



An Evaluating M-Banking Service Quality To Strengthen Loyalty And Satisfaction Of Customers Priority In The Digital Era

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ABSTRACT

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In this decade, mobile banking applications greatly facilitate customers to make transactions and enjoying banking services without having to visit branch offices, in which it can conducted anywhere. This paper aims to evaluate the direct and indirect effect of m-banking service quality on customer loyalty through mediating contribution of customer satisfaction. For the technique of sampling, this paper has used purposive with two criteria. In the distribution process, online method by assisting g-form questionnaires. As many as 154 complete questionnaires returned to the authors, then it tabulating in the form of interval data to be analyzed by Smart PLS 4.0.9 with the technique of SEM and path-analysis, and descriptively through IBM SPSS version 26. Result stated that all hypotheses are okay and partial contribution of mediating variable was found.

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1. Introduction

Banks around the world are facing big challenges keep their customers as loyal as possible (Bui et al., 2022). Thus, the transformation of traditional service mechanisms towards digital such as mobile banking has been considered to adapt with customer demand in the digital era (Trabelsi-Zoghalmi et al., 2020). Indeed, today's customers expect simplicity in terms of how, when, and where they can get financial services as their needs (Lamrhari et al., 2022). As it stands, the problem related to customers afraid to use mobile banking due to worries about transactions and personal information leaked still on mind (Thar et al., 2017). In this context, responding on it and ensure risk minimization in the mobile banking service has always been priority to keep customer loyalty (Yusfiarto, 2021).

Customer loyalty is a long-term investment that indicates clarity about managing the relationship between service providers and customers as a whole (Desara et al., 2021). Study of Bui et al (2022) found that customer loyalty significantly and positively influenced by the quality of m-banking services, they have emphasized that information systems and transaction security are the most considered factors, and it is in line with the result of some studies (Hamidi & Safareeyeh, 2019; Marliyah et al., 2021; Mulyono & Pasaribu, 2021; Zhou et al., 2021). Mobile banking is one of the most effective tools to answering high expectations of customers in the digital era (Jun & Palacios, 2016). Therefore, banking sectors are always provide the feasibility of these innovative channels to obtaining customer satisfaction and loyalty, in which cashless transactions via mobile phones can improve bank efficiency and users' quality of life (Hasan, 2017).

On the other hand, Khan et al (2021) found that m-banking services quality significantly related to customer satisfaction, they also assert it is dominated by ease of use and high security. Further, Yusfiarto (2021) also stated that customer satisfaction with the digital banking services will greatly determines their loyalty level. Therefore H1: M-banking service quality has a positive and significant effect on customer loyalty, H2: M-banking service quality has a positive and significant effect on customer satisfaction and H3: Customer satisfaction has a positive and significant effect on customer loyalty.

Banking customer satisfaction defined as the feeling which created by customer evaluation of the perceived reality with their initial expectations to the banking service (Khan & Fasih, 2014). Satisfied customers will intend to spread their satisfaction to colleagues and people's, while dissatisfied customers will be more likely to tell negative things and spread it to many people (Pratama et al., 2021). In the banking sector, customer satisfaction is significantly influenced by digital service quality (Khattoon et al., 2020; Li et



al., 2021). Hossain (2019) also found that customer satisfaction when using m-banking is significantly influenced by the quality of m-banking services itself, where the most decisive elements are transaction security and customer data protection. Some experts also examined the mediating role of customer satisfaction in the relationship between m-banking services quality and customer loyalty, in which most of them found that customer satisfaction was enhanced the role of m-banking service quality to strengthen long-term loyalty (Baabdullah et al., 2019; Khan et al., 2021; Marliyah et al., 2021), these results also explains that loyal customers will tend to recommend it to others and share their pleasure through social media and messaging applications on their cellphones (Baabdullah et al., 2019; Khan et al., 2021; Marliyah et al., 2021). Therefore H4: Customer satisfaction mediates the effect of m-banking service quality on customer loyalty.

Nowadays, a lot of peoples make m-banking became a part of the daily life, in which by m-banking they can do transactions quickly and accurately then anywhere, find out the amount of balance, invest money, and so on (Addisse, 2020). Especially in Indonesia, mobile payments and household bills with m-banking has become popular payment method from high-end fashion outlets to the local food stalls (Games et al., 2022; Yusfiarto, 2021). However, along with the sophistication of the systems and services available in m-banking apps, the use of all features and service still being far understood, it is due to lack of socialization and information related to how to enjoy digital banking services provided overall (Hidayat et al., 2021; Yuliani et al., 2021; Yusfiarto, 2021). In the research of Marliyah et al (2021), found that banking customer satisfaction successful mediates partially to the relationship between e-service quality and customer loyalty, they stated simplicity is the dimension that mostly considered by customer due to limited time and reduce over thinking when using m-banking app.

2. Methods

The study design is explanatory research through quantitative approach (Sekaran & Bougie, 2016), and purposive random sampling technique with two criteria. First, the customer have to use m-banking actively, and second, the customer is former user of m-banking. Regarding our populations, priorities customer choose as on it. In establishing sample size, table of Krejcie and Morgan (1970) used as references, in which as many as 327 expected samples to generalize population, but only 154 questionnaires returned due to the difficulties to find the participants with high profile persons. In the questionnaire distribution process, we use online method by assisting g-form questionnaires. After questionnaires returned to the researchers, the data then analyzed descriptively with SPSS versions 26 software, while structural equation model (Outer loading = 0,7, Cronbach alpha 0,7), and path-analysis one tailed ($t=1,64$, $\alpha=5\%$) with Smart PLS version 4.0.9 software (Hair et al., 2010; Hult et al., 2015).

In term of measurement scales, fifteen items in five dimension of m-banking service quality was adopted from Arcand et al (2017), then revised by Trabelsi-Zoghلامي et al (2020). Banking customer loyalty with ten items was adopted from Baabdullah et al (2019), Lee and Chung (2009), Rajaobelina et al (2021), and Rasheed et al (2015). Meanwhile, m-banking customer satisfaction refers to Baabdullah et al (2019) and Zhou et al., 2021), then we fit to the conditions and purpose of the research. All the item indicator use were packaged in the form of *likert* scale (1=strongly disagree to 5=strongly agree) (Sekaran & Bougie, 2016).

3. Result And Discussion

The majority of respondent participated are woman as many as 77,93% and 22,07% of them are man, with ages ranging 31-40 years (44,81%), and ages over than 40 years (44,20%), while ages ranging 20-30 years (12,34%), and only 0,65% has an age less than 20 years. Most of them recognize have married (97,41%), and only 0,65% stated not yet married, while widow and widower each on for 1,29% and 0,65%. In the educational background, most of them well-educated at bachelor level (68,83%), master (20,77%), doctoral (2,69%), diploma III (1,94%), and vocational/senior high school (3,89%). Further, respondent profession recorded 63,63% as business owner, 3,89% are investor, 3,24% are company director, 3,89% are general manager, 8,41% are manager, and 16,23% as bureaucracy servant including police, civil servant, state own company, and army, while 0,65% of respondent not available to inform. An average income of participants recorded variously, in the range of IDR 50¹ to 100 million as many as 46,75%, 39,61% in the range of IDR 25 to 50 million, 10,38% has an income over than IDR 100 million, and only 3,24% were stated has an income less than IDR 25 million. Priority customers of m-banking stated that as many as

44.81% of them had been customers for more than 10 years, 38.96% stated that they had been customers for a range of 5* to 10 years, and 16.12% of them stated that they had become customers less than 5 years.

In term of responses to the statement proposed on each variable, m-banking service quality has a mean value for overall 4,371 and classified very high response, in which the statement of “I can talk online with customer service representatives when I need them via my cell phone” is the highest response value of 4,47 among m-banking service quality items. Further, customer satisfaction has a mean value for overall 4,380 and classified very high response, in which the statement of “I am satisfied with m-banking investment service” is the highest response among items of customer satisfaction. Furthermore, customer loyalty has a mean value for overall 4,838 and classified very high response, in which the statement of “I use m-banking for almost every transaction” is the highest score among loyalty indicators. We conclude that each questionnaire statement submitted to priority customers has described their situation and feelings when using m-banking. Then, high response regarding the instrument indicates that customer expectations are achieved in m-banking services quality.

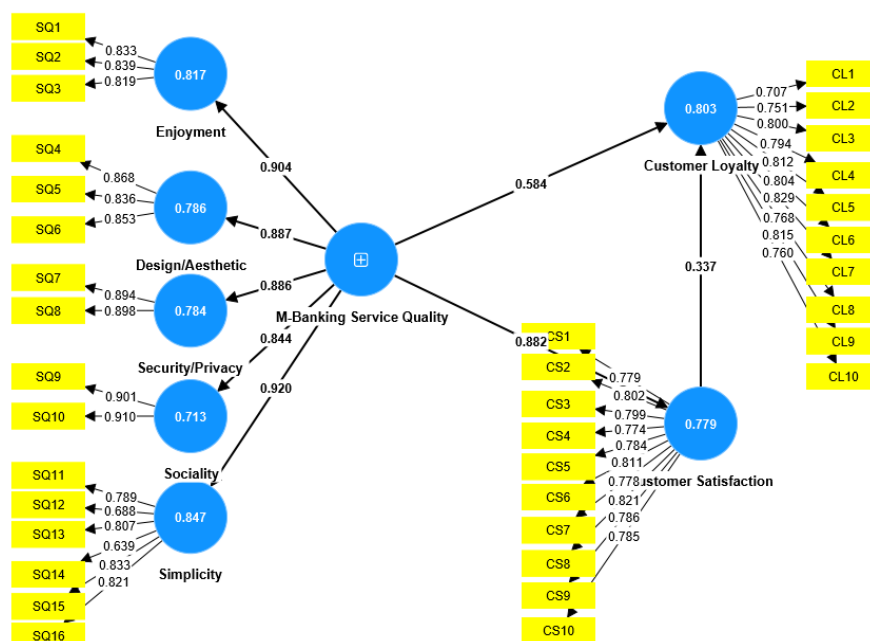


Figure 1. Model Outcome

The structural equation modelling results of the conceptual model is shown in Figure 1. All of the standardised factor loadings are larger than 0.7 and only single item has a value 0,639, but we stay keep the item due to the value of AVE and Cronbach α on each construct not significantly affected, indicates that comparing to the constructs’ errors, the scales have better variance explanation (Hair et al., 2010). Further, this study utilized the R-squared (R^2) of regression analysis to determine how well the data collected fit with the regression model. The research model used R^2 , and the value showed that m-banking service quality and customer satisfaction explained 80,3% of the variance in customer loyalty and that only 19,7% was due to unexplained variance.

Furthermore, to complete the validity and reliability tests, the score of average variance extracted (AVE) and cronbach alpha are shown in table 2, in which each variable including m-banking service quality dimension has a CA greater than the recommended value of 0.7, thus stated that the reliability test secured. Meanwhile, AVE value of each variable including dimensions m-banking service quality has also been fulfilled due to construct score above recommended value of 0.5.

Table 1.
Validity and Reliability

	Cronbach's alpha	Average variance extracted (AVE)
Customer Loyalty	0,930	0,616
Customer Satisfaction	0,934	0,627
Design/Aesthetic	0,812	0,726
Enjoyment	0,774	0,689
M-Banking SQ	0,945	0,551
Security/Privacy	0,754	0,802
Simplicity	0,857	0,587
Sociality	0,780	0,820

Based on the result of these two criteria, we conclude that the research can be continued to hypothetical testing stage. Hypothetical testing is aims to decide do the hypothesis can be stated accepted or rejected. Technically, it is carried out to answer how much the parameter has an effect to another (Sekaran & Bougie, 2016). Tabel 2 shown:

Tabel 2.
Hypothetical Testing

	Original sample (O)	Standard deviation (STDEV)	T values	P values
CS -> CL	0,337	0,079	4,294	0,000
M-BSQ -> CL	0,584	0,076	7,688	0,000
M-BSQ -> CS	0,882	0,059	14,921	0,000
M-BSQ -> Design/Aesthetic	0,887	0,045	19,737	0,000
M-BSQ -> Enjoyment	0,904	0,041	22,286	0,000
M-BSQ -> Security/Privacy	0,886	0,041	21,543	0,000
M-BSQ -> Simplicity	0,920	0,037	25,022	0,000
M-BSQ -> Sociality	0,844	0,055	15,276	0,000
M-BSQ -> CS -> CL	0,297	0,074	4,046	0,000

Note: M-BSQ= Mobile banking service quality, CS=Customer satisfaction, CL=Customer Loyalty

Table 2 summarizes the hypotheses result, m-banking service quality has a positive and significant effects on loyalty (t=7,688 and p=0,000) and satisfaction (t=14,921 and p=0,000) of the customer priorities, while customer satisfaction is also has a positive and significant effect on customer loyalty (t=4,294 and p=0,000). Further, the contribution of customer satisfaction significantly enhance the relationship between m-banking service quality and customer loyalty (t=4,046 and p=0,000) with total contribution of 33,71% based on variance accounted for (VAF) calculation. In regard with dimension of m-banking service quality, all stated has significant and positive effects with dominant value on simplicity (t=25,022) and enjoyment (t=22,286).

As it stands, the positive impact of COVID 19 has given people coercion and courage in using M-banking, because social restrictions and spread avoidance of COVID 19 have minimized people use paper money. Along with that, many payment, investment, and consulting services have been directed in digital form through m-banking. In this study, simplicity and enjoyment are the two most dominant elements which considered by most of customer priority in helping their transactions in the digital era, then it encourages to carry out almost all their transactions through m-banking, whether it is related to fund transfers, investments, macro business payments to MSME shopping, etc.

Customers priority also feel that m-banking conversation through inquiry services have also proven to be strongly effective due to most of them have busy schedules and do not have much time to visit branch offices, thus lead them toward simple method which can be done anywhere. Further, the suitability of expectations and benefits that exist in m-banking indirectly encourages customer priorities to disseminate positive information regarding brand of m-banking that they are using today, and then they also will invite their friends and colleagues to become users or switch to m-banking with similar brand. In this study, we also found that the recommendation or sharing behavior from customer priorities will only be given when someone asks her/him about experience when using m-banking. In the analysis, we argue that respondents are authoritative and high-profile person with a majority income of 50 to 100 million, and has a bachelor's degree and above, so their attitude tend toward calm to represent their satisfaction.

On the other side, most of users are business owners with ages ranging 31 to 40 years, and are women who are very skilled and critical in assessing a service related technological in nature. Thar et al (2017) argues that most young entrepreneurs or business owners are more sensitive to the convenience and ease of transactions than those who are a little older. This is due to high demand for speed, convenience, security, and simplicity of transactions in this digital era. Meanwhile, most respondents admitted that the effectiveness and productivity of their transaction activities increased due to the simplicity of features and ease of use provided by m-banking.

Zhou et al (2021) stated that the present business activities lead to online activities, and was enforce many transaction conducted in the digital form due to avoidance effort on money counterfeiting and possibility to losing transaction bills. In today's, almost all of banking have provided m-banking to ease and serve customer with high securities to fulfilled customer expectation. Therefore, the distinguish that considered by customer priorities to determining which brand to prefer referring to the level ease of use, simplicity features, and speed of transactions, because almost today m-banking already high security standards in accordance with Central Bank regulations.

Our findings are in line with several research including Bui et al (2022), Yusfiarto (2021), and Zhou et al (2021) which stated that m-banking service quality has a significant and positive effects on customer loyalty and satisfaction, they incidentally that ease of use, security, and enjoyment are dimensions which most considered by customer priority to be more loyal in doing transaction with m-banking (Bui et al., 2022), and then those loyalty will be represented on information sharing behavior. Our findings also closely related to some studies which tested mediating contribution of customer satisfaction on loyalty, and most of them found that customer satisfaction could enhance and strengthen those relationship (Khatoun et al., 2020; Puriwat & Tripopsakul, 2017; Suariedewi, 2020).

4. Conclusion

Modern financial institutions are utilizing technologies to render better service to their customers. The present banking industry focuses on m-banking technologies to provide branchless banking service to the customers, in which it offers convenient, speedy and dependable service to the customer. This study provides initial empirical evidence of the impact of SERVQUAL dimensions on customers priority loyalty and satisfaction in mobile banking service. Findings related to the simplicity and enjoyment indicates as key factors which considered by most of customer priority to help their transactions quickly in anywhere. In this regard, it is important to maintain and increase both dimensions as long with globalization upgrade without forgetting another dimension that were belief's today.

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