Effect of E-Service Quality on Loyalty through Customer Satisfaction on Livin' Users by Mandiri

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ABSTRACT - Banks are required to be able to transform themselves through end-to-end digital transformation to maintain their competitiveness. Therefore, it is important for banks as companies engaged in financial services to be more sensitive to technological developments. This rapid progress in finance and technology has also increased competition in the banking industry for innovation in banking services and electronic services for its customers, especially mobile banking. The results of the 2020 Top Brand Index survey show that the m-BCA product ranks as the customer's preferred mobile banking product, followed by the BRI mobile product, Mandiri's m-banking, which is still far behind in the first position of m-BCA. The two lowest mobile banking products are BNI Mobile and CIMB Niaga Mobile. The survey results indicate that there are factors that cause Livin' by Mandiri m-banking products to be unable to compete with m-BCA and BRI Mobile products. It is suspected that the quality of Mandiri's m-Banking electronic service is a factor causing its products to be unable to compete with m-BCA products so that it can have an impact on reduced customer loyalty and can switch to using m-Banking at other banks. This study aims to determine the respondents’ assessment of the variables interface design, reliability, responsiveness, trust, personalization, customer satisfaction and customer loyalty Livin' by Mandiri. To determine the effect of interface design, reliability, responsiveness, trust, and personalization on customer satisfaction, the effect of customer satisfaction on loyalty. To determine the effect of interface design, reliability, responsiveness, trust, and personalization on loyalty to Livin' by Mandiri through satisfaction mediation. The data collection process used a questionnaire with a purposive sampling method using 385 respondents of Livin' by Mandiri customers. The data analysis technique in this study used SEM-PLS (Partial Least Square). The results of this study conclude that the level of interface design, reliability, responsiveness, trust, and personalization, customer satisfaction and loyalty is included in high category. Hypothesis testing shows that there is a positive and significant effect of interface design, reliability, responsiveness, trust, and personalization on customer satisfaction at Livin' by Mandiri. There is a positive and significant effect of customer satisfaction on loyalty to Livin' by Mandiri. There is a mediating effect of satisfaction in the relationship between interface design, reliability, responsiveness, trust, personalization and loyalty to Livin' by Mandiri.

Keywords: Livin’ by Mandiri, e-service quality, customer satisfaction, loyalty.

I. INTRODUCTION

The current digitization of the economy and finance requires banks to transform in order to maintain their role and position as the main intermediation institution in the financial system as well as the axis of monetary policy transmission. The demands come as the non-bank role strengthens in the financial sector. Banks are required to be able to transform themselves through end-to-end digital transformation to maintain their competitiveness.
1. Letting You Control Your Life: Be more enthusiastic about life because being independent helps you control your finances.

2. Assuring financial Sidekick: Best friends who help manage finances and organize a better financial life. It allows you to synergize many aspects of life.

3. One app for everything: Livin' is written in a brush style with handwriting to make it more personalized. So anyone can customize the services they need using the Livin' app.

4. Friends who make life more exciting: The writing style is made very casual to show the closeness of best friends (sidekick) and show the enjoyment of life (livin’) which is easier and more controlled.

5. Blue for new spirit: The blue color symbolizes trust, security, and strengthens Livin' by Mandiri side as a reliable friend.

In encouraging domestic economic growth, banks that are financial intermediary institutions certainly take a role for the drivers that drive the economy in various sectors. While for Indonesia sourced from OJK at the end of 2019, the ratio of comparison of banking assets to GDP or Gross Domestic Income is only at 55.01%. When compared to Malaysia, Singapore or Thailand is still far behind because it has broken through 110%, which means the expansion of the banking business in Indonesia still has great potential to continue to be improved. The level of technology adoption that is still lacking is still a problem that needs to be faced in the banking world (Sitanggang, 2020).

II. LITERATURE REVIEW

The purpose of marketing is in principle to create value for customers to capture value from customers in return. Steps in the marketing process range from understanding customer needs, designing customer value-driven marketing strategies and integrated marketing programs, to building customer relationships and capturing value for the company (Kotler & Armstrong, 2018:26)

Kotler & Armstrong (2018:28) also adds that marketing is the process of engaging customers and managing profitable customer relationships. The dual purpose of marketing is to attract new customers by promising superior value and retaining and growing the customers that companies have today by providing value and satisfaction for them.

The functions of successful marketing management according to Kotler and Keller (2016:52) include developing marketing strategies and plans, capturing marketing insights, connecting with customers, building strong brands, creating, delivering, and communicating value, as well as creating growth for the long term.

Thus, it can be taken from the essence of these experts that marketing management has its function as an activity that leads to strategic planning related to customer relationships, delivering superior value for those customers, and creating profits through transactions and positive developments for the company in the long run. With marketing management, what the company expects or targets including in building a strong brand can be achieved.
The e-service quality dimension of Puriwat & Tripossakul (2017) research is considered suitable for this research because it includes interface design, reliability, responsiveness, trust and personalization. The five dimensions of e-service quality in the online scope or e-service quality becomes important to determine the success or failure of an electronic banking transaction through a mobile banking system.

The relationships between variables in this study are described in the following frame of mind.

E-Service Quality (X)

- Interface design
- Reliability
- Responsiveness
- Trust
- Personalization

Satisfaction Customer (M)

Loyalty Customer (Y)

H1

H2

H3

H4

H7 H8 H9 H10 H11

Mediating Hypotheses

Figure 2 Framework for Thinking

III. METHOD

Sugiyono (2018) said that research methodology is a scientific way to get data with specific purposes and uses. The purpose of the research conducted is to examine the influence of the e-service quality dimension on customer satisfaction in Livin' by Mandiri users, the influence of customer satisfaction on customer loyalty to Livin' by Mandiri users, and the effect of satisfaction mediation on the relationship between the e-service quality dimension and customer loyalty to Livin' by Mandiri users. Then the hypothesis proved and explained the phenomenon that occurred in Livin' by Mandiri.

Structural Equation Model (SEM)

The SEM (Structural Equation Model) is a second-generation multivariate analysis technique that allows researchers to test the relationships between complex variables both recursive and non-recursive to obtain an overview of the comprehensive on the overall model (Ghozali, 2008; in Haryono, 2017). This structural equation model is also divided into two groups, namely covariance based matric structural equation modeling (CB-SEM) and variance based matric structural equation modelling (VB-SEM) (Indrawati, 2015).

The use of variance based matric structural equation modeling (VB-SEM) model with PLS-SEM aims to test predictive relationships between constructs by seeing if there is a relationship or influence between the constructs. In this study, the model trial was conducted by testing the relationship between each dimension of e-service quality to loyalty through satisfaction variables.

IV. RESULTS

Evaluation of Outer Model (Measurement Model)

Evaluations of reflective indicator models include convergent validity, discriminant validity, and construct reliability. The outer model is the first of two estimation models in SEM. This outer model represents a theory that will determine the observed variables for each construction and allow the assessment of construct validity (Malhotra, 2010). Initial testing of outer models is carried out tests of the validity and reliability of research
instruments. Based on the results of data processing, the results of the outer model (measurement model) are obtained, as follows:

Testing this outer model is the first step in data processing with PLS. These tests are measured, because the goodness of the data depends on how well the measurement system is developed. Here are the results of tests on outer models consisting of convergent validity, discriminant validity, and construct reliability.

The discriminant validity test shows that one indicator is different from another indicator. The discriminant validity test is assessed based on the cross loading rule of thumb of cross loading, which is the correlation of constructs of an item greater than other constructs. Based on the results of data processing, the results of discriminant validity are obtained, as follows:

![Figure 3 Measurement Model (Outer Model)](image)

Source: data that has been processed

<table>
<thead>
<tr>
<th>Interface Design</th>
<th>Satisfaction</th>
<th>Loyalitas</th>
<th>Personalization</th>
<th>Reliability</th>
<th>Responsiveness</th>
<th>Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID1</td>
<td>0.823</td>
<td>0.475</td>
<td>0.453</td>
<td>0.504</td>
<td>0.389</td>
<td>0.451</td>
</tr>
<tr>
<td>ID2</td>
<td>0.854</td>
<td>0.568</td>
<td>0.468</td>
<td>0.506</td>
<td>0.425</td>
<td>0.515</td>
</tr>
<tr>
<td>ID3</td>
<td>0.822</td>
<td>0.522</td>
<td>0.491</td>
<td>0.505</td>
<td>0.437</td>
<td>0.481</td>
</tr>
<tr>
<td>K1</td>
<td>0.512</td>
<td>0.843</td>
<td>0.445</td>
<td>0.541</td>
<td>0.461</td>
<td>0.563</td>
</tr>
<tr>
<td>K2</td>
<td>0.555</td>
<td>0.837</td>
<td>0.499</td>
<td>0.518</td>
<td>0.519</td>
<td>0.566</td>
</tr>
<tr>
<td>K3</td>
<td>0.455</td>
<td>0.742</td>
<td>0.481</td>
<td>0.564</td>
<td>0.413</td>
<td>0.528</td>
</tr>
<tr>
<td>L1</td>
<td>0.482</td>
<td>0.467</td>
<td>0.814</td>
<td>0.494</td>
<td>0.364</td>
<td>0.445</td>
</tr>
<tr>
<td>L2</td>
<td>0.433</td>
<td>0.499</td>
<td>0.842</td>
<td>0.542</td>
<td>0.427</td>
<td>0.518</td>
</tr>
<tr>
<td>L3</td>
<td>0.495</td>
<td>0.501</td>
<td>0.838</td>
<td>0.531</td>
<td>0.386</td>
<td>0.534</td>
</tr>
<tr>
<td>P1</td>
<td>0.529</td>
<td>0.549</td>
<td>0.497</td>
<td>0.784</td>
<td>0.402</td>
<td>0.484</td>
</tr>
<tr>
<td>P2</td>
<td>0.479</td>
<td>0.571</td>
<td>0.531</td>
<td>0.875</td>
<td>0.410</td>
<td>0.578</td>
</tr>
</tbody>
</table>
According to Abdillah & Hartono (2015) the inner model is a structural model that describes causality relationships between latent variables built on the substance of the theory. Performing a structural model test begins by measuring the $R^2$-square for the dependent construct and the path coefficient value for the significance test between constructs which further changes in the $R^2$-square are used to determine the influence of independent variables with dependent variables, while path coefficient values indicate the level of significance in hypothesis testing (Abdillah & Hartono, 2015). Structural models use three types of evaluation including $R^2$, effect size $f^2$, and path coefficient using Smart PLS software. This model is done through the bootstrapping process, following the results of the image on the structural model:

![Figure 4. Structural Models (Inner Model)](image)

**V. DISCUSSION**

Based on the results of data that has been collected and processed, this study uses 7 variables including interface design, reliability, responsiveness, trust, personalization, satisfaction and loyalty. This variable is used with the aim of seeing if there is a positive influence on each e-service quality variable, namely interface design, reliability, responsiveness, trust, personalization with satisfaction variables. Furthermore, it is used with the aim
to see if there is a positive influence of satisfaction variables on customer loyalty. In addition to direct influence is also used to test the influence of satisfaction mediation in the relationship between interface design, reliability, responsiveness, trust, personalization and loyalty.

CONCLUSIONS

According to the overall result and discussion of this research, it is safe to conclude that several variables may have positive effect on the dependent variables. When Tokopedia service user interface shows an improvement, the customer satisfaction and loyalty will increase. The better the service information quality of Tokopedia, the higher the satisfaction of the customer will be. The better the perceived privacy felt by the customer, the higher the satisfaction level of the customer will be. When it comes to risk management, the better it becomes, the higher the satisfaction and trust of the customer. The better the perception of website quality of Tokopedia, the higher the satisfaction and trust of the customer and when the trust is high, it goes the same with the loyalty of the customer.

Based on the results of H1 testing there is a positive and significant influence of interface design on customer satisfaction on Livin' by Mandiri as evidenced by the results of t-statistics > t-table (3.711 > 1.64) and p-value 0.001 < 0.05. The results are in accordance with previous research conducted by Puriwat & Triopsakul (2017), that there is a positive influence of e-service quality on interface design on customer satisfaction. Based on these results, it can be concluded that interface design indicators such as menus in Livin' by Mandiri application are visually attractive, Livin' by Mandiri application has a neatly arranged appearance, and Livin' by Mandiri application is easy to use to complete transactions this can affect the satisfaction of Livin' by Mandiri users. Based on the results of H2 testing there is a positive and significant influence of reliability on customer satisfaction on Livin' by Mandiri as evidenced by the results of t-statistics > t-table (3.531 > 1.64) and p-value 0.000 < 0.05. The results are in line with previous research conducted by Lee & Lin (2005), that the importance of reliability has been emphasized by information technology-based services. The reliability dimension has a direct positive effect on customer satisfaction with the electronic banking system. Based on these results, it can be concluded that reliability indicators such as Livin' by Mandiri provide its efforts to improve services, Livin' by Mandiri handles customer problems or complaints immediately, banking transactions on livin' by Mandiri application are always accurate and Livin' by Mandiri application has adequate security, these factors can affect the satisfaction of Livin' by Mandiri users.

Based on the results of the H3 test, there is a positive and significant effect of responsiveness on customer satisfaction at Livin’ by Mandiri as evidenced by the results of t-statistics > t-table (4.672 > 1.64) and p-value 0.000 < 0.05. These results are consistent with previous research conducted by Lee & Lin (2005), that responsiveness in electronic banking services has shown an important influence on customer satisfaction. Based on these results, it can be concluded that responsiveness indicators such as the Livin’ by Mandiri application provide a fast service process, Livin’ by Mandiri party is always willing to help its customers, and Livin’ by Mandiri party always responds to customer requests or requests, these things can affect the satisfaction of Livin’ by Mandiri users.

Based on the results of the H4 test, there is a positive and significant effect of trust on customer satisfaction at Livin’ by Mandiri as evidenced by the results of t-statistics > t-table (3.189 > 1.64) and p-value 0.002 < 0.05. These results are in accordance with previous research conducted by Puriwat & Triopsakul (2017), that there is a positive effect of e-service quality on trust on customer satisfaction. The importance of trust in the online context that can influence the adoption of mobile banking applications, predict online behavior and as a determinant of satisfaction. Based on these results, it can be concluded that trust indicators such as the Livin’ by Mandiri application are trusted m-banking applications, and Bank Mandiri is able to instill trust in Livin’ by Mandiri customers, both of which are able to affect the satisfaction of Livin’ by Mandiri users.

Based on the results of the H5 test, there is a positive and significant effect of personalization on customer satisfaction at Livin’ by Mandiri as evidenced by the results of t-statistics > t-table (4.915 > 1.64) and p-value 0.000 < 0.05. These results are in accordance with previous research conducted by Puriwat & Triopsakul (2017), that there is a positive effect of e-service quality on personalization on customer satisfaction. Based on these results, it can be concluded that personalization indicators such as the Livin’ by Mandiri application are already connected to the customer's email, the Livin’ by Mandiri application provides transaction
recommendations based on customer preferences, and the Livin’ by Mandiri application provides free personal pages for customers, affect the satisfaction of Livin’ by Mandiri users.

Based on the results of the H6 test, there is a positive and significant effect of customer satisfaction on loyalty to Livin’ by Mandiri as evidenced by the results of t-statistics > t table (13.027 > 1.64) and p-value 0.000 < 0.05. These results are in accordance with previous research conducted by Gotama & Indarwati (2019), that satisfaction has a positive influence on loyalty. This result is also supported by other researchers, namely Narotama (2019) who concludes that the customer satisfaction variable has a positive and significant influence on customer loyalty. Based on the results of the H7 test, it was found that there was a mediating effect of satisfaction in the relationship between interface design and loyalty at Livin’ by Mandiri as evidenced by the results of t-statistics > t table (3.381 > 1.64) and p-value 0.001 < 0.05. These results are in accordance with previous research conducted by Puriwat & Tripopsakul (2017), that satisfaction in the use of mobile banking mediates the relationship between interface design dimensions and mobile banking user loyalty. Based on the results of the H8 test, it was found that there was a mediating effect of satisfaction in the relationship between reliability and loyalty at Livin’ by Mandiri as evidenced by the results of t-statistics > t table (4.368 > 1.64) and p-value 0.000 < 0.05. These results are in accordance with previous research conducted by Puriwat & Tripopsakul (2017), that satisfaction in the use of mobile banking mediates the relationship between the dimensions of reliability and loyalty of mobile banking users. To increase customer satisfaction and loyalty, mobile banking service providers must begin to improve the reliability dimension, such as providing up-to-date and accurate information, as well as strengthening the security of banking transactions.

Based on the results of the H9 test, it was found that there was a mediating effect of satisfaction in the relationship between responsiveness and loyalty to Livin’ by Mandiri as evidenced by the results of t-statistics > t table (3.290 > 1.64) and p-value 0.001 < 0.05. These results are in accordance with previous research conducted by Puriwat & Tripopsakul (2017), that satisfaction in the use of mobile banking mediates the relationship between the dimensions of responsiveness and loyalty of mobile banking users.

Based on the results of the H10 test, it was found that there was a mediating effect of satisfaction in the relationship between trust and loyalty in Livin’ by Mandiri as evidenced by the results of t-statistics > t table (2.988 > 1.64) and p-value 0.003 < 0.05. These results are in accordance with previous research conducted by Puriwat & Tripopsakul (2017), that satisfaction in the use of mobile banking mediates the relationship between the dimensions of trust and loyalty of mobile banking users.

Based on the results of the H11 test, it was found that there was a mediating influence of satisfaction in the relationship between personalization and loyalty to Livin’ by Mandiri as evidenced by the results of t-statistics > t table (4.372 > 1.64) and p-value 0.000 < 0.05. These results are in accordance with previous research conducted by Puriwat & Tripopsakul (2017), that satisfaction in the use of mobile banking mediates the relationship between the dimensions of personalization and loyalty of mobile banking users.

**VI. CONCLUSION**

Based on the results of research on "The Effect of E-Service Quality on Loyalty Through Customer Satisfaction on Livin’ By Mandiri Users", the conclusions are as follows:

1. Respondents’ assessment of the variables studied, namely the level of interface design was included in the high category with a percentage of 79.97%. The level of reliability is included in the high category with a percentage of 81.82%. The responsiveness level is included in the high category with a percentage of 78.67%. The level of trust is included in the high category with a percentage of 79.51%. The level of personalization is included in the high category with a percentage of 78.01%.
2. Customer satisfaction using Livin’ by Mandiri is included in the high category with a percentage of 79.62%.
3. Customer loyalty in using Livin’ by Mandiri is in the high category with a percentage of 78.58%.
4. There is a positive and significant effect of interface design on customer satisfaction at Livin’ by Mandiri, this is evidenced by the results of t-statistics > t-table (3.371 > 1.64) and p-value 0.001 < 0.05.
5. There is a positive and significant effect of reliability on customer satisfaction at Livin’ by Mandiri, this is evidenced by the results of t-statistics > t table (3.531 > 1.64) and p-value 0.000 < 0.05.
6. There is a positive and significant effect of responsiveness on customer satisfaction at Livin' by Mandiri, this is evidenced by the results of t-statistics > ttable (4.672 > 1.64) and p-value 0.000 < 0.05.
7. There is a positive and significant effect of trust on customer satisfaction at Livin' by Mandiri, this is evidenced by the results of t-statistics > ttable (3.189 > 1.64) and p-value 0.002 < 0.05.
8. There is a positive and significant effect of personalization on customer satisfaction at Livin' by Mandiri, this is evidenced by the results of t-statistics > ttable (4.915 > 1.64) and p-value 0.000 < 0.05.
9. There is a positive and significant effect of customer satisfaction on loyalty to Livin' by Mandiri, this is evidenced by the results of t-statistics > ttable (13.027 > 1.64) and p-value 0.000 < 0.05.
10. There is a mediating effect of satisfaction in the relationship between interface design and loyalty to Livin' by Mandiri, this is evidenced by the results of t-statistics > ttable (3.381 > 1.64) and p-value 0.001 < 0.05.
11. There is a mediating effect of satisfaction in the relationship between reliability and loyalty at Livin' by Mandiri, this is evidenced by the results of t-statistics > ttable (4.368 > 1.64) and p-value 0.000 < 0.05.
12. There is a mediating effect of satisfaction in the relationship between responsiveness and loyalty at Livin' by Mandiri, this is evidenced by the results of t-statistics > ttable (3.290 > 1.64) and p-value 0.001 < 0.05.
13. There is a mediating effect of satisfaction in the relationship between trust and loyalty to Livin' by Mandiri, this is evidenced by the results of t-statistics > ttable (2.988 > 1.64) and p-value 0.003 < 0.05.
14. There is a mediating effect of satisfaction in the relationship between personalization and loyalty to Livin' by Mandiri, this is evidenced by the results of t-statistics > ttable (4.372 > 1.64) and p-value 0.000 < 0.05.

VII. REFERENCES
