USER EXPERIENCE ANALYSIS ON CUSTOMER SATISFACTION IN USING MOBILE BANKING APPLICATION AT PT. BANK SYARIAH INDONESIA

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Article Info	ABSTRACT
  	This study aims to analyze the influence of user experience and e-service quality on customer satisfaction in the context of mobile banking services at PT. Bank Syariah Indonesia (BSI). The research focuses on how user interaction with the BSI Mobile application and the perceived quality of electronic services affect customer satisfaction directly and indirectly. To achieve these objectives, the study employs Structural Equation Modeling using Partial Least Squares (SEM-PLS). The validity and reliability of the constructs were tested through convergent validity, discriminant validity (using cross loading and Heterotrait-Monotrait Ratio), and internal consistency measures such as Cronbach's alpha and Average Variance Extracted (AVE). The structural model was assessed using R-square, path coefficients, and t-statistics for hypothesis testing. The findings reveal that user experience has a significant direct influence on customer satisfaction (t = 2.697, p = 0.007), while e-service quality also has a significant and stronger effect on customer satisfaction (t = 7.353, p = 0.000). Furthermore, e-service quality mediates the relationship between user experience and customer satisfaction significantly (t = 7.402, p = 0.000), indicating that a better user experience enhances perceived service quality, which in turn leads to higher customer satisfaction. The study concludes that both user experience and e-service quality are critical determinants of customer satisfaction in digital banking services. Managerially, this suggests that continuous improvement in user interface design and e-service features can significantly enhance customer satisfaction and strengthen customer loyalty in the highly competitive Islamic banking industry. ***Keywords:*** *User Experience; E-Service Quality; Customer Satisfaction; Mobile Banking; Islamic Banking; SEM-PLS; BSI Mobile; Digital Service Quality.*

1. INTRODUCTION

Banking in Indonesia does not only include conventional banking, but also Islamic banking. Islamic banking is part of the economic and financial system in Indonesia which is involved in providing the dynamics of economic growth. In the business world, increasingly tight competition is a challenge for companies, especially for banking companies. So that banking companies are expected to retain customers and prevent them from switching to other banking companies, because a company cannot survive if it does not have customer satisfaction.

Customer satisfaction is the result felt by customers after comparing the expectations and reality received by customers in using the services provided by a bank (Kotler et al, 2021). Customer satisfaction is a feeling felt by bank customers whose desires and hopes are fulfilled by the bank. Customer satisfaction itself is the key to the success of a bank, to realize this is a challenge for the bank itself. When the quality of bank services meets customer expectations and customers have a good experience from using the bank, customers will feel satisfied and the goals of the bank will also be realized (Dhingra et al, 2020).

A bank is a service in the financial sector (banking), where its business activities are collecting funds from customers and channeling the funds back to customers. Banks must be able to know and recognize what affects customer satisfaction so that they can create good relationships with their customers to improve customer experience. If customers are not satisfied with the experience of using the services they feel and have bad experiences with the bank, it will have an impact on decreasing customer satisfaction.

PT. Bank Syariah Indonesia as one of the largest Islamic banks in Indonesia also utilizes mobile banking technology to provide more efficient and practical services for its customers known as the BSI Mobile application. PT. Bank Syariah Indonesia (BSI) was founded on February 1, 2021 by merging the three largest State-Owned Enterprises (BUMN) Islamic banks in Indonesia, namely Bank Mandiri Syariah, Bank BNI Syariah, and Bank BRI Syariah. This company is engaged in financial and banking services that operate based on sharia principles.

PT. Bank Syariah Indonesia uses a mobile banking service, namely BSI mobile, to improve the quality of service and customer satisfaction. By using mobile banking services, customers can make money transfer transactions, pay bills, buy credit, and top up e-wallets and e-money. Not only that, the BSI mobile application service has quite a lot of differences and superior features with other bank mobile banking services. Because BSI mobile is a service from PT. Bank Syariah Indonesia which is a sharia bank, so that its mobile banking service provides additional features, such as zakat and waqf payments, alms and donations, hajj and umrah payments, gold investment and Islamic services in which customers can access juz amma, asmaul husna and prayer schedules (Syam et al., 2024; Dalimunthe et al., 2024).

PT. Bank Syariah Indonesia recorded a BSI mobile transaction growth of 45.02% annually. According to Hery Gunardi, President Director of BSI, until June 2024, there were 7.1 million BSI mobile users and 247.5 million transactions with a volume of IDR 299 trillion. This is a significant increase compared to the achievement in June 2023, when its users reached 3.26 million and transactions reached 170.7 million with a volume of IDR 220.5 trillion. This makes BSI the sharia bank with the largest number of customers in the world. Hery said that the company will continue to innovate and strategize to accelerate digital transactions because public interest in BSI mobile continues to increase (Bank Syariah Indonesia, June 2024).

The use of the BSI mobile application cannot be separated from the various challenges and problems faced by its users. Some of the obstacles that often arise include the less than optimal performance of the BSI mobile application, service quality (e-service quality) and customer experience (user experience) that has not fully met customer expectations. Poor customer experience can have an impact on reducing customer desire to use the service and encourage customers to switch to other banking services that are considered better. Not a few of the many customers who use the BSI mobile application give a bad assessment of the quality of the application's services through ratings that can be seen on the Appstore or Playstore when downloading the BSI mobile application. This shows that there is a gap between BSI mobile's commitment to customer satisfaction and the real experience felt by customers.

Rating is part of a review that uses an assessment in the form of giving a star symbol to describe customer opinions on a certain value scale. Rating is one way for customers to assess the quality of online products or services they use (Wicaksono et al, 2022). Service quality (e-service quality) refers to the extent to which the service provided meets customer expectations (Mamakou et al, 2024). Service quality includes various important aspects such as efficiency, security, reliability, and responsiveness that affect the customer experience in using the BSI mobile application. Customers not only expect ease of use of the application, but also demand a stable, fast, safe and responsive service quality to complaints and problems experienced by customers. So, when e-service quality does not meet expectations, customers will tend to feel disappointed.

Septiana Sinta Rahayu's scientific article (2020), entitled "The Influence of Customer Experience and Benefits Perceived from Internet Banking on Customer Satisfaction of Sharia Banks in Surabaya & Sidoarjo". This study shows that customer experience has a significant positive effect on customer satisfaction. Customer experience affects customer satisfaction, because the higher the customer experience in using the service, the more real the customer's assessment will be and can create satisfaction for the customer itself.

Scientific journal of Muhammad Rafli & Muhammad Yunanto (2024), entitled "The Influence of Service Quality, Customer Experience on Customer Satisfaction

and Its Impact on Customer Loyalty of Livin Mandiri Mobile Banking Users". This study shows that customer experience has a positive and significant effect on customer satisfaction is supported and can be stated if there is a direct influence between customer experience and customer satisfaction.

2. RESEARCH METHOD

This study uses the SEM-PLS method. SEM-PLS is used to check the suitability and consistency of data with external model measurements and relationships between variables. It is impossible for a research concept to be tested with a model without going through the measurement model purification stage. The use of SEM-PLS to model the relationship between variables and apply outer model evaluation before structural testing (Hamid & Anwar, 2022). In the SEM-PLS method, outer model measurements are known as construct validity tests. This measurement is used to see whether the items or indicators used are appropriate and consistent. This test consists of convergent validity, discriminant validity and then continued with reliability testing.

The research will be conducted by conducting a convergent validity test using the outer loading test and Average Variance Extracted (AVE). Discriminant validity testing will be carried out using the cross loading test and Heterotrait-Monotrait Ratio (HTMT). Then, the research will be tested with reliability testing and looking at the Cronbach's alpha value. The recommended rule of thumb is to look at the outer loading value and Cronbach's alpha must be above 0.7. The Average Variance Extracted (AVE) value must be above 0.5. The Heterotrait-Monotrait Ratio (HTMT) value must be less than 0.9. And the value of each indicator in the cross loading must be greater in its own dimension compared to indicators with different dimensions (Hamid & Anwar, 2022). The next method is to measure the inner model. This measurement is carried out to see the relationship between each dimension of User Experience and the Customer Satisfaction variable. This test needs to be carried out with several tests, including the R-Square test, path coefficient and t-Statistics (Hamid & Anwar, 2022).

An R-Square value below 0.25 indicates a weak model value, a value below 0.5 indicates a normal model and a value below 0.75 indicates a strong model. Then, the path coefficient value can be seen from the original sample value, where a positive value indicates a positive influence, while a negative value means the opposite. Finally, to measure t-Statistics, with a significance level of 5%, Hamid and Anwar (2022) stated that if the t-Statistics value is greater than 1.96, then this indicates the significance of the variable or dimension.

3. RESULT AND ANALYSIS

Based on the results of data processing using SmartPLS, the R-Square (R^2) value for the E-Service Quality (Z) variable is 0.939, with an Adjusted R-Square of 0.938.

This shows that 93.9% of the variation in E-Service Quality can be explained by the User Experience (X) variable. Meanwhile, the R-Square value for the Customer Satisfaction (Y) variable is 0.953, with an Adjusted R-Square of 0.952, which means that 95.3% of the variation in Customer Satisfaction can be explained by a combination of the User Experience (X) and E-Service Quality (Z) variables. Based on the R-Square interpretation criteria proposed by Chin (1998), an R-Square value above 0.67 is included in the strong (substantial) category. Thus, this research model has very good explanatory power for the relationship between the variables tested.

After completing the convergent validity, reliability and discriminant validity tests, the next stage is to conduct hypothesis testing. This process is carried out by analyzing the path coefficient value (inner model) to determine the level of significance of the hypothesis being tested through bootstrapping. The bootstrapping data processing technique in Smart-PLS will obtain results that are used as a significance testing method. At a significance level of 95% (α = 0.05), the critical T value used is 1.96. This means that the hypothesis is declared accepted if the T value exceeds 1.96 and rejected if the value is below that number.

H1: The Influence of User Experience (X) on Customer Satisfaction (Y):

The results show that User Experience (X) influences Customer Satisfaction (Y), with a t-statistics value of 2.697 which is greater than 1.96, and a p-value of 0.007 below 0.05 indicating that this relationship is statistically significant. Although the path coefficient value is smaller than the influence of E-Service Quality, these results indicate that user perceptions of the user experience greatly influence their level of satisfaction with the services provided. This strengthens the view that user experience while interacting with a digital system or application not only influences the perception of the functionality of the system, but also emotionally impacts their final assessment of service satisfaction. Thus, in testing H1, the hypothesis stating that User Experience influences Customer Satisfaction can be accepted. In addition, the original sample value of 0.261 indicates a positive relationship, although the influence is moderate.

H2: The Effect of E-Service Quality (Z) on Customer Satisfaction (Y):

The results show that E-Service Quality (Z) has an effect on Customer Satisfaction (Y), with a t-statistics value of 7.353 which is greater than 1.96, and a p-value of 0.000 below 0.05 indicating that this relationship is statistically significant. This means that the better the quality of digital services felt by customers, the higher their level of satisfaction with the company's services will be. This reflects that features in digital services that are easy to use, reliable, and fast in responding to customer needs are able to create a satisfying experience. Therefore, in testing H2, it can be concluded that the hypothesis stating that E-Service Quality has an effect on Customer Satisfaction can be accepted. In addition,

the original sample value of 0.721 indicates that there is a positive and strong relationship between the two variables.

H3: The Influence of User Experience (X) on Customer Satisfaction (Y) through E-Service Quality (Z):

The results also show that User Experience (X) influences Customer Satisfaction (Y) through E-Service Quality (Z), with a t-statistic value of 7.402, which far exceeds the threshold of 1.96 and a p-value of 0.000 below 0.05 indicating that this relationship is statistically significant. Therefore, testing H3, it can be concluded that the hypothesis stating that there is a mediating influence of E-Service Quality in the relationship between User Experience and Customer Satisfaction can be accepted. In addition, the original sample value of 0.699 indicates that this indirect influence is positive and significant. With this significant value, it can be concluded that E-Service Quality acts as a strong mediator in bridging the influence between user experience and customer satisfaction. This means that although user experience has a direct influence on satisfaction, the influence becomes much stronger when mediated by perceptions of electronic service quality. In other words, the more positive the user experience with the system, the higher the perceived quality of service, and ultimately increase customer satisfaction.

The Influence of User Experience on Customer Satisfaction

Based on the results of the hypothesis, it shows that the user experience variable (X) affects the customer satisfaction variable (Y). The t-statistic value obtained was 2.697, greater than 1.96 and the p-value obtained was 0.007, less than 0.05. So this relationship is statistically significant. These results state that user perceptions of the user experience greatly affect their level of satisfaction with the services provided. This supports the idea that user experience when interacting with digital systems or applications has an emotional impact on their final assessment of service satisfaction. A well-designed user experience can significantly increase customer satisfaction. In services such as mobile banking, user experience is a crucial factor because customers interact directly with the application. Therefore, improving the quality of user experience must be a strategic priority to increase customer satisfaction.

In the journal "Journal of Internet Banking and Commerce", it was found that user experience has a direct influence on customer satisfaction in the banking sector, especially in the use of digital services (Rahi, et al., 2021). In line with Hamid & Anwar's research (2023) which shows that positive user experience drives higher levels of satisfaction, which ultimately increases customer intention to continue using the application and recommend it to others. As found in Ariq and Irsyad's research (2024), overall, the results obtained from the study using the SEM-PLS method show that all dimensions of user experience have a positive influence on customer satisfaction. These results indicate that user experience

plays an important role in shaping customer satisfaction. The higher the value of user experience, the higher the value of customer satisfaction (Rahi & Alnaser, 2021).

The Influence of E-Service Quality on Customer Satisfaction

Based on the results of the hypothesis, it shows that the e-service quality variable has an effect on the customer satisfaction variable (Y). The t-statistics value of 7.353 which is greater than 1.96 and the p-value of 0.000 below 0.05 indicate that this relationship is statistically significant, which shows that the better the quality of digital services felt by customers, the level of their satisfaction with the company's services will also increase.

Measuring electronic service quality (e-service quality) in the context of digital banks or mobile banking in Indonesia has a real and positive impact on customer satisfaction. This relationship shows that increasing the value of e-service quality will increase customer satisfaction in using mobile banking (Khan et al., 2022)). This is in line with the research of Rangkuti (2022), which shows that there is an influence of e-service quality on customer satisfaction at a significant level. It can be interpreted that this study shows that e-service quality can achieve customer satisfaction.

The Influence of User Experience on Customer Satisfaction Through E-Service Quality

Based on the results of the hypothesis, it shows that the user experience variable (X) has an effect on the customer satisfaction variable (Y) through the moderation variable e-service quality (Z). The t-statistic value of 7.402, which far exceeds the threshold of 1.96 and the p-value of 0.000 below 0.05 indicates that this relationship is statistically significant. Thus, it can be concluded that there is a mediating effect of E-Service Quality in the relationship between User Experience and Customer Satisfaction. Furthermore, it can also be concluded that E-Service Quality acts as a strong mediator in bridging the influence between user experience and customer satisfaction (Kavitha & Gopinath, 2020).

The results of the study show that user experience and e-service quality have a positive and significant effect on customer satisfaction. User experience influences customer satisfaction through e-service quality with a complementary partial mediation model, meaning that the higher the value of user experience on the quality of electronic services, the higher the customer satisfaction. This is in line with research by Hongdiyanto & Liemena (2024), research shows that e-service quality is a bridge between user experience and customer satisfaction. Research also shows that poor user experience can reduce the effectiveness of service quality as a mediator (Hussain et al., 2021).

Managerial Implication

The implications of the tested hypothesis in this study indicate that user experience has an effect on customer satisfaction through e-service quality. Where the more positive the user experience is towards the system, the higher the quality of service felt and ultimately increases customer satisfaction. Based on this, the implications that can be given based on the results of the study are as follows:

1. PT. Bank Syariah Indonesia needs to pay more attention to user experience and make user experience a strategic focus in developing digital services. Good user experience creates a pleasant, easy and efficient experience for users, which has been proven to have a positive impact on customer satisfaction. An intuitive, fast and convenient customer experience will strengthen the perception of e-service quality. The application development team must continue to collect user feedback and carry out data-based improvement iterations.

2. PT. Bank Syariah Indonesia needs to ensure that the main aspects of e-service quality such as security, system availability, usability and responsiveness are maintained and improved. Training for IT and customer service teams is also important to be able to handle complaints or service disruptions quickly and provide solutions.

3. Because user experience and e-service quality have been proven to affect customer satisfaction, PT. Bank Syariah Indonesia needs to make customer satisfaction one of the Key Performance Indicators (KPI). Regular customer satisfaction surveys can also be used to identify areas of improvement and maintain customer satisfaction. The IT, digital marketing, and customer service divisions need to work together to align technical needs, user desires, and customer service, so that the application is always relevant to user expectations.

4. CONCLUSION

User Experience has a direct and significant influence on customer satisfaction in using digital services, especially the mobile banking application of PT. Bank Syariah Indonesia. This is evidenced by the t-statistic value of 2.697 and the p-value of 0.007. In addition, the original sample value of 0.261 indicates a positive relationship, although the influence is moderate.

E-Service Quality is also proven to have a significant influence on customer satisfaction, as indicated by the t-statistic value of 7.353 and the p-value of 0.000. This shows that the better the customer's perception of the quality of digital services, the higher their level of satisfaction. In addition, the original sample value of 0.721 indicates that there is a positive and strong relationship between the two variables.

User Experience affects customer satisfaction through E-Service Quality as a mediating variable. The t-statistic value of 7.402 and the p-value of 0.000 indicate that e-service quality is a strong and significant mediator in the relationship between user experience and customer satisfaction. In addition, the original sample value of 0.699 indicates that this indirect influence is positive and significant. With this significant value, it can be concluded that E-Service Quality acts as a strong mediator in bridging the influence between user experience and customer satisfaction.

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