



ECONOMIC ANNALS-XXI
ISSN 1728-6239 (Online)
ISSN 1728-6220 (Print)
<https://doi.org/10.21003/ea>
<http://ea21journal.world>

Volume 198 Issue (7-8)'2022

Citation information: Said, L. R., Puspasari, N., & Rusniati, R. (2022). The effect of mobile banking e-service on positive word-of-mouth marketing and customers: a case study of South Kalimantan Bank in Indonesia. *Economic Annals-XXI*, 198(7-8), 4-17. doi: <https://doi.org/10.21003/ea.V198-01>



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The effect of mobile banking e-service on positive word-of-mouth marketing and customers: a case study of South Kalimantan Bank in Indonesia

Abstract. Various studies on bank customers' perception of e-service quality are widely done in conventional banks or private banks. However, hardly any study sheds light on the baby boomers and X generation customers on how their perceptions of e-service quality and satisfaction affect positive word-of-mouth (WOM) in a regional government-owned bank. This study aims to analyze the effect of South Kalimantan Bank (SKB) mobile banking e-service on positive WOM and old SKB customers and the role of customer satisfaction in intervening in the influence of e-service quality on WOM. This study used a structured, self-administered questionnaire based on a convenience sampling method to collect data from 97 customers of an Indonesian regional bank. The study data were analyzed using Partial Least Square (PLS). The structural equation modelling (SEM) analysis looked for essential relationships between the variables in the study. The structural findings showed that e-service quality has no direct effect on positive WOM, but e-service quality affects positive WOM through customer satisfaction. The study's key findings found that although older customers want convenience in mobile banking transactions, they still put security as the main factor. Therefore, it is recommended that banks focus more on user-friendly mobile features than complex features, primarily when serving older customers.

Keywords: E-Service Quality; Customer Satisfaction; Mobile Banking; Word-of-Mouth; WOM; Partial Least Square; South Kalimantan Bank (SKB)

JEL Classification: H1; H50; J14

Acknowledgements and Funding: The authors received no direct funding for this research.

Contribution: The authors contributed equally to this work.

Data Availability Statement: All data will be available upon request.

DOI: <https://doi.org/10.21003/ea.V198-01>

1. Introduction and Brief Literature Review

Competition in the banking industry is currently very tight, including competing to improve mobile banking performance. This competition also demands that banks should be able to provide quality mobile banking services because customers are increasingly selective in choosing and entrusting their financial transactions to the bank. However, as the migration of offline transactions to online increases, the amount of research on mobile banking adoption is still not satisfactory (Merhi et al., 2020).

Electronic-based services facilitate effective and efficient shopping, purchasing, and delivering products and services. Research on e-service quality in the banking industry is focused on internet banking and mobile banking services. Mobile banking as an innovative technology has been developing rapidly globally and transformed the banking sector function (Rakhmetova & Budeshov, 2020). Research on e-service quality mobile banking concerns trust, security, and privacy. Service innovation as part of service quality affects positive word-of-mouth (WOM). Positive WOM is a form of conversation about the advantages of a product/service between one person and another. Positive message delivered that is sometimes not realized by the informant or by the recipient of the information. WOM is a critical factor for the banking services business's continuity because WOM influences product purchase decisions (Manohar et al., 2019).

Research on banking services cannot be separated from the importance of the role of variable customer satisfaction. Customer satisfaction is a feeling of pleasure or disappointment that a person experiences with a product. Customer satisfaction comes from comparing products or services as a priori expectations and a posteriori perceived performance. Perceived service quality is widely regarded as a predictor of customer satisfaction. Previous research in various industries has established its link, including the hospitality industry, such as hotels (Li et al., 2020). Various studies also show customer satisfaction as mediating/intervening variable between service quality and the dependent variable such as WOM and loyalty. Customer satisfaction can function as a total mediating variable and partially mediating variable and other variables such as perceived value (Andriani & Sri, 2020).

Research conducted among others by Raza et al. (2020), and Fida et al. (2020), show a model of the relationship between a bank's e-service quality to loyalty mediated by customer satisfaction. The strong relation between customer satisfaction and loyalty, which includes positive WOM, is found in many banking services studies. The research outlined above has been conducted mainly on conventional banks or private banks. Research on e-service quality in regional government owned-banks is minimal. Indonesia's regional development bank model is similar to a municipal bank. City banks have three financial business models: investment, divestment, and combination entities.

This study analyzed South Kalimantan Provincial Bank. In short, South Kalimantan Bank (SKB), as one of the best Indonesia regional development banks that switch strategies, encourages their customers to conduct mobile banking transactions. The banks are categorized as regional development banks as their functions include supporting the development of Indonesian provinces. COVID-19 pandemic challenges how the regional development banks doing business toward more digital applications. SKB felt compelled to go more digital to better serve its customers in a safe environment during a pandemic. That phenomenon is in line with data showing that in the pandemic period COVID-19, almost 90 percent of the successful companies changes to a more digital business model (McKinsey & Company, 2021).

The use of mobile banking in provincial/regional development banks is interesting because compared to conventional banks, regional banks are slower in making digital services changes. Such inaction is likely due to differences in the function and ownership of provincial banks. SKB is the only finance business owned by the provincial government of South Kalimantan that serves as the holder of the Government's Regional Cash Account. Most of its shares are owned by the provincial government.

SKB, as a provincial/regional development bank, participates in improving performance through mobile banking services to customers. SKB is unique because most of SKB's customers are active government employees and retired civil servants. Customers who transact in SKB more to take salaries and pensions of civil servants. Current customers of SKB are mostly baby boomers and generation X. Cohort theory defines a generation as a group whose birth date is above 2000 (Fida et al., 2020). Each generation shares the same values, beliefs and behaviours and is influenced by events and developments. Baby boomers (born between 1944 and 1964) and generation X (born between 1965 and 1979), when compared to younger generations (generations Y and Z), they are less in mobile technology use. Before the pandemic, most baby boomers and generation X customers of SKB prefer to come directly to the bank or to the ATM to transact.

There is hardly any study that sheds light on the baby boomers and X generation customers at provincial/regional development banks on how their perceptions on e-service quality and satisfaction affect WOM. Therefore, this study aims to analyze the influence of e-service quality

of SKB mobile banking on positive WOM among older SKB customers; and analyze the role of customer satisfaction in intervening the influence of e-service quality on positive WOM (Piercy et al., 2018). Based on the problem formulation and the theoretical basis that has been outlined, this research model is illustrated in Figure 1.

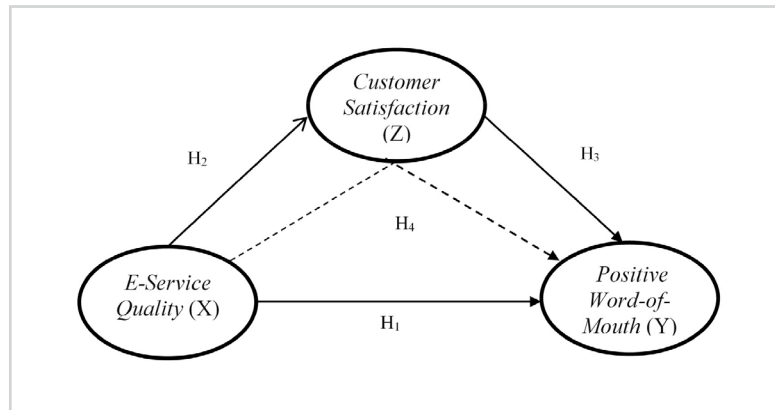


Figure 1:
**Conceptual framework of the effect of e-service quality
on customer satisfaction and positive WOM**
Source: Compiled by the authors

Hence, the research hypotheses can be described as follows:

H1: E-Service Quality influences Positive Word-of-Mouth.

H2: E-Service Quality influences Customer Satisfaction.

H3: Customer Satisfaction influences Positive Word-of-Mouth.

H4: E-Service Quality influences Positive Word-of-Mouth through Customer Satisfaction.

2. Research Methods

2.1. Sampling Approach

The sampling approach used was non-probability purposive sampling with the respondent features of SKB mobile banking active users who were baby-boomers and generation X. In multivariate analysis (correlation or multiple regression), the sample was at least ten times the variables studied. In this study, one independent variable, one dependent variable, and one mediating variable, a total of three variables, therefore the minimum sample number was $10 \times 3 = 30$. In this study, researchers obtained a sample of 97 respondents by disseminating questionnaires through Google Form and questionnaire forms sent to customer contacts and customer e-mail addresses.

2.2. Definitions of the Operational Variables

In this study, the exogenous variable was E-Service Quality (X), the endogenous variable was Positive Word-of-Mouth (Y), while mediating variable was Customer Satisfaction (Z). The definitions of the operational variables are presented in Table 1.

2.3. Data Analysis Methods

This research uses the data analysis method y Partial Least Square (PLS). The Model indicator used for E-Service Quality in this study was a formative indicator model (Nawi et al., 2019). E-Service Quality is better represented by formative indicators than reflective ones. E-Service Quality analysis has different conclusions depending on the indicator used, whether with reflective or formative indicators (Afthanorhan et al., 2019). E-Service Quality proved to be a strong indicator using formative indicators. Otherwise, conceptualized reflective indicators resulted in E-Service Quality becoming weak in terms of process quality and usability.

2.4. Descriptive Analysis of Respondents' Answers

Categorizing the total score of respondents' responses uses the average value as a reference for determining the category classification. The division of evaluation categories in the current

Table 1:
Definitions of the Operational Variables

No.	Variable	Theoretical Definition	Source	Operational Definition	Indicator
1.	<i>E-Service Quality (X)</i>	Electronic-based services facilitate the effective and efficient shopping, and services and products delivery	(Parasuraman et al., 2005)	The Quality of SKB's mobile banking services is based on system availability, effectiveness, accomplishment, and privacy dimensions	1. Effectiveness 2. System availability 3. Fulfilment Privacy
2.	<i>Customer Satisfaction (Z)</i>	Customer feedback manifested in a Individual's feelings of joy or disappointment undergone after comparing the perception of performance or outcomes of a product with its anticipations	(Kotler et al., 2014)	The feeling felt by SKB customers after using mobile banking	1. Loyal/repeated usage of mobile banking 2. Use other SKB products 3. Feel safe transacting 4. Feel comfortable transacting
3.	<i>Positive Word-of-Mouth (Y)</i>	<i>Positive Word-of-Mouth</i> is a form of conversation about the advantages of a product/service between one person and another, in which there is a positive message delivered that is sometimes not realized by the informant or by the recipient of the information	(Babin et al., 2005)	It is the process of conveying the word of mouth information conducted by the customer to other people based on the positive experience of SKB services	1. Talk to others about SKB's ease of mobile banking 2. Recommend Persuade

Source: Compiled by the authors

survey is defined on the basis of the number of measurement scales utilized. The following is an equation for calculating the class length at each interval:

$$P = \frac{X_{max} - X_{min}}{b} = \frac{R}{b}, \quad (1)$$

where:

P is Class Length of each Interval;

X_{max} is Maximum Value;

X_{min} is Minimum Value;

R is Range;

b is Number of Classes.

In the current article, the ultimate rating value was five, and the minimum value was one so that while the value was subsistence into the former equation, the next outcomes were acquired:

$$P = \frac{5-1}{5} = 0.8. \quad (2)$$

The average was used to examine the research variable's value, which can be explained in Table 2.

Table 2:
Indicator Assessment Criteria on Research Variables

Number	Percent	Criteria
1	1.00 – 1.80	Quite Inefficient
2	1.81 – 2.60	Inefficient
3	2.61 – 3.40	Fair
4	3.41 – 4.20	Acceptable
5	4.21 – 5.00	Excellent

Source: Compiled by the authors

3. Results and Discussion

3.1. Respondents' Responses to Variable E-Service Quality (X)

E-Service Quality (X) questionnaire consisted of 4 indicators, 22 statement items, and 97 responses. Table 3 shows the results of data processing that has been done regarding the indicators on the variable *E-Service Quality (X)*.

Table 3:
Recapitulation of Descriptive Analysis of E-Service Quality (X)

Code	Indicator	Average	Category
X1	Efficiency	4.14	Good
X2	Fulfillment	3.95	Good
X3	System Availability	3.31	Fair
X4	Privacy	2.82	Fair
	Average	3.56	Good

Source: Compiled by the authors

3.2. Respondents' Responses to Customer Satisfaction (Z)

Recapitulation of Descriptive Analysis of Customer Satisfaction is given in Table 4.

The *Customer Satisfaction* (Z) questionnaires consisted of 4 indicators, 4 statement items, and 97 responses. Table 4 presents the results of data processing that has been done regarding the indicators on the *Customer Satisfaction* (Z) variable as follows in Figure 2.

Table 4 and Figure 2 show the average respondent's response to the *Customer Satisfaction* (Z) variable. The highest average occurs in the indicator Z3 with an average of 3.41 in the range of 3.41-4.20 within a good category. In comparison, the lowest average occurs in the indicator Z4 with an average of 2.84 (within 2.61-3.40) with an appropriate category. Overall, the average respondent's response to the *Customer Satisfaction* variable (Z) of 3.18 is 2.61-3.40 in the appropriate category.

Table 4:
Recapitulation of Descriptive Analysis of Customer Satisfaction (Z)

Code	Item	Response's Score					Total Score	Average	Category
		5	4	3	2	1			
Z1	I repeat using SKB mobile services after my first experience	7	49	13	21	7	319	3.29	Fair
		7.22%	50.52%	13.40%	21.65%	7.22%			
Z2	I feel the need to inform others of SKB's mobile banking services	3	46	19	24	5	309	3.19	Fair
		3.09%	47.42%	19.59%	24.74%	5.15%			
Z3	I feel safe when making transactions in SKB mobile banking even though there is other alternatives bank	6	53	17	17	4	331	3.41	Good
		6.19%	54.64%	17.53%	17.53%	4.12%			
Z4	I feel comfortable using various service products owned by SKB	0	25	34	35	3	275	2.84	Fair
		0.00%	25.77%	35.05%	36.08%	3.09%			

Source: Compiled by the authors

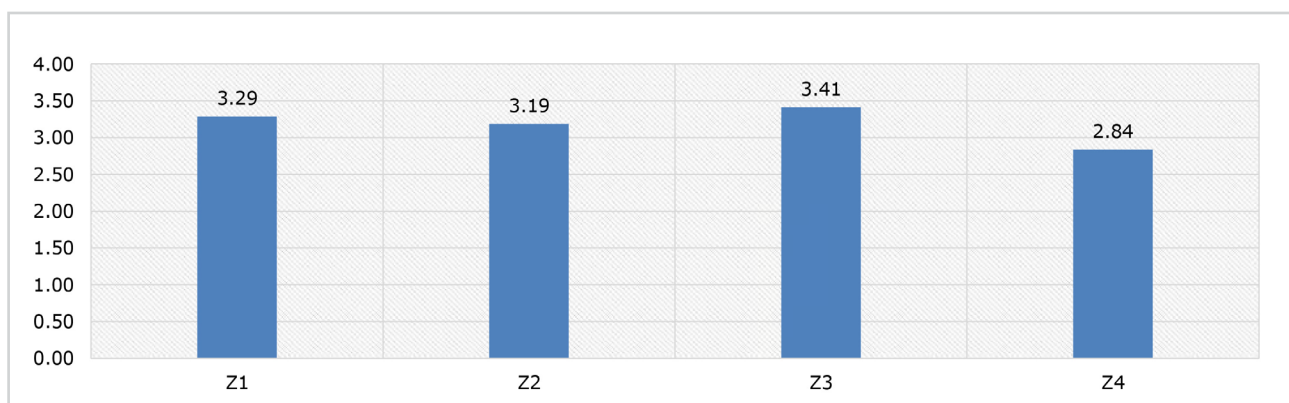


Figure 2:
Recapitulation of Customer Satisfaction (Z) Descriptive Analysis

Source: Compiled by the authors

3.3. Respondents' Responses to Positive Word-of-Mouth (Y)

The questionnaire of *Positive Word-of-Mouth* (Y) consists of 3 indicators, 3 statement items, and 97 responses. Table 5 presents the results of data processing of *Positive Word-of-Mouth* (Y).

Based on Table 5 and Figure 3, the average responses to the *Positive Word-of-Mouth* (Y) are as followed. The highest average occurred on the Y2, with an average of 3.41 being in the range of 3.41-4.20 within the excellent category. While the lowest average occurs in the Y3 with an average of 2.84 is (within 2.61-3.40) with an appropriate category. Overall, the average

Table 5:
Recapitulation of Descriptive Analysis of Positive Word-of-Mouth (Y)

Code	Items	Response's Score					Total Score	Average	Category
		5	4	3	2	1			
Y1	I talk to others, the ease with which I get to be an SKB customer	3	46	19	24	5	309	3.19	Fair
		3.09%	47.42%	19.59%	24.74%	5.15%			
Y2	I give recommendations about SKB service products to others	6	53	17	17	4	331	3.41	Good
		6.19%	54.64%	17.53%	17.53%	4.12%			
Y3	I convince others to keep their money safely in SKB	0	25	34	35	3	275	2.84	Fair
		0.00%	25.77%	35.05%	36.08%	3.09%			
Average								3.14	Fair

Source: Compiled by the authors

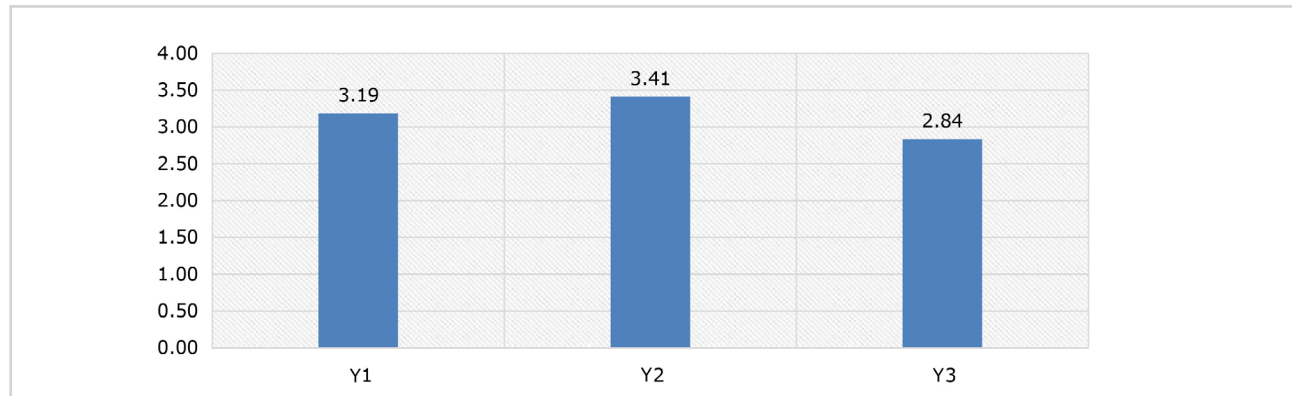


Figure 3:
Recapitulation of Positive Word-of-Mouth (Y) Descriptive Analysis

Source: Compiled by the authors

respondent's response to the *Positive Word-of-Mouth* (Y) variable of 3.14 is in the range of 2.61-3.40 in the appropriate category.

3.4. Analysis of Structure Equation Modeling Partial Least Square

The present phases is related to shaping the primary model of structural equations prior to estimation was conducted. This primary model was formulated on the basis of a previous re-search theory.

In Figure 4, the path model consists of 2 (two) substructures. In general, these substructures can be described through the following equations:

$$\begin{aligned}\eta_1 &= (\gamma_{11} \times \xi) + \xi_1, \\ \eta_2 &= (\gamma_{21} \times \xi) + (\gamma_{22} \times \xi_1) + \zeta_2,\end{aligned}\tag{3}$$

where:

ξ (Ksi): Exogenous Variable of *E-Service Quality* (X).

η_1 (Eta 1): The endogenous variable of *Customer Satisfaction* (Z).

η_2 (Eta 2): The endogenous variable of *Positive Word-of-Mouth* (Y).

γ_{11} (Gamma 11): The coefficient value of exogenous variable *E-Service Quality* (X) on endogenous variable *Customer Satisfaction* (Z).

γ_{21} (Gamma 21): The coefficient value of exogenous variable *E-Service Quality* (X) on endogenous variable *Positive Word-of-Mouth* (Y).

γ_{22} (Gamma 22): The coefficient value of endogenous variable *Customer Satisfaction* (Z) on endogenous variable *Positive Word-of-Mouth* (Y).

ζ_1 (Zeta 1): Error value on the endogenous variable *Customer Satisfaction* (Z).

ζ_2 (Zeta 2): Error value on the endogenous variable *Positive Word-of-Mouth* (Y).

3.5. Outer Model Evaluation

The manifest variables in the study are as follows:

1. *Four latent variables measured e-Service Quality* (X), i.e., latent variable X_1 as measured by eight observed variables (E1-E8), X_2 as measured by seven observed variables (F1-F7),

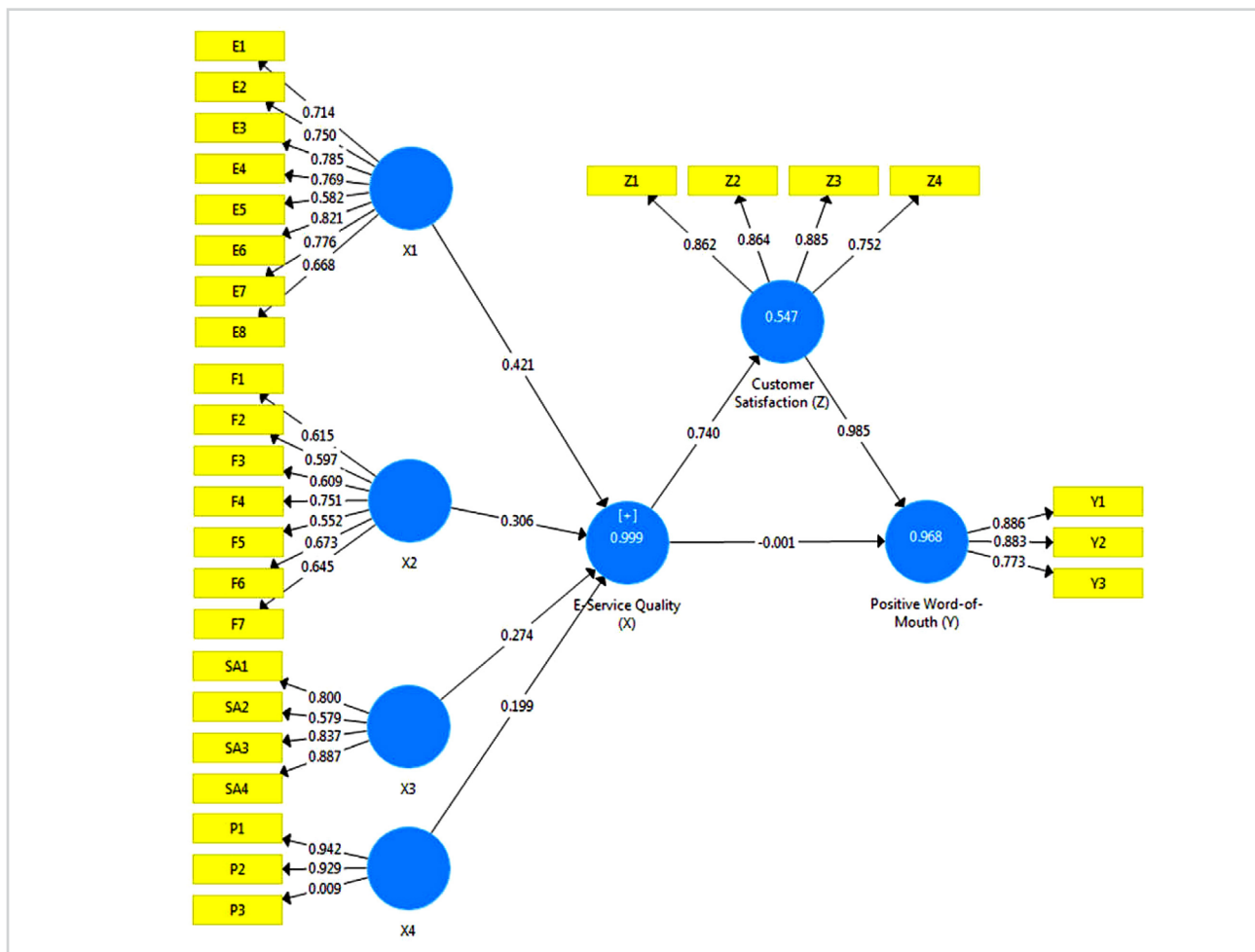


Figure 4:
Loading Factors of the Initial Outer Model
Source: Compiled by the authors

X_3 as measured by four observed variables (SA1-SA4), and X_4 as measured by three observed variables (P1-P3).

2. *Customer Satisfaction (Z)* was measured by four observed variables (Z1-Z4).

3. *Positive Word-of-Mouth (Y)* was measured by three observed variables (Y1-Y3).

Plus, discriminant validity, convergent validity, and reliability tests were carried out.

3.6. Convergent Validity Test

An indicator is said to have good validity on reflective latent variables if a loading factor value is more significant than 0.70. For formative models, if the significance of weight is significant at the level of 5% or more than 1.96, there is no multicollinearity indicated with a VIF value of less than 10. Based on the estimation results using SmartPLS 3.0 statistical application, the output is obtained as follows.

Table 6 contains loading factors of all observed variables.

Figure 4 and Table 6 show the loading factor value for each observed variable. P3 has a loading factor smaller than 0.5. Therefore, the variable is not valid and must not be included in a structural model. Figure 5 shows the model after eliminating P3.

Table 7 contains loading factors of all observed variables, excluding P3.

Based on Figure 5 and Table 7, all loading factors have values greater than 0.5; therefore, the entire indicators are valid. Furthermore, the average variance extracted (AVE) test was conducted to further support convergent validity results with criteria $AVE \geq 0.5$. Table 8 shows the results of the AVE test using the PLS 3.0 program:

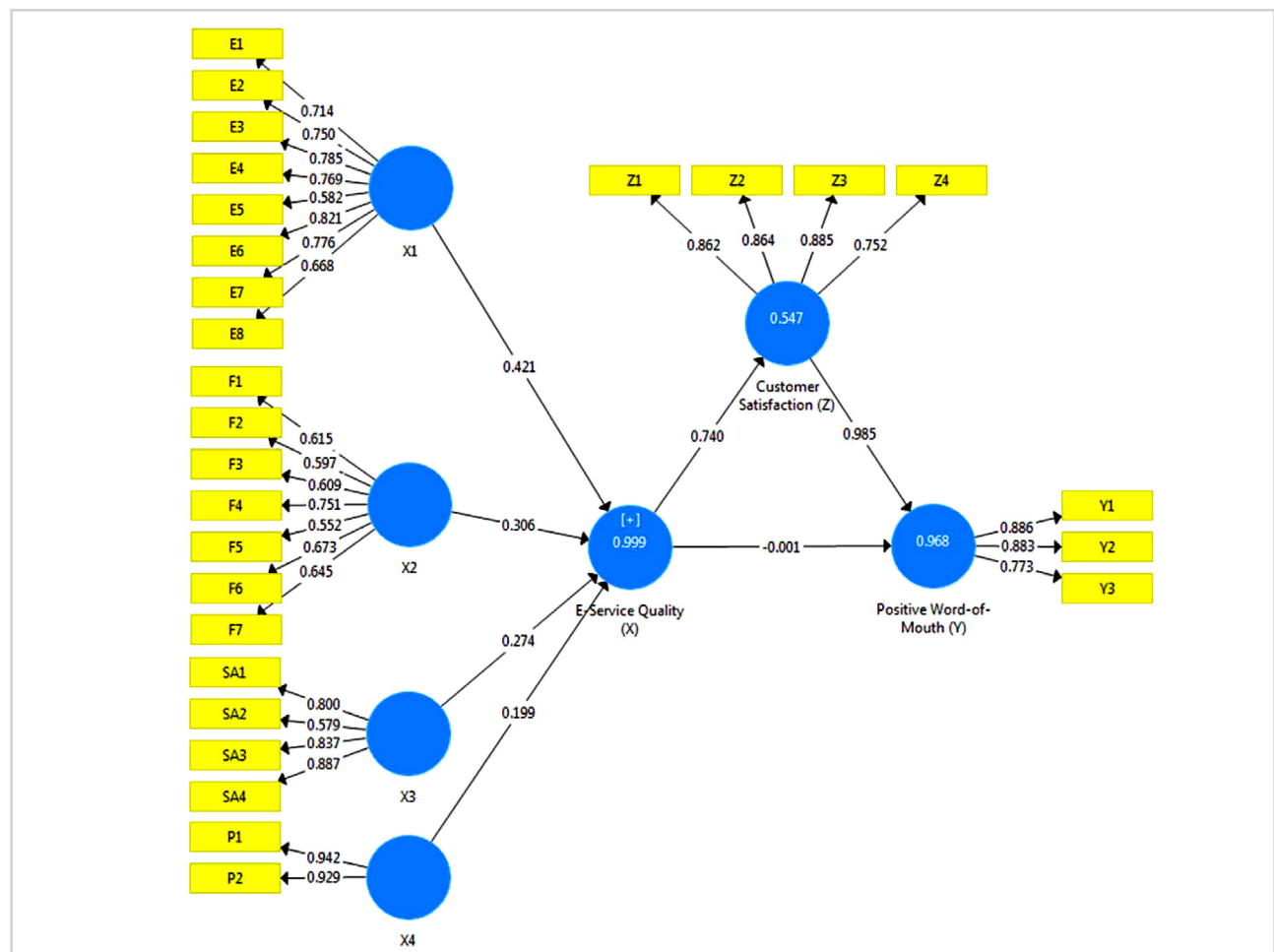
As shown in, a construct has an AVE value smaller than 0.5, i.e., X_2 . However, the value is still above 0.3, so X_2 is still considered to be maintained. It assumes that the indicators that make up the constructs have good convergent validity.

Table 6:

Convergent Validity Loading Factor of the Initial Outer Model

Observed Variable	Loading Factor	R critical	Criteria (Loading Factor ≥ 0.5)
E1	0.714	0.50	Reliable
E2	0.750	0.50	Reliable
E3	0.785	0.50	Reliable
E4	0.769	0.50	Reliable
E5	0.582	0.50	Reliable
E6	0.821	0.50	Reliable
E7	0.776	0.50	Reliable
E8	0.668	0.50	Reliable
F1	0.615	0.50	Reliable
F2	0.597	0.50	Reliable
F3	0.609	0.50	Reliable
F4	0.751	0.50	Reliable
F5	0.552	0.50	Reliable
F6	0.673	0.50	Reliable
F7	0.645	0.50	Reliable
P1	0.942	0.50	Reliable
P2	0.929	0.50	Reliable
P3	0.009	0.50	Not Reliable
SA1	0.800	0.50	Reliable
SA2	0.579	0.50	Reliable
SA3	0.837	0.50	Reliable
SA4	0.887	0.50	Reliable
Y1	0.886	0.50	Reliable
Y2	0.883	0.50	Reliable
Y3	0.773	0.50	Reliable
Z1	0.862	0.50	Reliable
Z2	0.864	0.50	Reliable
Z3	0.885	0.50	Reliable
Z4	0.752	0.50	Reliable

Source: Compiled by the authors

**Figure 5:**
Loading Factors of the First Respecified Outer Model

Source: Compiled by the authors

Table 7:

Convergent Validity Loading Factor of the First Respecified Outer Model

<i>Observed Variable</i>	<i>Loading Factor</i>	<i>R critical</i>	<i>Criteria (Loading Factor ≥ 0.5)</i>
E1	0.7140	0.50	reliable
E2	0.7500	0.50	reliable
E3	0.7850	0.50	reliable
E4	0.7690	0.50	reliable
E5	0.5820	0.50	reliable
E6	0.8210	0.50	reliable
E7	0.7760	0.50	reliable
E8	0.6680	0.50	reliable
F1	0.6150	0.50	reliable
F2	0.5970	0.50	reliable
F3	0.6090	0.50	reliable
F4	0.7510	0.50	reliable
F5	0.5520	0.50	reliable
F6	0.6730	0.50	reliable
F7	0.6450	0.50	reliable
P1	0.9420	0.50	reliable
P2	0.9290	0.50	reliable
SA1	0.8000	0.50	reliable
SA2	0.5790	0.50	reliable
SA3	0.8370	0.50	reliable
SA4	0.8870	0.50	reliable
Y1	0.8860	0.50	reliable
Y2	0.8830	0.50	reliable
Y3	0.7730	0.50	reliable
Z1	0.8620	0.50	reliable
Z2	0.8640	0.50	reliable
Z3	0.8850	0.50	reliable
Z4	0.7520	0.50	reliable

Source: Compiled by the authors

Table 8:

Average Variance Extracted

<i>Construct</i>	<i>Average Variance Extracted (AVE)</i>	<i>R critical</i>	<i>Criteria (AVE ≥ 0.5)</i>
X ₁	0.543	0.5	Valid
X ₂	0.406	0.5	Not valid
X ₃	0.615	0.5	Valid
X ₄	0.875	0.5	Valid
Y	0.721	0.5	Valid
Z	0.709	0.5	Valid

Source: Compiled by the authors

The next step is validity testing for formative construct, i.e., on X₁, X₂, X₃, and X₄ against E-Service Quality (X) and assessing the multicollinearity that occurs in latent X₁, X₂, X₃, and X₄. Table 9 presents validity test results on formative validity significance and multicollinearity.

Based on Table 9, the results show that the entire latent constructs had a calculated t-value greater than 1.96, and the P-value was less than the significance level of 5% (0.05). Also, the VIF value in each construct is less than 10, indicating no multicollinearity in formative constructs. It can be concluded that all formative latent constructs are valid.

3.7. Test of Discriminant Validity

Discriminant validity may be assessed from the value of cross-loading. The indicator's correlation value to its construct shall be above the value among the indicator and other constructs. Moreover, it may be observed from the comparison among the AVE's square root the relation among latent constructs. In case the value of AVE square root surpasses the correlation among latent constructs, it demonstrates that the latent construct holds a favorable discriminant validity in the model. Table 10 presents discriminant validity test results employing the Smart PLS 3.0 program.

Table 9:

Formative Validity Significance and Multicollinearity

<i>Construct</i>	<i>Path Coefficient</i>	<i>T-test</i>	<i>P Values</i>	<i>VIF</i>
X1 -> X	0.421	10.684	0.000	1.936
X2 -> X	0.306	9.130	0.000	2.148
X3 -> X	0.274	8.605	0.000	2.646
X4 -> X	0.199	11.807	0.000	2.685

Source: Compiled by the authors

Table 10:
Cross Loading Discriminant Validity Test Value

	X1	X2	X3	X4	Y	Z
E1	0.714	0.449	0.301	0.359	0.440	0.467
E2	0.750	0.477	0.319	0.319	0.321	0.345
E3	0.785	0.377	0.295	0.359	0.321	0.345
E4	0.769	0.515	0.220	0.365	0.327	0.340
E5	0.582	0.500	0.465	0.447	0.320	0.335
E6	0.821	0.561	0.454	0.483	0.492	0.516
E7	0.776	0.523	0.322	0.457	0.330	0.352
E8	0.668	0.373	0.263	0.478	0.314	0.321
F1	0.641	0.615	0.348	0.460	0.422	0.430
F2	0.526	0.597	0.466	0.436	0.400	0.420
F3	0.333	0.609	0.357	0.245	0.337	0.364
F4	0.452	0.751	0.400	0.321	0.429	0.428
F5	0.358	0.552	0.170	0.169	0.265	0.253
F6	0.250	0.673	0.370	0.308	0.354	0.360
F7	0.211	0.645	0.493	0.435	0.469	0.474
P1	0.518	0.558	0.783	0.942	0.667	0.659
P2	0.526	0.471	0.621	0.929	0.565	0.579
SA2	0.246	0.329	0.579	0.359	0.149	0.150
SA3	0.436	0.519	0.837	0.698	0.773	0.752
SA4	0.443	0.494	0.887	0.754	0.664	0.660
Y1	0.431	0.531	0.473	0.510	0.886	0.864
Y2	0.390	0.510	0.529	0.499	0.883	0.885
Y3	0.436	0.519	0.837	0.698	0.773	0.752
Z1	0.487	0.537	0.493	0.522	0.759	0.862
Z2	0.431	0.531	0.473	0.510	0.886	0.864
Z3	0.390	0.510	0.529	0.499	0.883	0.885
Z4	0.436	0.519	0.837	0.698	0.773	0.752

Source: Compiled by the authors

Table 10 demonstrates that all indicators possess a heightened correlation to the construct in comparison to other constructs. It may be inferred that the study old model hi satisfactory discriminant validity.

3.8. Reliability Test

The subsequent stage evaluates Composite Reliability and Cronbach's Alpha. Each of the constructs is reliable providing Composite Reliability and Cronbach's Alpha are more significant than 0.70. Table 11 presents reliability test results making use of the Smart PLS 3.0 program.

Regarding Table 11, it can be concluded that all latent constructs have a value of Cronbach's alpha and composite reliability of more than 0.7.

3.9. Testing of Structural Model

Assessing the inner model is regarded as an investigation of the outcomes of the relation among constructs. The predicted relation between constructs can be observed as below.

1. Customer Satisfaction (Z) is affected by E-Service Quality (X).
2. Positive Word-of-Mouth (Y) is affected by E-Service Quality (X) and Customer Satisfaction (Z).

The results of R Square are presented in Table 12.

Table 11:
Cronbach's Alpha and Composite Reliability Values

Construct	Cronbach's Alpha	Composite Reliability
X1	0.877	0.904
X2	0.756	0.826
X3	0.788	0.862
X4	0.858	0.934
Y	0.805	0.886
Z	0.862	0.907

Source: Compiled by the authors

Table 12:
R Square

	R Square	The Power of Relationships
E-Service Quality (X) -> Customer Satisfaction (Z)	0.547	Moderate
E-Service Quality(X) -> Customer Satisfaction (Z) -> Positive Word-of-Mouth (Y)	0.968	Robust

Source: Compiled by the authors

R-square with 0.67 means a powerful model, a value of 0.33 reveals a *moderate* model, and a value of 0.19 demonstrates an inadequate model. Table 12 shows *Customer Satisfaction* (Z) of 0.547 which means that *E-Service Quality* (X) influences 54.7% to *Customer Satisfaction* (Z), which indicates a moderate category. In comparison, the remaining 45.3% is influenced by other factors that are not observed.

The test results with Smart PLS 3.0 obtained F-Square results as follows in Table 13.

Based on Table 13, *E-Service Quality* (X) has a significant influence on *Customer Satisfaction* (Z), but it has little influence on Positive Word-of-Mouth (Y). On the other hand, Customer Satisfaction (Z) significantly influences positive *Word-of-Mouth* (Y).

Table 13:
F-square

Variable	Effect Size	Rating
Customer Satisfaction (Z)		
<i>E-Service Quality</i> (X)	1.208	Great
Positive Word-of-Mouth (Y)		
<i>E-Service Quality</i> (X)	0.00003	Small
<i>Customer Satisfaction</i> (Z)	13.853	Great

Source: Compiled by the authors

3.10. Q-square Predictive Relevance

The next step is to look at the Q-square predictive relevance for the constructs (Table 14). Q-square testing is used to measure how well the model and the estimated parameters generate the observation value. Q-square values greater than 0 (zero) indicate that the model has a predictive relevance value, while Q-square less than 0 (zero) indicates that the model lacks predictive relevance.

Based on Table 14, it is obtained the prediction of the relevance of the Q-square of 0.986. This model has a good predictive relevance value because it is greater than 0. The value of Q² is closer to 1, which means the better

Table 14:
Q² Predictive Relevance

Construct	R-square	1 - R-square
<i>Customer Satisfaction</i> (Z)	0.547	0.453
<i>Positive Word-of-Mouth</i> (Y)	0.968	0.032
Q ² =	Q ² = 1- (1-R ₁ ²) (1-R ₂ ²) = 0.986	

Source: Compiled by the authors

3.11. Hypothesis Test Results

Testing hypothesis in the present survey has been performed utilizing *coefficient*, *t-value*, and *P-value*. Figures 6 and Figure 7 show the significant value between the variables tested and presented in the arrows form. The t-count value in the image represents the significance value magnitude between the E-Service Quality (X), Customer Satisfaction (Z), and Positive Word-of-Mouth (Y) variables.

A summary of the path coefficient and t-test values can be found in Table 15.

This study's theoretical implication is to look at Customer Satisfaction as a total intervening variable in the relationship between E-Service Quality and Positive WOM. The results of this study enrich research that analyzes the importance of Variable Customer Satisfaction in influencing positive WOM. The managerial/practical implication is the importance of evaluating the service quality based on customer perceptions and needs (Ershova et al., 2019). Although the bank has a high technology mobile banking feature, if it is not perceived satisfactorily according to customers' needs and convenience, it will not be created positive WOM. It is crucial to analyze the perception of service quality of baby boomers and generation X in mobile banking so that banks can determine factors that are considered essential and bring satisfaction to customers concerning positive word-of-mouth (WOM). Mobile technology that is considered excellent by service providers can be seen differently by customers (Lentner et al., 2019). In this study, customers of baby boomers and generation X are more concerned with user-friendly factors than advanced features

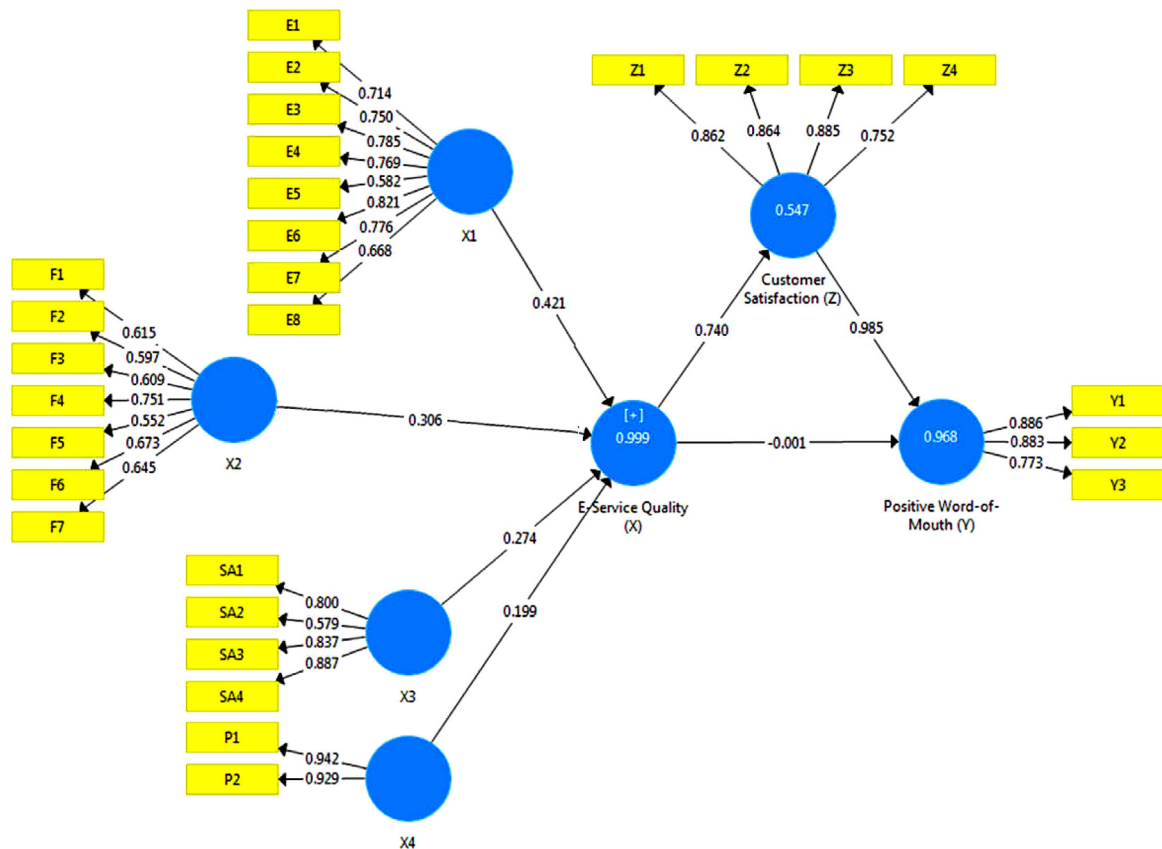


Figure 6:
Structural Model (path coefficient, beta)
Source: Compiled by the authors

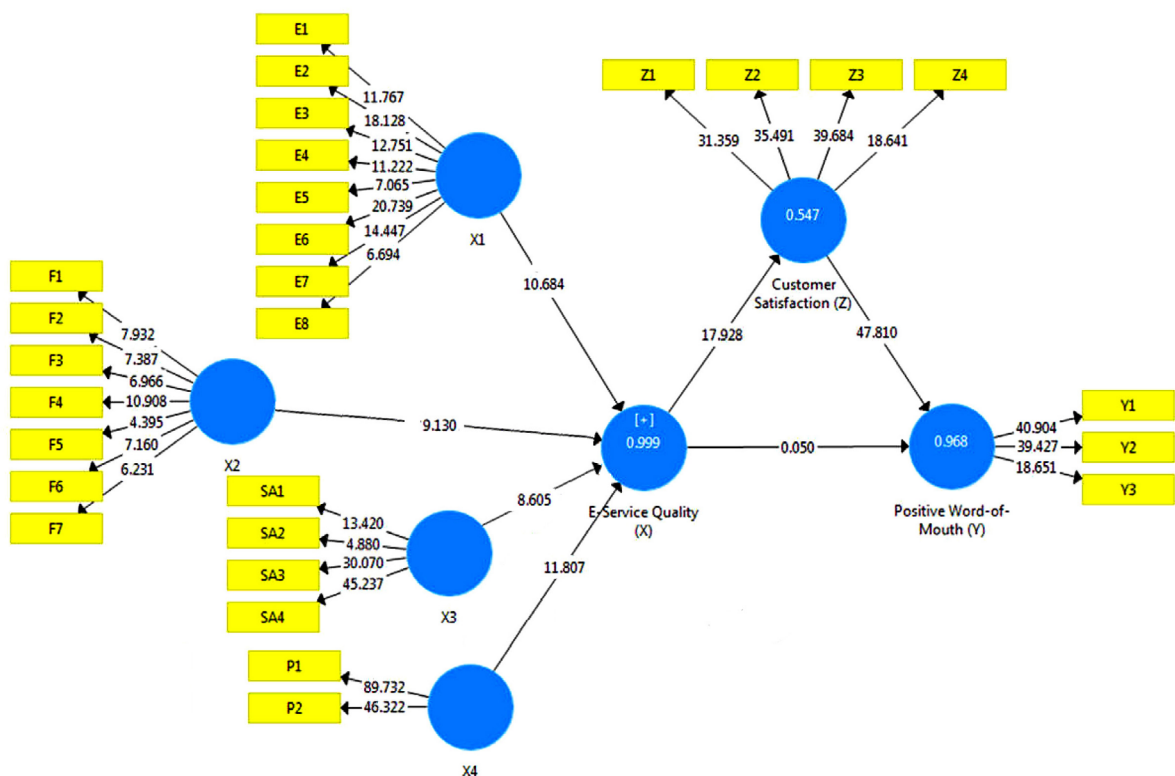


Figure 7:
Significance Value (t-test)
Source: Compiled by the authors

Table 15:
Result of coefficient of path and t-test values

Influence	Path Coefficient	T-test	P-value
X -> Y	-0.001	0.050	0.960
X -> Z	0.740	17.928	0.000
Z -> Y	0.985	47.810	0.000
X -> Z -> Y	0.729	18.338	0.000

Source: Compiled by the authors

because they are considered too complex, resulting in dissatisfaction (difficulty) in mobile banking technology. Although older customers want convenience and easiness in mobile banking transactions, they still put security factors.

4. Conclusion

E-Service Quality has no significant effect on Positive WOM. On the other hand, E-Service Quality has a significant effect on Customer Satisfaction, and Customer Satisfaction has a significant effect on Positive WOM. The relationship between E-Service Quality and Positive WOM through Customer Satisfaction is positive or unidirectional. The relationship between E-Service Quality and Positive WOM through Customer Satisfaction (Z) is significant. The influence of e-service quality toward positive WOM is fully mediated by Customer Satisfaction. Thus, E-Service Quality has no direct effect on Positive WOM, but E-Service Quality affects Positive WOM through Customer Satisfaction. E-service quality mobile banking is widely done in conventional banks, but only a little research is done on regional banks in Indonesia. This research contributes significantly both theoretically and practically. Research limitations include this research is still a case study in a regional bank, with sampling techniques convenience purposive sampling. Future research should include some regional banks with more representative samples. Future research should also analyze potential intergenerational differences in perception of the Quality of mobile banking services.

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Received 20.04.2022

Received in revised form 22.05.2022

Accepted 26.05.2022

Available online 20.08.2022