

# CUSTOMER SATISFACTION TOWARD DIGITAL BANK SERVICES IN INDONESIA

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## Abstract

The proliferation of technological advancements and the widespread adoption of smartphones has significantly impacted the shift from traditional offline transactions to online. The necessity for individuals to conduct financial transactions at their convenience and from any location has prompted banks to adjust their services accordingly. This research employs digital banks in Indonesia as the subjects of investigation, specifically focusing on the digital bank with the highest number of downloads and usage among Indonesian users. This research utilizes a quantitative approach and collects data from a sample of 413 participants by administering an online questionnaire. All participants in the study have prior experience with digital banking applications. This study aims to examine the various elements that impact user satisfaction with digital bank applications and the extent to which each component contributes to users' satisfaction levels. This study examined the many elements associated with utilizing Service Quality, Quality Systems, Security, Performance Expectations, Trust, Design Application, and Bank Image. The present study utilized Partial Least Squares Structural Equation Modeling (PLS-SEM) as the analytical approach, with the data being analyzed using the SmartPLS software application. All variables, except for quality system and security, exhibit a positive and statistically significant impact on satisfaction. Furthermore, these three variables demonstrate a positive and statistically significant influence on brand image. Furthermore, it has been found that satisfaction has a noteworthy and substantial impact on customer satisfaction. This study is anticipated to support Digital Bank in enhancing and optimizing its banking applications and services, fostering continuous improvement in customer satisfaction and brand image.

**Keywords:** Digital Banking, Electronic Banking Services, Customer Satisfaction, Brand Image, Banking Industry.

## 1. INTRODUCTION

The proliferation of information technology has led to a significant surge in the utilization of cell phones and internet services among the Indonesian population. The number of internet users in Indonesia has demonstrated a consistent upward trend. As of early 2022, over 73.7% of the country's population had internet connection. This figure represents a notable rise of 54.25% from 2018. It is worth noting that the total population of Indonesia in January 2022 stood at approximately 277.7 million individuals (*Ada 204,7 Juta Pengguna Internet Di Indonesia Awal 2022*, n.d.). Digital banking makes it easier for people to acquire financial services, manage their finances, and run a business. These technologies allow banks to offer innovative services, including online investing platforms, digital financial tools, and real-time payments. Technology's tremendous advancement in recent decades has changed how people live comfortably. Thus, the previous several decades have seen a major change in banking due to digital technology (Sardana, V., & Singhania, 2018). Over the years, considerable strides have been made in the technology that underpins digital banking. (Cavus & Christina, 2016;

Sardana, V., & Singhania, 2018; Vijai & Anitha, 2020; Vivek Dubey, 2019) Digital banking technology has advanced quickly and will continue to improve. Digital banking technology allows financial firms to tailor services to individual consumers. On-analytics can also help financial organizations understand client behaviour and enhance performance. Services better serve customers.

(MaminiainaAimee, 2019) "Customer satisfaction" refers to factors that affect customer satisfaction and measures used to quantify it. "Customer satisfaction" measures how well a product or service satisfies customers' expectations. Satisfied clients are more likely to stay loyal and suggest a firm, which is crucial to a business's profitability and reputation. Most companies want client satisfaction (Yussoff & Nayan, 2020). According (Sima & Ileana, 2015) "Customer satisfaction" measures how well a product or service satisfies customers' expectations. Satisfied clients are more likely to stay loyal and suggest a firm, which is crucial to a business's profitability and reputation. Most companies want client satisfaction also (Aminuddin et al., 2020) said the company's most devoted customers can build its brand and operations.

Due of the rapid growth of digital banking and the complexity of its client satisfaction factors, academics and financial industry experts are interested in this topic. Indonesian digital banking and consumer satisfaction research abound (Adinugroho & Nugraha, 2021; Indriasari et al., 2019; Luqmansyah & Hati, 2021; Siagian et al., 2021; Vebiana, 2020; Windasari et al., 2022) Because the researchers in this study only recruited respondents from major cities in Indonesia, it was required to expand the number of respondents from other parts of Indonesia. This was done in accordance with digital banks, which can be accessed or used by anyone and anywhere.

The primary reasons for conducting this study are to gain an understanding of the aspects that are most important for customer satisfaction in digital banking, particularly in Indonesia, and to locate a substantial innovation value (to be one of the innovations). The results of this research can be used to provide an explanation for why digital bank services are effective in increasing customer satisfaction, as well as for the components that contribute to digital bank customer satisfaction. Because of this, digital banks may be able to develop better services and initiatives, which will ultimately lead to increased levels of consumer satisfaction. With any luck, this study will be able to contribute to determining the path that future research in the subject of digital bank customer satisfaction should take. This has the potential to shed light on research gaps that need to be filled as well as promising areas for future research.

As a result, the purpose of this research is to provide a more in-depth understanding of the factors that determine the degree to which customers are satisfied when using digital banks. This research will provide actionable counsel that is based on a deep examination of the specific elements that influence customer satisfaction in the usage of digital banks. This information may be used to build strategy. This helps increase the adoption and quality of digital banking. In order to understand what factors influence customer satisfaction in the use of digital banks, it is important for practitioners, this research will provide an understanding of what those factors are.

## 2. LITERATURE REVIEW

In the following parts, a detailed evaluation of the relevant literature pertaining to customer satisfaction and loyalty is offered. This provides a thorough grasp of the main concepts and linkages in this research, which is described in the following sections.

### 2.1 Customer Satisfaction

According (Yussoff & Nayan, 2020) Customer satisfaction is how satisfied customers are with their purchases. It measures a company's product or service's satisfaction with customers. Customer satisfaction can lead to repeat business and beneficial word of mouth. Based on the opinions of (Suchánek et al., 2014) "Customer satisfaction" is how happy or satisfied customers are with their purchases. It measures a company's product or service's satisfaction with customers. Customer satisfaction can lead to repeat business and beneficial word of mouth. Product quality, reliability, value, convenience, and customer service all affect customer satisfaction.

Polls, questionnaires, and other feedback can assess customer satisfaction. Customer satisfaction might vary depending on business sector, product or service, and target population. Businesses must regularly poll customers to gauge their contentment and then address any issues to ensure success.

### 2.2 Service Quality

Digital banks' online and mobile services' quality is measured against client expectations. Information system users receive service quality from customer service and IT professionals. Based on the research that was carried out (Jaiwani et al., 2022) The banking business may improve client satisfaction and behavior by focusing on service quality. To assess e-banking's impact on the banking business, the study investigates consumer satisfaction, behavioral intents, and banking habits.

According to study by (Meer et al., 2022) Service quality expectations strongly influence user satisfaction, hence improving online service quality will boost user contentment. Indonesian research (Aprilia et al., 2022) Both the level of client satisfaction and the likelihood that they will use Islamic banking goods and services are impacted by the quality of the service provided. These findings suggest that an emotional connection between a company and its clientele is one of the most important factors in consumer loyalty.

### 2.3 Security

Digital banking security protects clients' personal and financial data from theft, fraud, and unauthorized access. Digital banks can safeguard client banking transactions, building confidence and loyalty. This study by attempts by (Azzam et al., 2022) the purpose of this study is to investigate the factors that contribute to the broad adoption of electronic banking services in Jordanian commercial banks. It was determined that the most important factor was security. According to research carried out by (Salamin et al., 2022) which aimed to investigate the relationship between the quality of online banking services offered during a pandemic and the level of customer satisfaction experienced by those using those services, It was revealed that

the level of happiness overall clients felt was significantly impacted, in a positive way, by the level of security provided to them. Additional (Kuncoro et al., 2020) research investigates the role that security and privacy play in influencing the intention to continue using M-Banking, which is mediated by trust and user satisfaction. The results reveal that security and privacy are necessary factors in creating the intention to continue using M-Banking. Trust and user satisfaction are also important mediators in this process.

## 2.4 Trust

Customers' trust in their digital bank's ability to preserve their personal and financial information, deliver reliable services, and operate ethically and transparently is called digital bank trust. The study investigated if trust and system quality affect online transaction intentions by (Usino & Metri, 2017) Where exactly in the outcomes of this research does it state that trust has a favorable and considerable influence on the intention to carry out financial transactions online.

And agree with the findings of research carried out by (Geebren et al., 2021), in this particular study, wanted to evaluate customer satisfaction in relation to the use of electronic banking services in cellular networks, particularly in developing countries, and discovered that trust has a significant and favorable impact on the level of consumer satisfaction.

## 2.5 Quality System

The term "quality system" is a term that is used to refer to a set of protocols and regulations that are followed by digital banks in order to ensure the consistency and high-quality of the banking services that they offer to their customers. The overall quality of an information system, in addition to the attributes that describe the system when it is being utilized, is referred to as the system's quality. System quality is also synonymous with user experience. A few examples of the traits that belong to this dimension are information systems that are very responsive, as well as those that are simple to use. It has been noticed that there is a substantial relationship between the quality of online services to consumers, the quality of the online system, the quality of banking service items, the quality of the overall e-banking services, and the level of customer satisfaction in the banking industry (Bavarsad et al., 2015).

Research is being carried out for the objective of elucidating the nature of the connection that exists between various aspects of service quality, the general quality of e-banking services, and the level of contentment experienced by customers. The purpose of this research is to provide an explanation for the connection between these different variables. Also (Lestari et al., 2023) conducted study In this study, to looked how satisfied users were with mobile banking systems, an area where the quality of the user experience is critical to the overall effectiveness of information system design. According to the findings of this research, elements that influence levels of satisfaction include the quality of the system, the quality of the information, and the quality of the service.

The research conducted by (Kumar & Lata, 2021) found that the quality of both the system and the website has a direct and favorable impact on the overall level of happiness experienced by customers, with the quality of the website serving in part as a mediator of this relationship. In the study, a theoretical framework was provided on the relationship between system quality and customer satisfaction.

## **2.6 Application Design**

When discussing digital banking, the term "application design" refers to the visual and interactive design of the mobile application that clients must utilize in order to access financial services. The ability of digital banks to build mobile apps that provide clients with an experience that is both entertaining and individualized eventually leads to higher customer satisfaction and loyalty.

According to the findings of research carried out by (Owuamanam et al., 2022) in which this study presents a model to evaluate the quality of mobile banking e-services while simultaneously investigating the relationship between e-service parameters and customer satisfaction.

According to the findings of this study, factors such as application design, fulfillment, and security all have a substantial impact on a company's ability to keep its customers happy. In addition to this, (Ling et al., 2016) are carrying out research with the purpose of discovering and analyzing the elements that determine the degree to which customers are satisfied with their internet banking experiences.

When everything was said and done, the findings demonstrated that the quality of the website's design and content, as well as its ease of use and speed, were the top three criteria that determined the level of consumer satisfaction with Internet Banking.

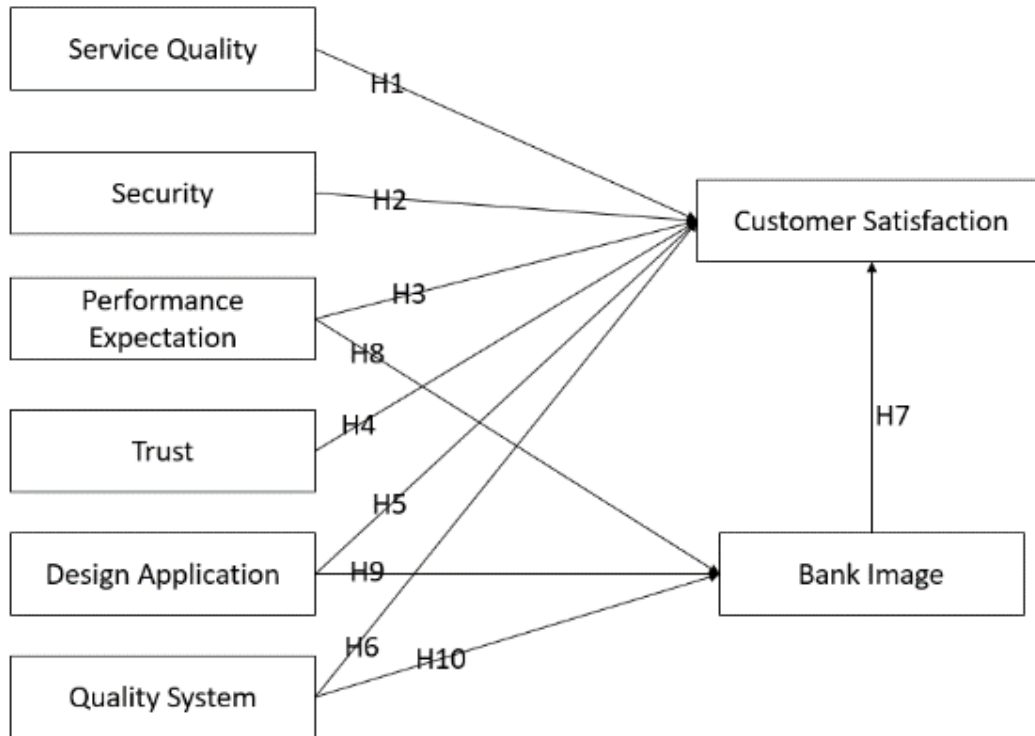
## **2.7 Bank Image**

Digital banking image relates to customers' and the public's opinion of a bank's reputation, brand, and image. Digital banks can build a good reputation, which boosts client satisfaction, loyalty, and brand awareness. Where (Ting & Zhang, 2015) During the course of research into how to design a measuring model that is appropriate for customer satisfaction of online bank information security products and future purchase intents, it was noted that image and service capacity have a positive effect on bank image.

This was one of the findings of the research. This was discovered as a result of the study that was conducted. In particular, it was observed that the potential of commercial banking services to have a bigger influence than brand image on customer satisfaction with online banking information security solutions was identified. This was a finding that was made.

### 3. METHODOLOGY

The model used for this study is depicted in Figure 1.



**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: Service Quality positively affect the Customer Satisfaction.
2. Hypothesis 2: Security positively affect the Customer Satisfaction.
3. Hypothesis 3: Performance Expectation positively affect the Customer Satisfaction.
4. Hypothesis 4: Trust positively affect the Customer Satisfaction.
5. Hypothesis 5: Design Application positively affect the Customer Satisfaction.
6. Hypothesis 6: System Quality positively affect the Customer Satisfaction.
7. Hypothesis 7: Bank Image positively affect the Customer Satisfaction.
8. Hypothesis 8: Performance Expectation positively affect the Bank Image.
9. Hypothesis 9: Application Design positively affect the Bank Image.
10. Hypothesis 10: System Quality positively affect the Bank Image.

### **3.2 Research Instrument**

Online questionnaires distributed to respondents collected this study's data. Each question will include a Likert scale with five intervals to represent each respondent's answer. 1 is strong disagreement, while 5 is strong agreement.

### **3.3 Sample**

The researchers of this study used an analytical method in addition to a descriptive method in order to determine the elements that influence customer satisfaction for digital banks in Indonesia. In order to characterize the research sample and the variables that comprised it, the researchers made use of the descriptive approach. Users of digital banks in Indonesia who both currently reside in Indonesia and have previously made use of digital banks make up the research population. The participants in the study were selected at random from among the 443 customers of digital banks in Indonesia. There were a total of 413 data respondents who fulfilled the requirements of the research, which meant that they were customers of an Indonesian digital bank located in Indonesia. These respondents were included in the total. The remainder of the respondents who did not meet these requirements were not included in the process of analyzing the data. Twenty of these respondents either did not live in Indonesia or did not have any prior experience with digital banks.

### **3.4 Analysis Method**

The information that was collected from the respondents as a result of their completion of the questionnaire was analyzed using SmartPLS version 4. The partial least squares method is used to figure out what the research results mean. A structural equation model (SEM) is another name for a structural equation model (PLS), which is what PLS is. Structured equation modeling (SEM) is a part of statistics that can look at multiple connections that are hard to measure at the same time. This stage includes convergent validity testing, validity testing (AVE), reliability testing, discriminant validity testing, and inner model testing, which includes R-square and path coefficient testing. The final step is testing the hypotheses that have been developed.

## **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 Convergent Validity**

Calculating each latent construct on the Average Variance Extracted (AVE) helps test the variables' convergent validity. AVE stands for "average variance extracted." At least fifty percent of the lowest variance of the observed variable needs to be accounted for by the model's constructs in order to be considered satisfactory. This demonstrates that the average variance extracted (AVE) for each component needs to be greater than 0.5 in order to validate the convergent validity of this research model. These findings offer additional proof that the measurement model contains convergent validity as well as a high degree of internal

consistency (Hair et al., 2011) The vast majority of the computed loading factor values were higher than 0.70, which means that the test can move on to the validity and reliability testing stage. This was determined based on the results of the convergent validity testing.

#### 4.2 Validity Test

Testing for both convergent and divergent validity can be done using AVE. To be considered an ideal model, the AVE value must be larger than 0.50 and greater than the cross loading. This indicates that the factor must be able to explain at least half of the variance associated with each indicator. If the AVE number is less than 0.50, it indicates that the error variance is more than the variance that was described. The results of the validity testing, often known as AVE, are as follows.

**Table 1: Validity Testing**

Variations	Average Variance Extracted (AVE)	Result
Bank Image (BI)	0.809	Valid
App Design (AD)	0.750	Valid
Security (SC)	0.687	Valid
Trust (TS)	0.668	Valid
Customer Satisfaction (CS)	0.691	Valid
Service Quality (SQ)	0.714	Valid
Quality System (QS)	0.748	Valid
Performance Expectation (PE)	0.743	Valid

According to the findings of the validity tests, the average variance extracted (AVE) for each latent variable has a value that is greater than 0.50, which indicates that the indicators that were utilized can be regarded as valid. This demonstrates that the model that was utilized is valid and that it satisfies the standards for validity. It has been determined, on the basis of the outcomes of the AVE test that was presented earlier, that each variable can be considered to be genuine because it has a value that is greater than 0.50; hence, the reliability test can now proceed.

#### 4.3 Reliability Test

During the reliability test, there was an investigation into the overall reliability value that was compiled. A perfect composite reliability value would have a value of 1, while an adequate model would have a value greater than 0.70. The range of possible values for composite reliability is 0 to 1, with 1 representing the ideal value. Because the composite reliability value of all the latent variables in this investigation is greater than 0.70, it is possible to assert that the model that was utilized is reliable. The following is an account of the findings from the study of the reliability tests.



**Table 2: Composite Reliability Testing**

Variances	Composite reliability	Result
Bank Image (BI)	0.894	Reliable
App Design (AD)	0.900	Reliable
Security (SC)	0.868	Reliable
Trust (TS)	0.858	Reliable
Customer Satisfaction (CS)	0.870	Reliable
Service Quality (SQ)	0.882	Reliable
Quality System (QS)	0.899	Reliable
Performance Expectation (PE)	0.897	Reliable

The validity and reliability tests that were performed in the past have shown that the variables that were employed are both valid and reliable.

#### 4.4 Path Coefficient Analysis

The path coefficient is used to characterize the contribution or influence that exists between these variables. The bootstrapping procedure is used to establish the relationship that exists between the construct variables, and it is used to characterize that relationship. In this study, the findings of the path coefficient after bootstrapping are displayed in the table that can be found below.

**Table 3: Path Coefficient Testing**

Hypothesis	T statistics ( O/STDEV )	P values	Result
BI -> CS	2.283	0.022	Accepted
DA -> BI	3.686	0.000	Accepted
DA -> CS	4.177	0.000	Accepted
SC -> CS	0.342	0.732	Not Accepted
TS -> CS	2.785	0.005	Accepted
QS -> CS	0.303	0.762	Not Accepted
SQ -> BI	5.280	0.000	Accepted
SQ -> CS	3.634	0.000	Accepted
PE -> BI	5.226	0.000	Accepted
PE -> CS	2.434	0.015	Accepted

The level of significance of each of these routes can be measured using the t statistics and P values that are present within each of the endogenous to exogenous variables that were employed in this investigation. Therefore, the researcher will move on to the following stage, which involves testing the significant path.

The conclusion that the T-statistic values are more than 1.96 or that the P-values are less than 0.05 is one that can be derived from Table 3, which makes this possibility probable. Both of these conclusions are supported by the evidence. According to the findings of the path coefficient testing, factors such as customer trust, the level of client satisfaction is significantly influenced by a number of factors, including the application design, the quality of the system, and the performance that was anticipated. The image that clients have of the bank is significantly influenced not only by the quality of the system itself, but also by the application design and the performance standards that customers have. Variables that have t-statistics that

are less than 1.96 or P values that are more than 0.05 are regarded as having no influence whatsoever on the image of the bank.

## 5. DISCUSSION

The findings from tests performed on hypothesis 1, The hypothesis that improved service quality will lead to increased levels of satisfied customers was put to the test, and the findings demonstrated that this hypothesis does not valid. According to these findings, there is no substantial association between the quality of service provided and the level of satisfaction experienced by customers. In this scenario, banks are required to take into consideration the feedback provided by consumers in order for the banks to discover what customers expect from digital banks and to make attempts to provide customers with a higher level of service while using digital banks. The level of customer satisfaction will grow when consumers are able to obtain a better sense of the quality of service they receive while utilizing digital banks.

The findings from tests performed on hypothesis 2, According to the findings of the experiment, the hypothesis that Security leads to Customer Satisfaction is not valid. According to these findings, there is no statistically significant connection between the level of security and the level of customer satisfaction. In this scenario, financial institutions are obligated to take into account the feedback provided by consumers in order to better understand customer expectations and to better facilitate customers' feelings of safety when using digital banking services. The degree of customer satisfaction will improve to a greater extent if clients may have a sense of security when opening or utilizing an online bank.

The findings from tests performed on hypothesis 3, According to the findings of the tests, the hypothesis that System quality leads to Customer Satisfaction can be accepted. According to these findings, there is a relationship that has a major impact on the level of customer satisfaction evaluated in terms of the quality of the system, and it is important to note that this impact can be measured. This is because of the quality of the system that is used for the digital bank application, which respondents believe is both responsive and reliable while carrying out transactions within the digital bank application. According to prior research carried out by (Usino & Metri, 2017; Zhou et al., 2021) which shows that the system quality variable has a strong and positive impact on customer satisfaction variables, this is in line with what has been discovered here.

The findings from tests performed on hypothesis 4, the findings of the experiment indicate that the Trust and Customer Satisfaction hypothesis should be adopted. According to these findings, there is a connection between trust and customer pleasure that has a substantial impact on the quality of the relationship. The user's confidence in the safety of the personal information that is utilized to be entered into a trusted digital bank application is a significant factor in this. This is consistent with findings from a previous study carried out by (Geebren et al., 2021; Kidron, 2021; Salehnia et al., 2014; Shahid et al., 2022; Usino & Metri, 2017; Wu et al., 2019) which says that the trust variable has a strong and positive effect on customer satisfaction variables.

The findings from tests performed on hypothesis 5, the findings of the experiment that tested the hypothesis of Application Design with Customer Satisfaction indicate that the hypothesis should be accepted. Based on these findings, there appears to be a connection between the quality of the application's design and a considerable impact on the extent to which consumers feel their needs have been met. This is due to the way in which the program that is utilized in the digital bank application was designed. This application has a look that entices users to always use the digital bank application, therefore the design of the application has an effect on this. This is in line with findings from earlier studies (Ling et al., 2016; Owuamanam et al., 2022), It suggests that the variables related to application design have a significant and beneficial impact on the variables related to customer satisfaction. This finding is consistent with the findings of other studies.

The findings from tests performed on hypothesis 6, As a result of evaluating the hypothesis that performance will meet expectations, it has been determined that customer satisfaction will be accepted. According to these findings, There is a connection that has a significant bearing on the amount of customer satisfaction when measured in terms of the level of expected performance, and this connection exists because this is impacted both by the availability of a digital bank application that offers convenience and boosts productivity in the process of completing banking transactions as well as by the desire of users to make use of the digital bank. According to earlier research carried out by (Butarbutar et al., 2022), which suggests that the expected performance variable has a large and beneficial impact on the desire to use digital banking, which eventually affects customer satisfaction, this is in line with what we have found.

The findings from tests performed on hypothesis 7, the conclusion drawn from the experiment examining the premise that Bank Image leads to Customer Satisfaction is acknowledged. According to these findings, there is a connection between the image of the bank and the degree to what extent clients are happy with the service they are given. This is impacted by the fact that banks that have a good reputation in Indonesia will still be banks that are utilized by Indonesian people, and it is also influenced by the innovation that comes from the bank itself. This corroborates the findings of prior studies carried out by (Butarbutar et al., 2022; Ting & Zhang, 2015), It hints that the image variable of the bank has a significant influence, both positively and negatively, on the customer satisfaction variables. These findings are consistent with the aforementioned findings.

The findings from tests performed on hypothesis 8, the conclusion drawn from the experiment that examined the Expected Performance hypothesis is that the Bank Image may be trusted. Based on these findings, there appears to be a connection that has an impact on how people view the bank in terms of their performance expectations. The image of the bank will improve as a result, because this is influenced by banks that have performance expectations that are in accordance with the expectations that users have.

The findings from tests performed on hypothesis 9, the findings of the experiment to test the premise that Application Design leads to Bank Image have been approved. According to these findings, there is a relationship that has an effect on Bank Image with regard to the design of applications. This is influenced by a digital bank application that has an attractive application

design, more users will want to use it, and this will affect the image of the bank, and the hypothesis 5 results show that application design has a positive effect on customer satisfaction, so when a customer feels satisfied, it will affect the image of a bank. In addition, more users will want to use the application, and this will affect the image of the bank digital too. This is consistent with earlier studies (Shangguan & Yuan, 2019) that have been conducted. Application design can be used to create a sense of the brand's identity in the user on a psychological level. To a certain extent, it is able to exert an influence on the purchasing mindset as well as the purchasing behavior of customers, so producing higher economic benefits for businesses.

The findings from tests performed on hypothesis 10, the findings obtained from putting the hypothesis to the test System quality leads to the acceptance of the bank image. According to these findings, there is a connection that has an impact on how customers perceive the Bank in terms of the quality of its systems. The results of Hypothesis 3 show that the quality of the system has a positive effect on customer satisfaction, which means that when a customer feels satisfied, it will affect the image of a company. This is influenced by a digital bank application that has a good quality system, more users will want to use it, and this will affect the image of the bank. That online banking service as well. According to earlier study carried out by (Rhomadona & Fionita, 2018), The quality of the product or system has a significant impact on the image of the bank, and the degree to which customers are satisfied functions as a connecting variable between the two. This discovery is in line with their findings, which is consistent.

## 6. CONCLUSION

According to the findings of the research that has been carried out, when a consumer uses Bank Digital Indonesia, many factors may have a good influence on the amount of happiness experienced by the consumer. These factors include system quality, trust, application design, expected performance, and bank image. Additionally, several factors positively influence image banks when using Indonesian digital banks. These factors include expected performance, application design, and system quality. The findings of this study are the processing of the data that researchers have obtained from the responses to questionnaires that were either distributed online or directly using the Google form. Respondents answered these questionnaires. Information on the level of any variable that has an influence or no effect on customer satisfaction can be seen as a result of processing the collected data. This includes information on the level of service quality and security. Based on the information collected from a literature review and data analysis from the results of this study, it is known that several elements regarding customer satisfaction still need to be met. Therefore, it is required to do additional research to analyze more deeply the elements that can affect customer satisfaction to help developers understand customer wishes for digital banks that are perfect for customers in Indonesia. Performing this research is necessary because it can help developers understand consumer desires for digital banks that are ideal for use by customers in Indonesia.

## 7. SUGGESTION

After performing research on the elements that influence customer satisfaction with digital banks in Indonesia, one piece of advice that can be provided is to consider re-testing factors that have previously been tried or being able to carry out tests with factors that have never been tested before. Both of these options are available to be tested.

### References

- 1) *Ada 204,7 Juta Pengguna Internet di Indonesia Awal 2022*. (n.d.).
- 2) Adinugroho, I., & Nugraha, S. (2021). The Effect of Differentiation and Positioning Strategies on Customer Satisfaction Using Digital Banking Service at PT. Bank Muamalat KC Mamuju. *PINISI Discretion Review*, 5(1), 89–98.
- 3) Aminuddin, M., Basari, M. D., & Shamsudin, M. F. (2020). Does Customer Satisfaction Matters? *Abrn.Asia*, 2(1), 2710–6918.
- 4) Aprilia, C., Suryani, R., Irma, A. A., & Chayyara, R. (2022). *How Service Quality and Emotional Attachment affect Continuance Intention of Islamic Banking Customers in Indonesia | IEEE Conference Publication | IEEE Xplore*.
- 5) Azzam, Z., Ali, M. W., LShaikh, M., Khanfar, I., & Ismai, A. R. (2022). *Factors Affecting the Use of Electronic Banking Services Provided by Jordanian Commercial Banks from Customers' Point of View. A Case Study: Jordan Ahli Bank in Northern Region/Jordan | IEEE Conference Publication | IEEE Xplore*.
- 6) Bavarsad, B., Azizi, Z., Saghaeian, M., & Hozhabri, A. A. (2015). *Testing the relationship between service quality, overall e-banking service quality and customer satisfaction | IEEE Conference Publication | IEEE Xplore*.
- 7) Butarbutar, N., Lie, D., Bagenda, C., Hendrayani, E., & Sudirman, A. (2022). Analysis of the Effect of Performance Expectancy, Effort Expectancy, and Lifestyle Compatibility on Behavioral Intention QRIS in Indonesia. In *International Journal of Scientific Research and Management* (Vol. 10, Issue 11, pp. 4203–4211). <https://doi.org/10.18535/ijstrm/v10i11.em07>
- 8) Cavus, N., & Christina, D. N. C. (2016). Information technology in the banking sector: Review of mobile banking. *Global Journal of Information Technology*, 5(2), 62. <https://doi.org/10.18844/gjit.v5i2.196>
- 9) Geebren, A., Jabbar, A., & Luo, M. (2021). Examining the role of consumer satisfaction within mobile ecosystems: Evidence from mobile banking services. *Computers in Human Behavior*, 114(September 2020). <https://doi.org/10.1016/j.chb.2020.106584>
- 10) Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152. <https://doi.org/10.2753/MTP1069-6679190202>
- 11) Indriasari, E., Gaol, F. L., & Matsuo, T. (2019). Digital Banking Transformation: Application of Artificial Intelligence and Big Data Analytics for Leveraging Customer Experience in the Indonesia Banking Sector. *Proceedings - 2019 8th International Congress on Advanced Applied Informatics, IIAI-AAI 2019*, 863–868. <https://doi.org/10.1109/IIAI-AAI.2019.00175>
- 12) Jaiwani, M., Gopalkrishnan, S., Mohanty, S. P., & Murthy, N. (2022). Understanding Service Quality, Customer Satisfaction and Banking Behaviour from an E-Banking Perspective: An Empirical Approach. *2022 International Conference on Sustainable Islamic Business and Finance, SIBF 2022*, 12–20. <https://doi.org/10.1109/SIBF56821.2022.9939858>
- 13) Kidron, A. (2021). Investigating trust in the Israeli banking system from the reciprocating perspectives of customers and bankers: a mixed methods study. *International Journal of Bank Marketing*, 39(1), 167–188.

<https://doi.org/10.1108/IJBM-07-2020-0360/FULL/XML>

- 14) Kumar, A., & Lata, S. (2021). The System Quality and Customer Satisfaction with Website Quality as Mediator in Online Purchasing: A Developing Country Perspectives. *Journal of Operations and Strategic Planning*, 4(1), 7–26. <https://doi.org/10.1177/2516600x21991945>
- 15) Kuncoro, E. A., Ridho Bramulya Ikhsan, Kurniawan, Prabowo, H., Sari, R. K., & Yuniarty. (2020). The Role of Security and Privacy For Continuance Intention: Learn From Users of M-Banking Services. *2020 6th International Conference on Computing Engineering and Design (ICCED)*, 21(1), 1–9.
- 16) Lestari, A. P., Fernando, Y., Ikhsan, R. B., & Wahyuni-Td, I. S. (2023). *A Direct Path Modeling of Mobile Banking Systems on User Satisfaction*. 1–4. <https://doi.org/10.1109/ICCED56140.2022.10010693>
- 17) Ling, G. M., Fern, Y. S., Boon, L. K., & Huat, T. S. (2016). Understanding Customer Satisfaction of Internet Banking: A Case Study In Malacca. *Procedia Economics and Finance*, 37(16), 80–85. [https://doi.org/10.1016/s2212-5671\(16\)30096-x](https://doi.org/10.1016/s2212-5671(16)30096-x)
- 18) Luqmansyah, D. J., & Hati, S. R. H. (2021). Customer Experience on Islamic Banking Digital Branch in Indonesia. *Proceedings of the International Conference on Business and Engineering Management (ICONBEM 2021)*, 177, 167–175. <https://doi.org/10.2991/aebmr.k.210522.023>
- 19) MaminiainaAimee, R. (2019). a Thorough Literature Review of Customer Satisfaction Definition, Factors Affecting Customer Satisfaction and Measuring Customer Satisfaction. *International Journal of Advanced Research*, 7(9), 828–843. <https://doi.org/10.21474/ijar01/9733>
- 20) Meer, F., Kumaraswamy, S., & Panigrahi, S. K. (2022). Online Banking Service Quality in Bahrain: An Empirical Analysis. *2022 International Conference on Sustainable Islamic Business and Finance, SIBF 2022*, 21–24. <https://doi.org/10.1109/SIBF56821.2022.9939881>
- 21) Owuamanam, J. N., Abdullah, S., Jusoh, Y. Y., & Pa, N. C. (2022). E-Service Quality Model for Assessing Customer Satisfaction of Mobile Banking Service. *Proceedings - AiIC 2022: 2022 Applied Informatics International Conference: Digital Innovation in Applied Informatics during the Pandemic*, 178–183. <https://doi.org/10.1109/AiIC54368.2022.9914577>
- 22) Rhomadona, & Fionita, I. (2018). The Influence Of Service Quality, Product Quality Toward Brand Image With Customer Satisfaction As Intervening Variable (Case Study at Agency Customers Of PT. Prudential Life Assurance). *International Conference on Information Technology and Business (Icibt)*, 145–157.
- 23) Salamin, S., Al-Tawara, F., & Qusef, A. (2022). *The Correlation between E-Banking Services Quality and Customers' Satisfaction During COVID-19 Pandemic: A Case Study | IEEE Conference Publication | IEEE Xplore*.
- 24) Salehnia, M., Saki, M., Eshaghi, A., & Salehnia, N. (2014). A model of E-Loyalty and word-of-mouth based on e-trust in E-banking services (case study: Mellat Bank). *8th International Conference on E-Commerce in Developing Countries: With Focus on e-Trust, ECDC 2014, April*. <https://doi.org/10.1109/ECDC.2014.6836764>
- 25) Sardana, V., & Singhania, S. (2018). Digital technology in the realm of banking: A review of literature. *International Journal of Research in Finance and Management*. *International Journal of Research in Finance and Management*, 1(2), 28–32.
- 26) Shahid, S., Islam, J. U., Malik, S., & Hasan, U. (2022). Examining consumer experience in using m-banking apps: A study of its antecedents and outcomes. *Journal of Retailing and Consumer Services*, 65, 102870. <https://doi.org/10.1016/J.JRETCONSER.2021.102870>
- 27) Shangguan, Q., & Yuan, H. (2019). Design of mobile application interface based on brand image. In *Advances in Intelligent Systems and Computing* (Vol. 796). Springer International Publishing. [https://doi.org/10.1007/978-3-319-93888-2\\_14](https://doi.org/10.1007/978-3-319-93888-2_14)

- 28) Siagian, M., Rini, E. S., & Situmorang, S. H. (2021). The Effect of Digital Service Quality (BRIMO) on Customer Loyalty through Customer Trust and Satisfaction on COVID-19 Situation (Pt Bank Rakyat Indonesia Medan Regional Office). *International Journal of Research and Review*, 8(8), 263–271. <https://doi.org/10.52403/ijrr.20210836>
- 29) Sima, V., & Ileana, G. G. (2015). Green customer satisfaction. *Green Economic Structures in Modern Business and Society*, 8(2), 61–86. <https://doi.org/10.4018/978-1-4666-8219-1.ch004>
- 30) Suchánek, P., Richter, J., & Králová, M. (2014). Customer satisfaction, product quality and performance of companies. *Review of Economic Perspectives*, 14(4), 329–344. <https://doi.org/10.1515/revecp-2015-0003>
- 31) Ting, L., & Zhang, H. (2015). The empirical analysis of effecting online banking information security products customer satisfaction. *Proceedings - 2015 7th International Conference on Intelligent Human-Machine Systems and Cybernetics, IHMSC 2015*, 1(2004), 398–402. <https://doi.org/10.1109/IHMSC.2015.264>
- 32) Usino, W., & Metri, W. (2017). *Factors influencing customers' intention to use Internet banking: MAYBANK2U in Indonesia | IEEE Conference Publication | IEEE Xplore.*
- 33) Vebiana, V. (2020). *Digital Banking, Customer Experience, and Islamic Bank Financial Performance in Indonesia. Iccetim 2019*, 249–255. <https://doi.org/10.5220/0009868002490255>
- 34) Vijai, C., & Anitha, P. (2020). Information Technology in Indian Banking Sector Some Recent Developments. *Shanlax International Journal of Commerce*, 8(1), 65–71. <https://doi.org/10.34293/commerce.v8i1.985>
- 35) Vivek Dubey. (2019). FinTech Innovations in Digital Banking. *International Journal of Engineering Research And*, 1(10), 597–601. <https://doi.org/10.17577/ijertv8is100285>
- 36) Windasari, N. A., Kusumawati, N., Larasati, N., & Amelia, R. P. (2022). Digital-only banking experience: Insights from gen Y and gen Z. In *Journal of Innovation and Knowledge* (Vol. 7, Issue 2). <https://doi.org/10.1016/j.jik.2022.100170>
- 37) Wu, H. C., Cheng, C. C., & Hussein, A. S. (2019). What drives experiential loyalty towards the banks? The case of Islamic banks in Indonesia. *International Journal of Bank Marketing*, 37(2), 595–620. <https://doi.org/10.1108/IJBM-04-2018-0101>
- 38) Yussoff, N. M., & Nayan, S. M. (2020). Review On Customer Satisfaction. *Journal of Undergraduate Social Science and Technology*, 2(2), 1–6.
- 39) Zhou, Q., Lim, F. J., Yu, H., Xu, G., Ren, X., Liu, D., Wang, X., Mai, X., & Xu, H. (2021). A study on factors affecting service quality and loyalty intention in mobile banking. *Journal of Retailing and Consumer Services*, 60(June 2020). <https://doi.org/10.1016/j.jretconser.2020.102424>