan E-commerce Terhadap Loyalitas Pelanggan dengan Menggunakan Metode Statistik. *Seminar Nasional IENACO, UII.*

[28] Sugiarti, D., & Meilani, A. (2021). Dimensi Carter Kualitas Layanan Bank Syariah Indonesia: Studi Komparatif Sebelum dan Setelah Merger. *Jurnal Ilmiah Ekonomi Islam,* 7(03), 1696–1704.

[29] Sugiyono. (2009). *Metode Penelitian Kuantitatif, Kualitatif dan R&D.* Bandung: Alfabeta.

[30] Sugiyono. (2016). *Metode Penelitian Manajemen. Cet5.* Bandung: Alfabeta.

[31] Sugiyono. (2018). *Statistik Non Parametris Untuk Penelitian.* Bandung: Alfabeta.

[32] Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif dan R & D.* Bandung: Alfabeta.

[33] Suherman, A. (2018). *Analisis Kualitas Pelayanan Dengan Model Carter Dan Pengaruhnya Terhadap Kepuasan Nasabah (Studi Pada PT Bank Aceh Syariah KC Banda Aceh)*. Universitas islam negeri ar-raniry banda aceh.

[34] Sulhan dan E S. (2008). *Manajemen Bank: Konvensional dan Syariah.* Malang: UIN Malang Press.

[35] Susanto, B. (2008). *Hukum Perbankan Syariah di Indonesia.* Yogyakarta: UII Press.

[36] Yilmaz, V., Ari, E., & Gürbüz, H. (2018). Investigating the Relationship between Service Quality Dimensions, Customer Satisfaction and Loyalty in the Turkish banking sector: An Application of the Structural Equation Model. *International Journal of Bank Marketing,* 34(1), 1–5

[37] Yulia W As, Ratno A, A. T. (2020). Pengaruh Kualitas Layanan, Nilai Nasabah, Kepercayaan, Dan Kepuasan Terhadap Loyalitas Nasabah Pengguna Layanan Mobile Banking Syariah. *Jurnal Sains Pemasaran Indonesia*, *XIX*(3), 134–158.