

# THE INFLUENCE OF ELECTRONIC SERVICE QUALITY ON DIGITAL BANK APPLICATION

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## ABSTRACT

The advancement of technology and prevalence of smartphones in society influence the transition from offline to online purchases. The ability to carry out financial transactions from anywhere and at any time has become a necessity for the community, and banks have adapted to meet this demand. Customers' expectations for easy, safe, and more personalized services, as well as the ability to evaluate the quality of products and services, have led banks to go digital. This study utilizes two digital banks as research samples, with this digital bank being the one with the greatest number of downloads. However, compared to all other digital banks, these two have relatively lower ratings. This study employs a quantitative methodology and gathers data from 400 participants using an online questionnaire; all respondents had prior experience digital bank application. This study will investigate the factors that influence the loyalty of digital bank application users, as well as the amount to which each component influences the user's loyalty to digital bank applications. This study investigated the factors involved in utilizing the Electronic Service Quality model with variables consisting of ease of use, customer contact, reliability, responsiveness, security/privacy, and application design. This study employed Partial Least Squares Structural Equation Modeling (PLS-SEM), and the SmartPLS program was used to analyze the collected data. All variables except application design have positive and significant influence on customer loyalty. All factors have a positive and significant influence on customer satisfaction. Additionally, the satisfaction determined to have a positive and significant influence on customer loyalty. This research is presumed to assist Digital Bank in enhancing and improving their banking applications and improving their services, so that customer satisfaction and loyalty keep on improving.

**Keywords:** *Banking Industry, Customer Loyalty, Customer Satisfaction, Digital Bank, Electronic Service Quality.*

## 1. INTRODUCTION

As information technology has advanced, the number of Indonesians using cell phones and the internet has increased rapidly. Indonesia's internet users have continued to grow, in early 2022, 73,7% of the Indonesia's population have access to the internet, a 54,25 percent increase from 2018 with the total population of Indonesia in January 2022 is 277,7 million people [1]. Report "Profile Internet Users 2022" released by the Association of Indonesian Internet Service Providers, stated that the connected population in Indonesia is as many as 210.026.769 people in 2021. Based on age, the highest penetration is in a group aged 13-18; as much as 99.16% have connected to the internet. This penetration is caused because the Covid-19 pandemic requires group age following the online

learning process. The group ages 19-34 has a penetration of 98.64%, and the 35-54 group of 87% [2]. The Covid-19 pandemic has also become the main reason for the behavior change. Public orientation from the previous shop in a manner physical becomes online shops using e-money or called with electronic payment. Convenience, for doing financial transactions from anywhere and at any time has become something society needs, and banks need to respond to these needs. Banks need to do digital transformation where expected candidate customers/customers lead to easy, safe, more personalized service, no left behind trend, and convenient for comparing quality products and services. Banking with so-called digital services with digital banking. According to Forbes, a "digital bank" is a business that offers both online and mobile banking services [3].

According to the Indonesian government agency that governs the financial services sector, digital banks are corporate banks under Indonesian law that provide and operate activity effort, particularly through past channel electronic, without office physical besides office centers or with limited use of office physical. Digital banks' services aim to provide their customers with efficient, operational, and high-quality banking services. This digital service consists of self-service activity banking through the bank's digital use facilities as well as through digital media-owned candidates or bank customers. According to the director of the Center for Research on Economics (CORE) in Indonesia, people in Indonesia have gradually transformed into digital, beginning with communication tools and transactions and progressing to digital shopping. So, the bank must follow the digital transformation to follow the trend of changing society by going digital [4]. The Chairman of the OJK Board of Commissioners emphasizes that with the presence of digital banks, the digital economy in Indonesia will become the foremost in the Southeast Asia region in 2025. With the contribution of digital transactions of 124 billion US dollars or equivalent in IDR 1,736 trillion, several factors support Indonesia's potential for developing the digital finance industry [5]. Based on a survey by Finder.com, total digital bank users in Indonesia are projected to increase. In 2021, as many as 25% of Indonesian adults had accounts, with 31%, or 59 million people, expected to reach 39%, or approximately 74 million people, by 2026 [6].

The Financial Services Authority released a digital bank blueprint to assist digital bank companies in growing their businesses in response to the development of digital banks in Indonesia. This plan was developed as an extension of Three pillar of the Indonesian Financial Services Sector Master Plan 2021–2025 and two pillar of the Indonesian Banking Development Roadmap 2020–2025, both of which urge banks to speed up their digital transformation. Establishing a new bank that functions as a digital bank with a minimum core capital of IDR 10 trillion or converting an existing conventional bank into a digital bank are the two options available for establishing a digital bank. The OJK Deputy Director of Basel and International Banking said that several banks in Indonesia have declared themselves fully digital and that there are more banks that will transform themselves to become fully digital. In Indonesia, there are 12 digital banks, five of which have declared

themselves to be digital banks. According to a DailySocail.id poll conducted in 2021, Jenius is the most well-known digital bank among Indonesian customers, followed by Bank Jago, Digibank, NeoBank, Line Bank, PermataME, TMRW, SeaBank, Blu by BCA, and Motion. With over 2,3 million active users, Jenius is the digital banking program with the most users, followed by Jago, Neobank, Digibank, TMRW, and Wise [7].

The growing number of new digital bank companies has a variety of effects on the business, one of which is the intensification competition among digital bank companies. In addition to the new banks that operate digitally, the previous large banks that operate conventionally are also building their digital banks. Digital banks provide users a variety of features and options, allowing them to choose and easily register as customers. In contrast, the registration procedure for traditional banks is typically more complicated than that of digital banks, which is faster and less complicated. For instance, Bank Jenius and Jago's popularity in Indonesia is not directly proportional to their ranking or rating. As evidenced by the Google Play store, the Jenius and Jago have the most downloads but a lower rating than other comparable applications such as Bank Neo, TMWR, BCA Mobile, BriMo, and BNI. Jenius are rated 3.4 out of 5 by users, while Jago banks are rated 3.8 out of 5 [8]. To survive in this business competition, companies need to maintain customer satisfaction and increase customer loyalty so that they remain satisfied using their services and do not move to other banks.

With these considerations, this study will discuss the factors that influence public loyalty to digital bank applications, which are analyzed by users of several digital banks and can later be used as a strategy in competition in the Digital Bank industry in Indonesia. This paper will examine the factors influencing user loyalty to Digital Bank applications and how each factor impacts loyalty from two digital Bank in Indonesia. The method used in this paper is using E-Service Quality Model with variable ease of use, customer contact, reliability, responsiveness, security and privacy, and application design.

Findings from this research about factor affecting the satisfaction and loyalty of digital bank application can be used to help the company to improve their application and keep their user satisfy and loyal.

## 2. LITERATURE REVIEW

In the following sections, a comprehensive examination of the relevant literature pertaining to customer satisfaction and loyalty is presented, providing a thorough understanding of the important concepts and relationships in this research.

### 2.1 Digital Bank

Financial Services Authority that regulates commercial banks stipulate that digital bank are banks with Indonesian legal entities (Bank BHI). Digital Bank provides and carries out business activities primarily through electronic channels without other physical offices other than the head office or with a limited number of physical offices. Digital banks can operate by establishing new BHI banks as digital banks or transforming existing BHI banks into digital banks. Electronic banking services aim to maximize the utilization of customer data to provide services faster and easier, according to customer needs. Customers can carry out their transactions independently while still paying attention to security elements. The Director of Indonesian Banking Architecture said that digital banks do not have special licenses or are different from conventional banks. The difference is only in how they serve the community; the government will keep their licenses the same [9].

The general difference between digital banking, such as e-banking and m-banking, and digital banks lies in the banking services provided [10]. Digital banking, such as mobile and internet banking, is designed for limited customer activities such as transferring funds, checking balances, paying bills, and purchasing vouchers. The customer must arrange other banking activities at the relevant bank branch office. Meanwhile, digital banks offer the same services as traditional banks, including the ability to withdraw money, manage credit, save, and invest funds, open new accounts, manage checks, and report transactions or financial transactions. Digital banks have few or no physical offices, whereas traditional banks that offer digital banking services still maintain many physical locations [11].

### 2.2 E-Service Quality

EServQual, also referred to as E-Service Quality, is the result of further developing the SERVQUAL model Zeithmal, Parasuraman & Malhotra to evaluate the quality of electronic services [12] and used as model for customer assessment of the quality of virtual services [13]. E-Service Quality is also described as the extension of a site's ability to

facilitate shopping, purchasing, and distribution activities effectively and efficiently [14]. E-service quality comprise a transaction from start to finish, including information search, website navigation, ordering process, interaction with customer service, delivery, privacy policy, return policy, and satisfaction with the product used [15] and essential for creating added value in future sales to maintain the company's marketing value in the long term and obtain additional value in the eyes of consumers [16].

E-service quality model found to be applied in various studies [17]–[22] on determining the experience of the customer related satisfaction and loyalty. E-Service Quality contributes to achieving business goals and can be recognized as one of the critical success factors for online service providers, and in this case, the banking industry [23]. This study will use variables developed by Parasuraman, Jane, in which include ease of use, customer contact, reliability, responsiveness, security & privacy, and application design are found to be essential in the determination of e-service quality in the digital bank application.

#### 2.2.1 Ease of Use

Ease of Use. The application should operate with minimal effort. Users can easily find the information they need and present the appropriate information on the application [24]. Several previous studies have shown that Ease of Use has a significant positive effect on customer satisfaction then Ease of Use also is positively influence customer [24]–[26].

#### 2.2.2 Responsiveness

Responsiveness. The eagerness of service providers to respond customers and rapidly improve service quality [13]. Responsiveness measures firms' willingness and capacity to provide quick customer service in response to inquiries or problems [12]. In term of digital bank application, responsiveness is the ability to respond to customer requirement timely and flexibly [27]. Previous research on electronic currency transactions shows that responsiveness positively and significantly affects customer satisfaction [12] and found that responsiveness positively affects customer loyalty [20], [22], [26], [28].

#### 2.2.3 Customer Contact

Customer contact is the capacity of a digital bank application to provide information about available services via telephone media, customer service representatives, and multiple online media.

According to prior research, contact has a substantial and positive effect on customer satisfaction [24] and shows that customer contact as one of the e-service quality variables positively affects loyalty [26].

### 2.2.4 Reliability

Reliability refers to the capacity of digital bank applications to operate rapidly and consistently, and to be accessible whenever the user requires them. Previous research has demonstrated that reliability has a positive and significant effect on customer satisfaction [24] and positively affected loyalty in research on the effect of e- e-service quality on online transaction [12], [19], [20], [22].

### 2.2.5 Reliability

The application should have robust security features that give users confidence when conducting financial transactions and activities. Thus, users will have confidence in the data and transaction security of digital banking applications. Prior research has demonstrated that security has a substantial and positive impact on customer satisfaction and loyalty [24], [29], [30].

### 2.2.6 Application Design

Application Design. The application has an intuitive and aesthetically pleasing user interface. In addition, the application has a consistent interface and exemplary standards throughout. According to previous research on the e-service quality of banking services, application design is one of the variables with the greatest positive impact on customer satisfaction [17], [22], [24].

## 2.3 Customer Satisfaction and Loyalty

Customer loyalty is a type of everlasting relationship between consumers and businesses. Loyalty is demonstrated by repeat purchases based on units of decision-making [31], [32]. A customer must pass through several stages before becoming loyal, including suspects, prospects, disqualified prospects, first-time customers, and repeat customers [31]. Additionally, user loyalty is a consistent and positive attitude toward a brand or business. User loyalty can also be viewed as a determinant of long-term growth and profit margins; customer loyalty can be viewed as part of a company's capital if it is incorporated into its research [33]. Consumer loyalty can be formed through continuous and repeated consumer purchases [34]. There are many studies regarding the types of customer loyalty. In general, there are two types of customer loyalty, namely long-term

customer loyalty and short-term customer loyalty. Long-term customer loyalty means customers will not easily switch to a brand or another company. In contrast, short-term customers quickly switch to another brand or company to get a better equivalent product or service. Customers with a high level of loyalty are highly motivated to promote themselves or a firm to their peers [34].

User satisfaction is experience and achievement through electronic media, considered e-customer satisfaction [12]. Research on the effect of user satisfaction on bank user loyalty states that E-customer satisfaction is a user's assessment of e-transactions compared to conventional transactions. Research investigating the effect of online service quality in the banking industry on the satisfaction and loyalty of user levels at various social levels, suggested that e-service quality is the most influential factor on customer e-satisfaction, which in turn affects loyalty [17]–[22], [25]–[29], [35], [36].

## 3. METHODOLOGY

The model used for this study is depicted in Figure 1. The model was constructed using variables utilizing the e-service quality model developed by Zeithmal, Parasuraman & Molhotra [12] for assessing the quality of e-services by utilizing several variables based on research to examine the quality of e-services. Without focusing on a single service, the research model was created to determine the impact of these factors on satisfaction of the customer, which ultimately influences the loyalty of digital bank application users to the service. This research includes ease of use, customer contact, reliability, responsiveness, security & privacy, and application design as independent variable while customer satisfaction and customer loyalty serve as the dependent variables.

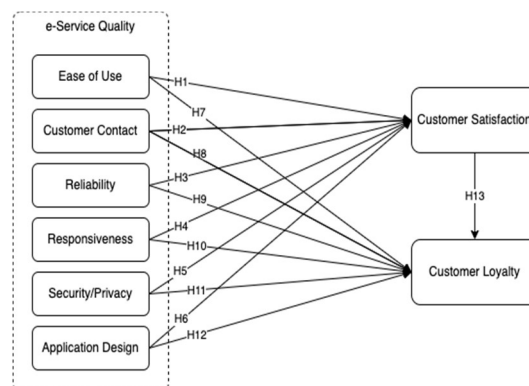


Figure 1: Proposed Research Model

### 3.1 Hypothesis

The hypothesis of the research, as indicated by the model in Figure 1, is presented below:

1. Hypothesis 1: Ease of Use positively influence the Customer Satisfaction.
2. Hypothesis 2: Customer Contact positively influence the Customer Satisfaction.
3. Hypothesis 3: Reliability positively influence the Customer Satisfaction.
4. Hypothesis 4: Responsiveness positively influence the Customer Satisfaction.
5. Hypothesis 5: Security/Privacy positively influence the Customer Satisfaction.
6. Hypothesis 6: Application Design positively influence the Customer Satisfaction.
7. Hypothesis 7: Ease of Use positively influence the Customer Loyalty.
8. Hypothesis 8: Customer Contact positively influence the Customer Loyalty.
9. Hypothesis 9: Reliability positively influence the Customer Loyalty.
10. Hypothesis 10: Responsiveness positively influence the Customer Loyalty.
11. Hypothesis 11: Security/Privacy positively influence the Customer Loyalty.
12. Hypothesis 12: Application Design positively influence the Customer Loyalty.
13. Hypothesis 13: Customer Satisfaction positively influence the Customer Loyalty.

### 3.2 Research Instrument

The data required for this study was collected through online questionnaires, which will be distributed to respondents. Questionnaires will be prepared based on questions, each of which has a Likert scale using five intervals that represent the response of each respondent to the question. 1 (one) will symbolize significant disagreement, while 5 (five) can represent strong agreement.

The questionnaire used for field research contained the two distinct sections listed below:

1. E-Service Quality measurement, comprised the 22 items of EServQual, measuring the following dimensions:
  - Ease of Use: four items.
  - Customer Contact: four items.
  - Reliability: three items.
  - Responsiveness: four items.
  - Security/Privacy: four items.
  - Application Design: three items.
2. Customer Satisfaction and Loyalty, comprised the 8 items to measuring the following dimensions:

- Customer Satisfaction: four items.
- Customer Loyalty: four items.

### 3.3 Sample

The sample population consisted of individuals with prior experience using digital bank e-services. This research uses the Slovin formula to calculate the sample size. According to a calculation utilizing the Slovin calculation formula, total of the respondent was 400. 66 percent of respondents were between the ages of 24 and 35, while 20 percent were between the ages of 35 and 44. This study includes of male and female respondents, with 58% female and 42% male. The sample population in this study is geographically dispersed across Indonesia.

### 3.4 Analysis Method

The data gathered in this research are analyzed using the partial least squares approach. PLS is what's known as a structural equation model (SEM), which is another name for a structural equation model (PLS). A subfield of statistics known as structural equation modelling (SEM) can analyze multiple relationships that are difficult to measure at the same time. In this study, the PLS analysis and modeling software that was utilized was the Smart PLS Application version 3.2. Three distinct sorts of tests will be conducted using PLS: tests to assess validity and reliability, tests to ascertain the path coefficient and coefficient of determination (R-Squared), and tests to determine the t-statistics value.

## 4. RESULT AND DISCUSSION

The subsequent sections will provide a thorough discussion of the results obtained from the tests conducted in this research.

### 4.1 Validity Test

The goal of this data validity test is to verify whether respondents can understand each latent variable statement in the same manner that researchers intended. The validity test consists of 2 types: the convergent validity test and the discriminant validity test. The convergent can be carried out in several ways, such as by looking at the loading factor value on each indicator with a value of  $\geq 0.7$  [37] or looking at the Average Variance Extracted (AVE) value in each variable with a value that must be  $\geq 0.5$  [37]. The discriminant validity test can be done in several ways, including the Fornell-Larcker Criterion and Cross Loading tests.



Table 1: Loading of The Loading Value of Indicator Factors and AVE Parameters.

Variable	Items	Loadings	AVE
Application Design (AD)	AD1	0,781	0,690
	AD2	0,836	
	AD3	0,872	
Customer Satisfaction (CS)	CS1	0,806	0,698
	CS2	0,843	
	CS3	0,857	
Customer Contact (CT)	CT1	0,883	0,779
	CT2	0,882	
Ease of Use (EU)	EU1	0,810	0,713
	EU2	0,864	
	EU3	0,857	
Customer Loyalty (CL)	CL1	0,841	0,760
	CL2	0,886	
	CL3	0,887	
Reliability (RB)	RB1	0,740	0,641
	RB2	0,817	
	RB3	0,842	
Responsiveness (RS)	RS1	0,775	0,676
	RS2	0,849	
	RS3	0,840	
Security/Privacy (SP)	SP1	0,815	0,760
	SP2	0,817	
	SP3	0,879	
	SP4	0,887	

**Error! Reference source not found.** displays the results of the validity test conducted using Smart PLS Application version 3.2, which were determined based on the loading factor value and Average Variance Extracted (AVE) value of all variables and indicators. The findings of the study suggest that all indicators for each variable have a loading factor greater than 0.70; hence, all indicators are included in the analysis, and none are excluded from the model. Furthermore, the average extracted (AVE) value of all variables exceeds 0.5, suggesting that all variables are valid.

#### 4.2 Reliability Test

Reliability test measures the consistency of a questionnaire as a tool for detecting changes or structures. A questionnaire is considered credible if the responses given by respondents to the statements requested are generally consistent [37]. The reliability test includes two types: Cronbach's alpha, with an expected value of  $> 0.6$  for all constructs, and composite reliability, with composite reliability value  $> 0.7$  [37].

The findings of the validity test, which were conducted using the Smart PLS Application version 3.2 and based on Cronbach's alpha and the total reliability score of all variables and indicators, are shown below.

Table 2: Composite Reliability Parameters and Cronbach's alpha

Variable	Cronbach's	Composite Reliability
Application Design (AD)	0,774	0,869
Customer Satisfaction (CS)	0,784	0,874
Customer Contact (CT)	0,716	0,867
Ease of Use (EU)	0,798	0,881
Customer Loyalty (CL)	0,842	0,905
Reliability (RB)	0,718	0,842
Responsiveness (RS)	0,759	0,862
Security/Privacy (SP)	0,871	0,912

According to the findings of the research, which are detailed in Table 2, All variables possess a Cronbach's alpha value exceeding 0.6 and a composite reliability value exceeding 0.7. Hence, it can be concluded that the variables are consistent and reliable.

#### 4.3 Path Coefficient Analysis

The findings of the validity test, which were conducted using the Smart PLS Application version 3.2 and based on Cronbach's alpha and the total reliability score of all variables and indicators, are shown below.

Table 3: R-Square Value on Dependent Variable

Variable	R-Square
Customer Satisfaction (CS)	0,846
Customer Loyalty (CL)	0,835

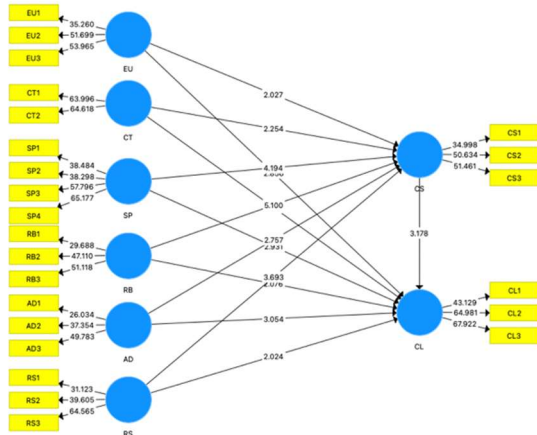


Figure 2: Final Model Output

Based on the R-Squared criteria [37], which stated that R-Square for endogenous latent variable in the structural model for 0.75 is indicated as good, 0.5 is moderate and 0.25 is indicated as weak. According to the findings of the research, which are detailed in Table 3, The R-squared (R<sup>2</sup>) for customer satisfaction is 0,846 and customer loyalty is 0,835. Therefore, both variables have a good R-Square (R<sup>2</sup>) because their respective values are more than 0.75.

Table 4: Path Coefficient Table

Hypothesis	Variable	T Statistics	P Values
H1	Ease of Use → Customer Satisfaction	2,064	0,040
H2	Customer Contact → Customer Satisfaction	2,175	0,030
H3	Reliability → Customer Satisfaction	2,847	0,005
H4	Responsiveness → Customer Satisfaction	5,302	0,000
H5	Security/Privacy → Customer Satisfaction	3,985	0,000
H6	Application Design → Customer Satisfaction	3,556	0,000
H7	Ease of Use → Customer Loyalty	2,719	0,007

H8	Customer Contact → Customer Loyalty	2,896	0,004
H9	Reliability → Customer Loyalty	2,888	0,004
H10	Responsiveness → Customer Loyalty	2,077	0,038
H11	Security/Privacy → Customer Loyalty	2,716	0,007
H12	Application Design → Customer Loyalty	1,915	0,056
H13	Customer Satisfaction → Customer Loyalty	3,318	0,001

The path coefficient is utilized to determine the significance of the relationship between latent variables and the Smart PLS bootstrapping procedure provide a t-statistic value, which the Smart PLS Application provides as a p-value. A comparison will be made between the t-statistic value and the t-table. The correlated variable is considered to have a significant influence when the t-statistic value is greater than the t-table or when the p-value is less than 0.05. The T-table reference value of 1.96 is used with a confidence level of 95% (= 5%). When the path coefficient is positive, it means that the associated variables have a positive impact, whereas a negative coefficient indicates a negative impact.

#### 4.4 Discussion

Below is a detailed explanation of each hypothesis based on the findings of the bootstrapping technique analysis of hypothesis testing shown in Table 4.

The findings from tests performed on hypothesis 1 indicate that usability is positively influence customer satisfaction among Digital Bank application users. From this instance, the relationship between the independent variable and the dependent variable is directly proportional, indicating that the higher the quality of the application usability, the greater the user satisfaction with digital bank applications. Similarly, hypothesis 7 demonstrates that user loyalty will increase proportionally to the level of application usability.

The results of testing hypotheses 1 and 7 are consistent with previous research [17], [18], [26], [38] indicating that ease of use positively influences the customer satisfaction and loyalty of customers.

The findings from tests performed on hypothesis 2, customer contact is positively influence customer satisfaction among Digital Bank application users. In this instance, the effect of the independent variable on the dependent variable is directly proportional, indicating that the greater the quality of the application's contact service, the greater the user satisfaction with digital bank applications. Similar to hypothesis 8, which suggests that user loyalty will increase proportionally to the quality of the application's contact service when the application is being used. Several studies [24], [26] have demonstrated that customer contact positively influences the customer satisfaction and loyalty of customers.

The findings from tests performed on hypothesis 3, reliability is positively influence customer satisfaction among Digital Bank application users. In this instance, the effect of the independent variable on the dependent variable is directly proportional, indicating that the greater the application reliability, the higher the user satisfaction with digital bank applications. Similarly, Hypothesis 9 suggests that user loyalty will increase proportionally to the reliability of an application. The results of testing hypotheses 3 and 9 are consistent with previous research [17], [20], [22], [26] suggesting that reliability positively influences the customer satisfaction and loyalty of customers.

The findings from tests performed on hypothesis 4, responsiveness is positively influence customer satisfaction among Digital Bank application users. In this instance, the effect of the independent variable on the dependent variable is directly proportional, indicating that the greater the responsiveness of the application, the greater the user satisfaction with digital bank applications. Similarly, hypothesis 10 demonstrates that increased user loyalty results from improved application responsiveness. The results of testing hypotheses 4 and 10 are consistent with previous research [17], [19], [26] indicating that responsiveness positively influences the customer satisfaction and loyalty of customers.

The findings from tests performed on hypothesis 5, security and privacy have a positive effect on the customer satisfaction of Digital Bank application users. In this instance, the influence of the

independent variable on the dependent variable is directly proportional, indicating that the greater the responsiveness of the application, the higher the user satisfaction with digital bank applications. Similarly, hypothesis 11 demonstrates that the greater the user loyalty, the better the security or privacy application. The results of testing hypotheses 5 and 11 are consistent with previous research [17], [19], [20], [26] indicating that security and privacy positively influences the customer satisfaction and loyalty of customers.

The findings from tests performed on hypothesis 6, application design is positively influence customer satisfaction among Digital Bank application users. In this instance, the influence of the independent variable on the dependent variable is directly proportional, indicating that the greater the responsiveness of the application, the higher the user satisfaction with digital bank applications. The results of testing hypothesis 6 are consistent with the findings previous studies [17], [22], [24], [26]. In regards, it is demonstrated in hypothesis 12 that application design has no significant impact on customer loyalty.

The findings from tests performed on hypothesis 13, customer satisfaction is positively influence customer loyalty among Digital Bank application users. In this instance, the influence of the independent variable on the dependent variable is directly proportional, meaning that the greater the customer satisfaction of the application user, the greater the customer loyalty of the user of the digital bank application. The results of testing Hypothesis 13 are consistent with research [18]–[22], [26], [28], [29] indicating that customer satisfaction positively influences the loyalty of customers.

## 5. CONCLUSION & SUGGESTION

The subsequent sections will provide a thorough conclusion obtained from the tests conducted and suggestion for further research.

### 5.1 Conclusion

The primary objective of this research is to investigate the factors that influence the satisfaction and loyalty of customer when using digital bank applications. This research's model is constructed with variables from e-service quality variable in consideration, with the goal of evaluating e-service quality. The sample consisted of 400 individuals who had previous experience with the services offered by digital bank application providers. The



following categories were designated as the independent variables: user-friendliness, customer contact, dependability, responsiveness, security and privacy, and application design. While the dependent variables were the satisfaction and loyalty of customers.

The studies conclude that each e-service variable quality is a crucial factor in keeping the satisfaction and loyalty of the application users. In this study, reliability, responsiveness, and security/privacy are the most impactful variables with coefficient value. This demonstrates that users of digital bank applications are more satisfied and will remain loyal if the application is available whenever the user needs it, user need to access their funds and conduct transactions without any disruptions or technical issues. Users desire digital bank applications that can load and respond quickly to provide a seamless and efficient user experience for customers. In addition, digital banks must ensure the security of transactions and protect the privacy of those who use digital bank application. This study also concludes that Application design, described in Hypothesis 12 is not positively and significantly affect the digital bank application.

## 5.2 Suggestion

After analyzing the results and discussion of this study, several suggestions have been identified to enhance and complement the findings.

1. Digital Bank company should really focus on delivering a reliable application and ensure the customer about their data is safe and private.
2. Digital Bank must provide proper customer contact services so that clients may reach them in the event of a problem. In addition, because digital banks have limited bank branches, services such as video calls, live chat instead of chat bots, and direct telephone calls can be given.
3. It is also recommended that digital bank applications prioritize user-friendliness, so that users can operate the application with minimal effort and always maintain the application's effectiveness. Because digital banks have very few physical branches, it is also recommended that applications for digital banks could respond to user complaints and resolve problems immediately. According to the findings of this study, digital bank applications should also always pay close attention to their appearance and design. Despite the result of

this study that the design of the digital bank app is not much impacted by the application design, user satisfaction is significantly impacted by the design of the digital bank application.

Suggestions for further research:

1. Suggestion for the further research is first, the model used in this study may overlook some of the variables that can affect user satisfaction and loyalty, therefore it is recommended for the future research to augment the utilization of product variants and rewards to enhance the overall customer experience in satisfaction and loyalty.
2. For further research also recommended to focus on identifying the specific elements of e-service quality that are most impactful and exploring ways to optimize these elements for maximum benefit. This could involve enhancing technical features, improving user experience, or streamlining processes to make them more efficient. By doing so, businesses can ensure that they are providing customers with the highest level of service possible and laying the foundation for a long and fruitful relationship with their users.

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