

Effect of E-Service Quality on E-Satisfaction in using Mobile Banking through User Experience at Bank Sumut

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Abstract: Today's banks face a big challenge where they must provide the best quality of service (*e-service quality*) and offer experience for customers to create customer satisfaction (*e-satisfaction*) in the era of digital banking. The analysis approach is qualitative and quantitative with descriptive. The results of the questionnaire given to 81 people were collected. The results of the study provide empirical evidence that there is a significant effect between *e-service quality* and *user experience* has a significant effect on *e-satisfaction*, *e-service quality* has a significant effect on *user experience* and *e-service quality* has a significant effect on *e-satisfaction* through *user experience*.

1 INTRODUCTION

Currently, banking transformation is taking place. How the best banks in the world are responding to these changes, and how the core principles of competitors are forcing us to think about banking in a different way. One of them is that transactions with smartphones have surpassed branch transactions but banks are still centered on branches both in organization and design (King, 2020).

Service quality is one of the important issues discussed by the company to maintain its business existence during existing competition. In today's digital era, information technology plays a very important role in aspects of human life because it makes it easier to carry out various activities, including business activities (Adzania, 2015).

A complaint contains a lot of information about customers and products and can be used as a foundation for the formation of product strengths (Fanny, et al 2020). Bank SUMUT has received data on customer complaints where the complaints are feedback from customers addressed to Bank SUMUT. The customer complains because he is not satisfied, he is dissatisfied because his expectations are not met.

In this context, Dipa et al. (2020) emphasizes that most of the Mobile Banking satisfied with internet accessibility, ease of use, usability, and trustworthiness. As a result, positive (or negative)

consumer perceptions of quality on various e-service attributes will result in satisfaction (or dissatisfaction) with e-services provided through websites (Arcand et al., 2017).

Previous research on the effect of e-service quality on e-satisfaction was conducted by San and Von (2020) who found a positive relationship between service quality dimensions and customer satisfaction in the context of Islamic banking culture in Malaysia. Another study conducted by Ahmad et al. (2017) stated that there was a relationship between e-service quality and e-satisfaction among internet users in India. Alikhan (2019) found that there was an influence between e-service quality on e-satisfaction on online shopping in Pakistan.

This study adds user experience as an intervening variable, user experience is a new technology finding in the digital era that strongly supports economic activities, in this case banking activities will be discussed. Digital modernization requires banks to reinvent their core businesses in lending, retail banking and payments. This will replace branch investment with cheaper digital channels which will allow banks to build economies of scale with much lower capital investment (Mbama et al., 2018).

Service is a differentiation as well as a determinant of the success or failure of banks in maintaining existing customers and attracting new prospective customers. One of the services provided by banking in the digital era is Mobile Banking. The

emergence Mobile Banking as an innovation that makes banking activities easier because it eliminates space and time limits (Komulainen and Saraniemi, 2018).

Through the existence of mobile phones and M-Banking, banking transactions which are usually done manually, meaning that activities previously carried out by customers by visiting the bank, can now be done without having to visit bank outlets, only by using the cellphone can save time and costs, in addition to saving time. Mobile banking also aims so that customers are not outdated in using modern and can also take advantage of cellphone which are usually used to communicate but can also be used for business or transactions (Hapsara, 2015).

2 LITERATURE REVIEW

2.1 E-Satisfaction

In the online context, Amin (2016) conceptualizes e-satisfaction as consumers' assessment of their internet experience compared to their experience with the traditional way of dealing with customers satisfaction as customer satisfaction in connection with previous purchase or use experiences with product and service companies.

According to Budiman, et al (2020) the dimensions of e-satisfaction are:

1. Convenience is the level of comfort felt by customers from using a mobile banking including ease of use and convenience in using the system. With mobile banking, customers do not need to leave their homes or travel to perform banking transactions.
2. Merchandising positive perception of merchandising online e-satisfaction. Merchandising's defined here as factors related to online sales and offerings. This includes product offerings and banking product information available online.
3. Serviceability customer Feedback on application design, availability of banking service products, and service are factors that affect e-satisfaction.

2.2 E-Service Quality

According to Zeithaml (2017) E-service quality is defined as the extent to which a website facilitates efficient and effective shopping, purchasing, and delivery of products and services. Service in this case is defined as a service or service delivered by the

service owner in the form of convenience, speed, relationship, ability, and hospitality aimed at the attitude and nature of providing services for E-satisfaction.

According to Zavareh et.al (2012) the dimensions of e-service quality include:

1. Efficient and reliable services
 - a. Services provided through the Mobile Banking Quick
 - b. The Mobile Banking of the website or application is always available for business
 - c. Mobile Banking can always make transactions anytime
 - d. Complete transactions quickly via the 's website bank
2. Fulfillment
 - a. The organization and structure of the Mobile Banking is easy to follow
 - b. Accurate promises about services provided
 - c. The Mobile Banking of the application is easy to use and immediately operational
 - d. transactions Mobile Banking are always accurate.
3. Security/trust
 - a. No Misuse of Customer's Personal Information
 - b. Transactions Mobile Banking
 - c. Confidence in Mobile Banking services.
4. Site aesthetic
 - a. application Mobile Banking Attractive
 - b. app page Mobile Banking is visually pleasing.
5. Responsiveness/contact
 - a. Quick response to customer requests
 - b. transaction problems online Quickly
 - c. customer service Mobile Banking is easily accessible by telephone / other means.

2.3 User Experience

User Experience is a person's perception and response resulting from the use and or anticipation of using a product, system, or service. More simply, user experience is how someone feels about every interaction you are having with what is in front of you when you use it (Winter and Thomaschewski, 2015).

Perspective customer-centric, the customer plays a key role in creating value because the customer's personal and individual living environment shapes the environment for creating value and customer experience. Therefore, the customer decides where, when and how value is created. For banks, this means it is important to understand how their customers integrate m-banking

into their daily value creation processes and how their experiences and associated value are shaped in this context (Komulainen and Saraniemi, 2018).

Digital Experience Transformation is a holistic and intuitive approach to reaching and re-engaging your current and potential customers. Doing it right requires a strategic understanding of customers in every channel in which customers interact with them. In user experience according to Dube and Helkkula (2015) there are 4 dimensions:

- 1) Reach
- 2) Personalization
- 3) Simplicity and ease of use
- 4) Channel flexibility

3 RESEARCH METHOD

This type of research uses associative research. According to Sugiyono (2017) the notion of associative is research that aims to determine the relationship between two or more variables. This research was carried out in a structured research stage through certain research stages. The population in this study were 445 customers who use Mobile banking Bank SUMUT. Sampling technique in this study is to use a sampling technique with the probability sampling the technique used is purposive sampling. Purposive sampling according to Maholtra et al., (2017) is taking sample members from the population according to predetermined strata or criteria. With the Slovin formula, it is found that the sample is 81 people who are actively using Mobile Banking Bank SUMUT

Research Hypothesis

- H1: E-service quality effect on E-satisfaction
 H2: User Experience has a positive and significant effect on E-satisfaction
 H3: E-service quality has a positive and significant effect on User Experience
 H4: E-service quality has a positive and significant effect on E -satisfaction through User Experience.

4 RESULTS AND DISCUSSION

Based on the data processing that has been carried out, the r square as follows:

Table 1: r Square

Indicator	R Square	Adjust R Square
E-satisfaction	0.608	0.598
User Experience	0.523	0.517

Based on the data presented in Table 1 above, the R Square for variable e-satisfaction is 0.608 and user experience is 0.623. Obtaining this value explains that the percentage of e-satisfaction can be explained by e-service quality and user experience of 60.8%, while the score that explains that the percentage of user experience can be explained by e-service quality is 52.3%.

Table 2: T Statistics and P Value

	T Statistics (O/STDEV)	P Values
E-service quality -> E-satisfaction	2.075	0.039
User experience -> E-satisfaction	13,961	0.000
E-service quality -> User experience	5,860	0.000
E-service quality -> User experience -> E-satisfaction	5,200	0.000

4.1 Effect of E-Service on E-Satisfaction

The effect of e-service quality on e-satisfaction of Bank SUMUT Medan Ngumban Surbakti Branch Office shows the $t_{\text{statistic}}$ of 2.075 with p value 0.039 smaller than 0.05. Based on these results, it can be interpreted that e-service quality has a positive and significant effect on e-satisfaction at Bank SUMUT Medan Branch Office Ngumban Surbakti.

In the research of Sheng and Liu (2010) which examined the level of satisfaction and loyalty of e-commerce in China, with the independent variable e-service quality. Overall satisfaction and loyalty of e-commerce in China is influenced by e-service quality in a positive and significant direction. Kim's (2010) research results also state that internet user satisfaction in America and South Korea is influenced by the e-service quality consisting of the dimensions of privacy, efficiency, system availability and

fulfillment, the directions are the same, namely positive, and significant.

In the banking sector, another study by Charles (2016) confirms that the relationship of e-service quality to satisfaction and loyalty of e-banking in general in Nigeria has a positive and significant direction. Al Hawari (2014) who also conducted research in the banking sector but in the United Arab Emirates, confirmed the research which stated that the quality of service in the e-banking has a positive and significant effect on the satisfaction felt by its users.

4.2 Effect User Experience on E-Satisfaction

The effect user experience on e-satisfaction of Bank SUMUT Medan Ngumban Surbakti Branch Office shows a $t_{\text{statistical}}$ of 13,961 with a p value of 0.000 less than 0.05. Based on these results, it can be interpreted that user experience has a positive and significant effect on e-satisfaction of Bank SUMUT customers at the Medan Ngumban Surbakti Branch Office.

User experience (User Experience, UX) is often associated with human interaction relations (users) with computerized application systems (Siebenhandl et al, 2013). Customers who have positive experiences will also give positive reviews to the company so that this can affect other customers who have not used the company's products or services. Research by Suandana (2016) found that the experience of buying fashion online. has a positive and significant influence on customer satisfaction. Thus, the better the experience the customer has, the customer satisfaction will also increase. Research conducted by Aditya (2015) found that the better the experience felt by consumers, the greater the possibility of repurchasing.

The importance of customer experience for improving business performance means that companies must understand how to ensure an online optimally, so as to increase customer satisfaction (Rose et al., 2012). This is in line with research conducted by Yulianti (2017) which found that user experience has a positive and significant effect on e-satisfaction among cellular operator users in Indonesia. Another study was conducted by Dewi, et al (2018) who found that user experience had a positive and significant effect on consumer satisfaction on the use of the PayTren application in Jabodetabek.

Purnomo and Ardiansyah's research (2018) mentions user experience to meet user needs with the simplicity and elegance of a product that is pleasant to own and pleasant to use development User experience application iBeautythat has been developed has

proven to be helpful in accordance with the usability that has been carried out through post task and SUS testing so that it can be developed into a real. In a study conducted by Yulianti (2017) the effect of user experience on customer satisfaction on cellular operators in Indonesia shows that the dimensions of user experience simultaneously have a significant influence on customer satisfaction.

Another study conducted by Intanny et. al (2018) that user experience affects e-satisfaction on the use of Jogyaplaza.id. This is supported by measuring the user experience. The pragmatic quality aspect has a tendency on a positive evaluation measurement scale. This means that users experience the ease of learning and using, the speed in completing activities, and the practicality that is supported by a well-organized system. This is also in line with research conducted by Aziati (2020) who found that user experience had a significant effect on e-satisfaction on e-commerce mobile application Syarif Hidayatullah State Islamic University students in Jakarta.

4.3 Effect of E-Service Quality on User Experience

The effect of e-service quality on user experience of Bank SUMUT Medan customers Ngumban Surbakti Branch shows the $t_{\text{statistic}}$ of 5,860 with p values 0.000 smaller than 0.05. Based on these results, it can be interpreted that e-service quality has a positive and significant effect on the user experience of Bank SUMUT customers at the Medan Ngumban Surbakti Branch Office.

In the last decade, the number of electronic services provided to the public through information and communication technology has increased, and it was found that the quality of digital services greatly affects the actual access to electronic services by the public. Different aspects of service quality have been addressed by many studies over the last two decades. Research has shown that good service quality can increase the retention of current customers, increasing the attractiveness of new customers gained from the experience of using the service product.

Research conducted by Putri (2020) states that e-service quality has a positive and significant effect on the user experience Bank Syariah Mandiri KC Medan Petisah customers.

4.4 Effect of E-Service Quality on E-Satisfaction Through User Experience

The effect of e-service quality on e-satisfaction through user experience of Bank SUMUT Medan customers The Ngumban Surbakti Branch Office shows a $t_{\text{statistic}}$ of 5.200 with a p-value 0.000. Based on these results, it can be interpreted that e-service quality has a positive and significant effect on e-satisfaction through user experience of Bank Sumut customers, Medan Ngumban Surbakti Branch Office.

Zhao and Zhang (2019) showed that the effect of system quality and service quality on user satisfaction was stronger for high experienced users than low experienced users and was significantly positive for high experience. However, very limited research has so far investigated the moderating effect of user experience between technology capabilities and user satisfaction. Considering that users' perceptions of object capabilities vary in their level of experience with objects, and technological capabilities that are useful for experienced users may not be effective for users with less experience (Lin 2012), this study incorporates user experience as a moderator in the research model operation of m-banking real-time becomes concrete for users in the form of push notifications that appear after the purchase event, containing information about the purchase. From research conducted by Komulainen and Saraniemi (2018), it can be concluded that the experience gained from using m-banking services in banking has a relationship with each other in creating satisfaction for banking customers.

In line with the research conducted by Komulainen and Saraniemi (2018) shows that the interaction between the service and the user - that is, the customer experience process as experienced by the user, creates value for the user. Based on data, value is created through ease of use, real-time operation, visuality, sense of control, trust, and social status. Based on these data, ease of use is clearly a utilitarian value because it provides practical benefits, such as speed and time savings.

5 CONCLUSION

In this study it was found that E-service quality, User experience directly affects e-satisfaction, as well as E-service quality on User experience. E-service quality has a positive and significant effect on e-satisfaction in using mobile banking through user

experience at Bank SUMUT Ngumban Surbakti Medan Branch.

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