Pushing Digital Paradigm...

by L S

Submission date: 16-Jan-2023 10:47PM (UTC-0500)
Submission ID: 1993915065
File name: TURNITIN_27_Puspasari_22.docx (466.85K)
Word count: 5948
Character count: 34036

PUSHING DIGITAL PARADIGM SHIFT FOR OLDER BANK SYSTEM TO IMPROVE THE ENVIRONMENTAL CONDITIONS

Abstract

At first glance, it might seem that banks and other financial institutions hold less accountability for environmental preservation compared to other companies. Although they might not be polluters themselves, probably they will have a banking interaction with some companies that are polluters or might be in the future. 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 on old SKB customers and the role of customer satisfaction in intervening in the influence of e-service quality on WOM, considering environmental issues. 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 and environmentally-friendly mobile features than complex features, primarily when serving older customers. Nevertheless, banks should not neglect the importance of security in mobile banking transactions.

Keywords: e-service quality, environmental preservation, mobile banking, polluters

1. Introduction

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 (Amit and Charles, 2019; Gentjan et al., 2020; Mostafa, 2020). Mobile banking as an innovative technology has been developing rapidly globally and transformed the banking sector function (Rakhmetova and Budeshov, 2020). Research on

eservice quality mobile banking concerns trust, security, and privacy (Pakurár et al., 2019). Service innovation as part of service quality affects positive word-of-mouth (WOM) (Man et al., 2019). 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 (Nashar et al., 2020). WOM is a critical factor for the banking services business's continuity because WOM influences product purchase decisions (Milaković et al., 2020).

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 (Zabihi et al., 2011). 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 intervening/mediating variable between service quality and the dependent variable such as WOM and loyalty (Suhartanto et al., 2019). Customer satisfaction can function as a total mediating variable and partially mediating variable and other variables such as perceived value (Andriani and Sri, 2020).

Research conducted among others by Fida et al. (2020) and Raza 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 (Kalinić et al., 2019). 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 (Islam et al., 2020). City banks have three financial business models: investment, divestment, and combination entities (Cohen et al., 2019).

This study analyzed South Kalimantan Provincial Bank. In short, South Kalimantan Bank (SKB), as one of the best Indonesia regional development banks (Bank Kalsel, 2020) 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 (Yuzvovich et al., 2020). 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 (Iivari et al., 2020). 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 Heidary et al., 2017).

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 (Adji, 2017). 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 (Kaur et al., 2020). Baby boomers (born between 1944 – 1964) and generation X (born 1965 – 1979), when compared to younger generations (generations Y and Z), they are less in mobile technology use (Loh et al., 2020). 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:

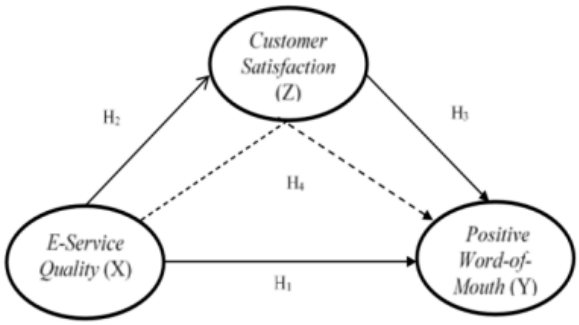


Fig. 1. Conceptual framework of the impact of e-service quality on customer satisfaction and positive word-of-mouth

So that 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. Sample approach

The sampling approach employed was non-probability purposive sampling with the respondent characteristics 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 x 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.

Table 1. Definitions of the operational variables

No.	Variable	Theoretical definition	Source	Operational definition	Indicator
1.	*E-Service Quality* (X)	Electronic-based services facilitate the effective and efficient shopping, purchasing, and delivery of products and services.	(Parasuraman et al., 2005)	The Quality of SKB's mobile banking services is based on efficiency, system availability, fulfilment, and privacy dimensions	1. Efficiency 2. System availability 3. Fulfilment 4. Privacy
2.	*Customer Satisfaction* (Z)	Customer feedback manifested.	(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.	*Positive Word-ofMouth* (Y)	*Positive Word-ofMouth* 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

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 (Ahmad et al., 2020). 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. Eq. (1) is an equation for calculating the class length at each interval.

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

where:

P = Class Length of each Interval

X_{max} = Maximum Value

X_{min} = Minimum Value R

= Range

b = Number of classes

In the current research the max and minimum rates ranges between 5 and 1 respectively, so that when the value was subsistence into the previous equation, the following results were obtained:

$$P = \frac{5 - 1}{5} = 0.8$$

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

Rate	***Status***
1.00 – 1.80	Very bad
1.81 – 2.60	Bad
2.61 – 3.40	Fair
3.41 – 4.20	Good
4.21 – 5.00	Excellent

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)

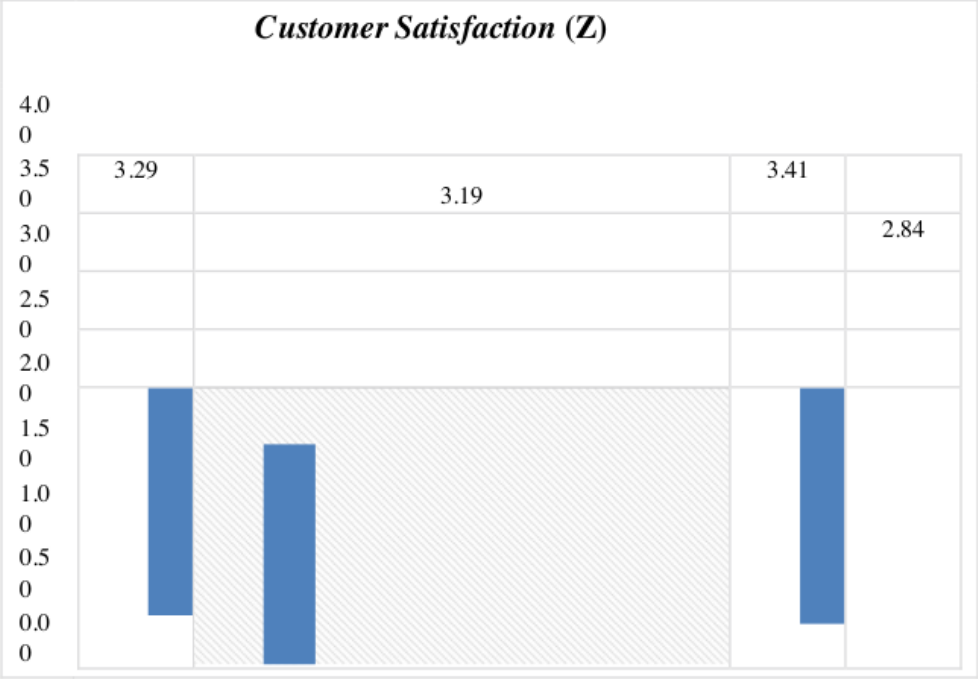
Code	***Indicator***	***Average***	***Category***
X1	*Efficiency*	4.14	Good
X2	*Fulfillment*	3.95	Good
X3	*System Availability*	3.31	Fair
X4	*Privacy*	2.82	Fair
	Average	**3.56**	**Good**

3.2. Respondents' Responses to Customer Satisfaction (Z)

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.

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%			



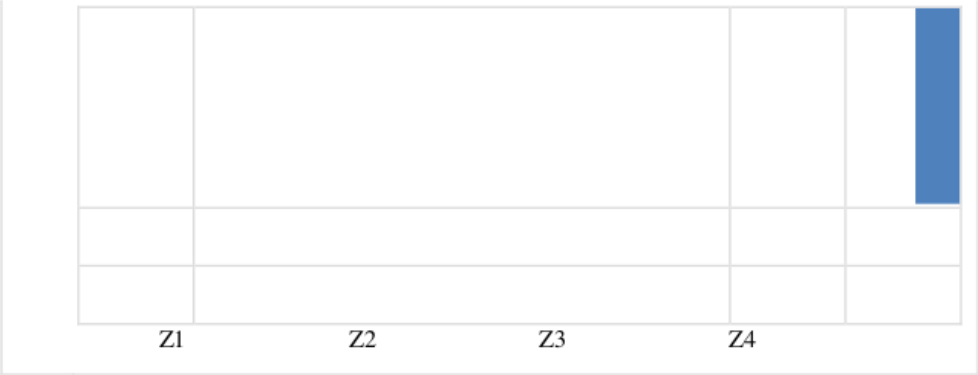


Fig. 2. Recapitulation of Customer *Satisfaction* (Z) Descriptive Analysis

Table 4 and Fig. 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.

3.3. Respondents' responses to positive Word-ofMouth (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):

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**

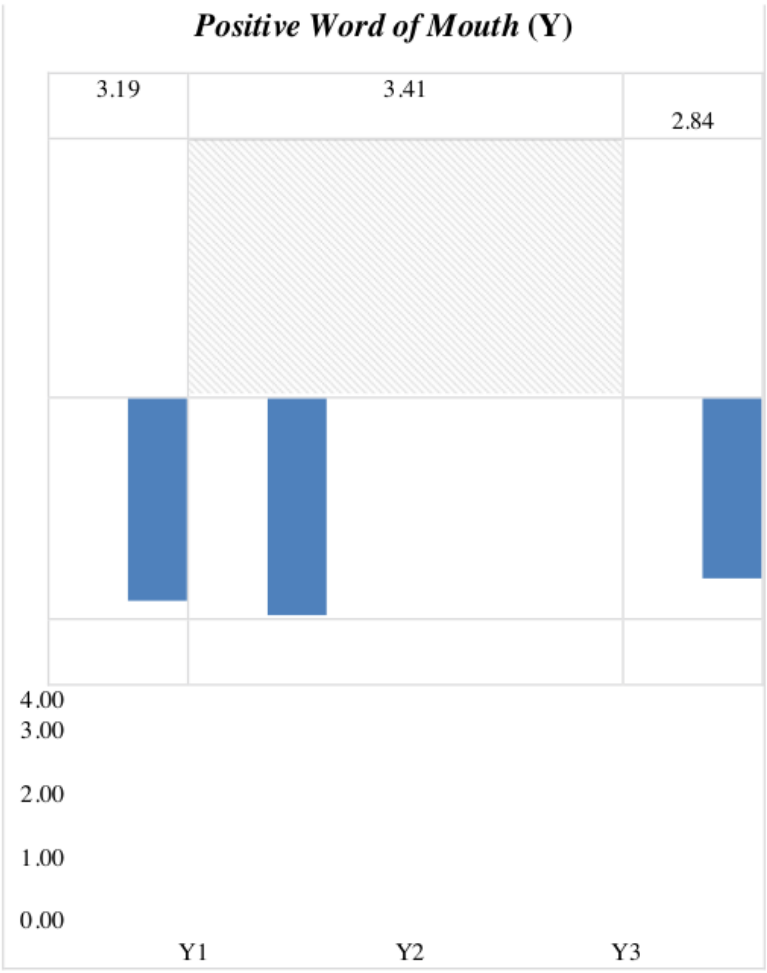


Fig. 3. Recapitulation of *Positive Word-of-Mouth* (Y) Descriptive Analysis

Based on Table 5 and Fig. 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 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. Structural Equation Modeling Partial Least Square (SEM PLS) Analysis Results

This stage relates to forming the initial model of structural equations before estimation was carried out. This initial model was formulated based on a previous theory or research. In Fig. 4, the path model consists of 2 (two) substructures. In general, these substructures can be described through the Equations (2, 3).

$$\eta_1 = (\gamma_{11} \times \xi) + \zeta_1 \quad (2)$$

$$\eta_2 = (\gamma_{21} \times \xi) + (\gamma_{22} \times \eta_1) + \zeta_2 \quad (3)$$

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-ofMouth* (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_1 (*Zeta* 1)	:	Error value on the endogenous variable *Positive Word-of-Mouth* (Y).

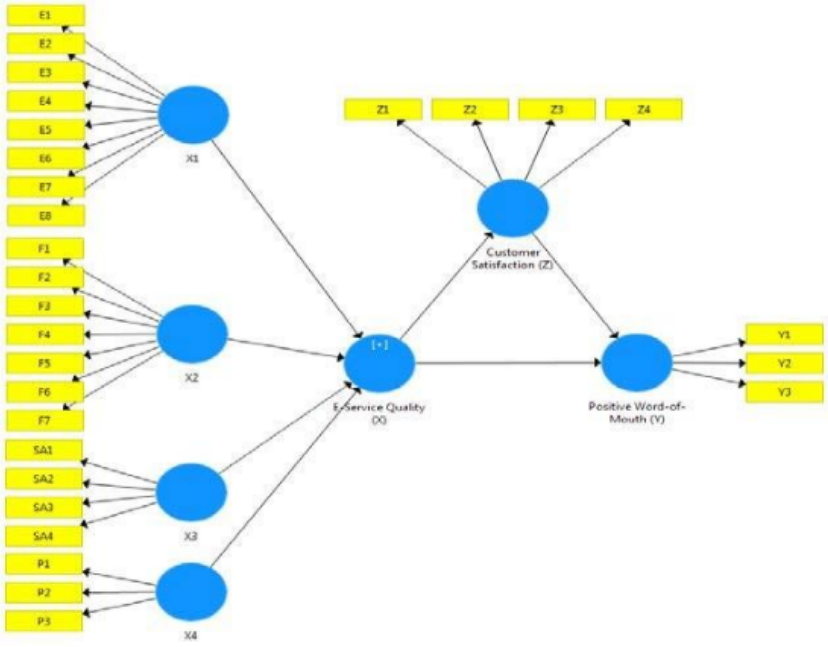


Fig. 4. Conceptual Diagram of Partial Least *Square* Model

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), 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).

Furthermore, convergent validity, discriminant validity, and reliability tests were conducted.

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. Figure 5 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 6 shows the model after eliminating P3. Table 6 contains loading factors of all observed variables.

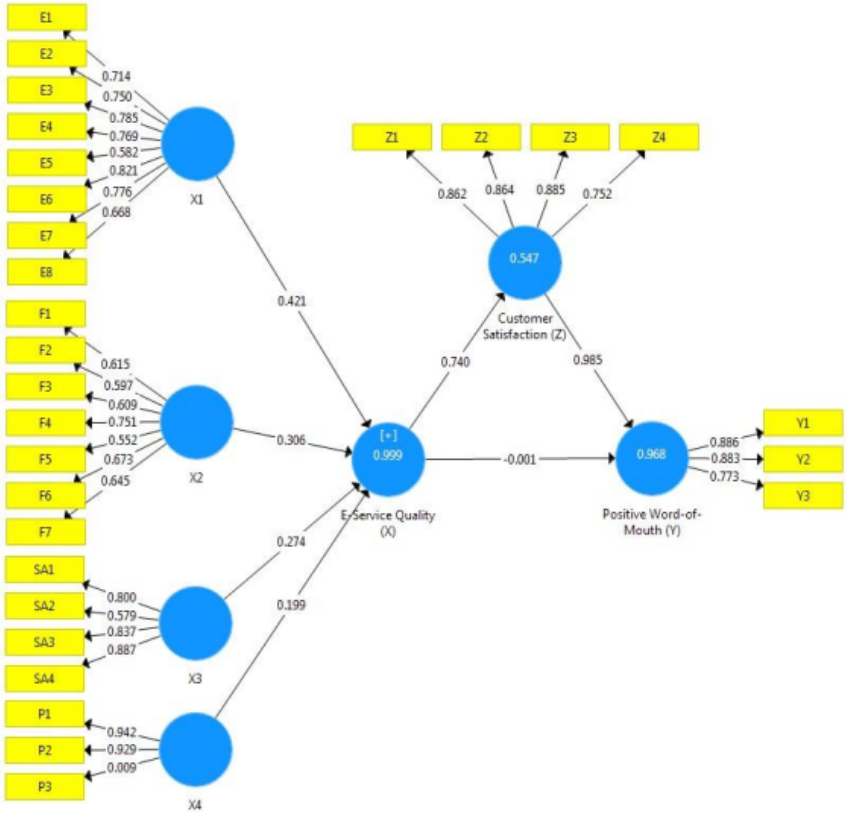


Fig. 5. Loading Factors of the Initial Outer Model

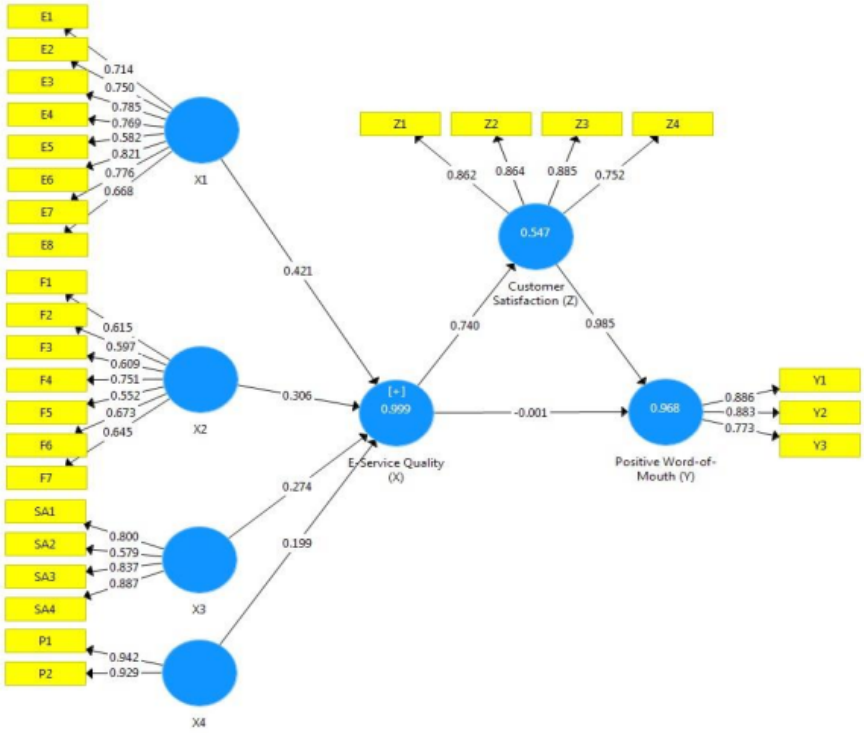


Fig. 6. Loading Factors of the First Respecified Outer Model

Table 6. *Convergent Validity Loading Factor*

Observed Variable	***Loading Factor***
E1	0.714
E2	0.750
E3	0.785
E4	0.769
E5	0.582
E6	0.821
E7	0.776
E8	0.668
F1	0.615
F2	0.597
F3	0.609
F4	0.751
F5	0.552
F6	0.673
F7	0.645
P1	0.942
P2	0.929
P3	0.009
SA1	0.800
SA2	0.579
SA3	0.837
SA4	0.887

Y1	0.886

Y2	0.883
Y3	0.773
Z1	0.862
Z2	0.864
Z3	0.885
Z4	0.752

(R critical: 0.5; All loading factors are valid, just P3 is not valid)

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

Table 7. Convergent Validity Loading Factor

Observed Variable	***Loading Factor***
E1	0.714
E2	0.750
E3	0.785
E4	0.769
E5	0.582
E6	0.821
E7	0.776
E8	0.668
F1	0.615
F2	0.597
F3	0.609
F4	0.751
F5	0.552
F6	0.673
F7	0.645
P1	0.942
P2	0.929
SA1	0.800
SA2	0.579
SA3	0.837
SA4	0.887
Y1	0.886
Y2	0.883
Y3	0.773
Z1	0.862
Z2	0.864
Z3	0.885
Z4	0.752

(R critical: 0.5; All loading factors are valid)

Based on Fig. 6 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 the convergent validity results with criteria AVE $\geq$ 0.5. Table 8 shows the results of the AVE test using the PLS 3.0 program.

Table 8. Average Variance Extracted

Construct	*Average Variance Extracted (AVE)*
X_1	0.543
X_2	0.406
X_3	0.615
X_4	0.875
Y	0.721
Z	0.709

(R critical: 0.5; All loading factors are valid, just X2 is not valid)

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.

The next step is validity testing for formative construct, i.e., on X_1, X_2, X_3, and X_4 against *EService Quality* (X) and assessing the *multicollinearity* that occurs in latent X_1, X_2, X_3, and X_4. Table 9 presents validity test results on formative latent. 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.

Table 9. *Formative* validity significance and *Multicollinearity*

Construct	*Path Coefficient*	*T-test*	*P Values*	*VIF*
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

3.7. Discriminant Validity Test

This test can be done by the cross-loading value. The relation amount of the indicator to its construct could be larger than the link among the indicator and other factors. Moreover, it can be confirmed by comparison the square root of AVE and the correlation between latent factors. If the AVE square root value is larger than the link among latent factors, it shows that the latent factor demonstrates a proper discriminant validity in the proposed pattern. Table 10 presents discriminant validity test results utilizing the Smart PLS 3.0 program.

Table 10. Cross Loading Test

	X1	X2	X3	X4	Y	Z
E1	0.714	0.449	0.301	0.359	0.4400	0.4670
E2	0.750	0.477	0.319	0.319	0.3210	0.3450
E3	0.785	0.377	0.295	0.359	0.3210	0.3450
E4	0.769	0.515	0.220	0.365	0.3270	0.3400
E5	0.582	0.500	0.465	0.447	0.3200	0.3350
E6	0.821	0.561	0.454	0.483	0.4920	0.5160
E7	0.776	0.523	0.322	0.457	0.3300	0.3520

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

3.8. Reliability test

Table 11 presents reliability test results using the Smart PLS 3.0 program. According to Table 11, it concluded that all latent constructs have a value of Cronbach's alpha and composite reliability of more than 0.7. It shows that latent factor demonstrate the reliable pattern.

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

3.9. Structural Model Testing (Inner Model)

Evaluation of the interior pattern are as follows:

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 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

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 R-square for *Positive Word-of-Mouth* (Y) variable is 0.968, which means that *E-Service Quality* (X) and Customer *Satisfaction* (Z) contribute 0.968 or 96.8% to Positive *Word-of-Mouth* (Y), indicating a robust category. The remaining 3.2% is the influence of other factors that are not observed. The test results with Smart PLS 3.0 obtained F Square results as follows in Table 13.

Table 13. F-*square*

Variable	***effect Size***	***Rating***
***Customer Satisfaction* (Z)**		
E-Service Quality (X)	1.208	Great
***Positive Word-of-Mouth* (Y)**		
E-Service Quality (X)	0.00003	Small
Customer Satisfaction (Z)	13.853	Great

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).

3.11. Q-square 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. Q^2 *Predictive Relevance*

Construct	***R-square***	***1 – R-square***
Customer Satisfaction (Z)	0.547	0.453
Positive Word-of-Mouth (Y)	0.968	0.032
Q^2 =	$Q^2 = 1 - (1-R_1^2)(1-R_2^2) = 0.986$	

3.12. Hypothesis outcomes

Hypothesis analysis were conducted utilizing *coefficient*, *t-value*, and *p-value*. Figures 7 and 8 show the significant value among the factors analyzed and proposed in the form of arrows. The t-count value in the image represents the significance value among 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.

3.13. The impact of E-Service Quality (X) toward Positive Word-of-Mouth (Y)

Table 16 depicts the path coefficient of the original sample estimate (beta) of -0.001, indicating that the direction of the relation between E-Service Quality (X) and Positive Wordof-Mouth (Y) is negative or reversed. Therefore, if E-Service Quality (X) increases, positive Wordof-Mouth (Y) will decrease, and vice versa. E-Service Quality (X) and Positive Word-of-Mouth (Y) is insignificant in the two-tailed test (t-table = 1.96) with the t-statistical value of 0.050 less than the t-table, as well as a p-value greater than alpha 5% (0.960 > 0.05). H1 is rejected because x does not have a significant effect on Y.

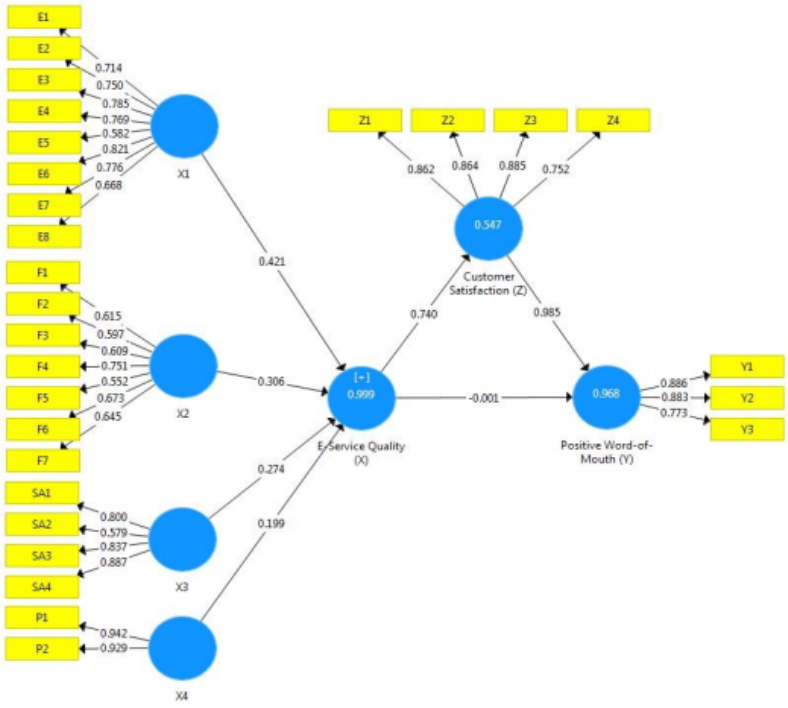


Fig. 7. Structural Model (path coefficient, beta)

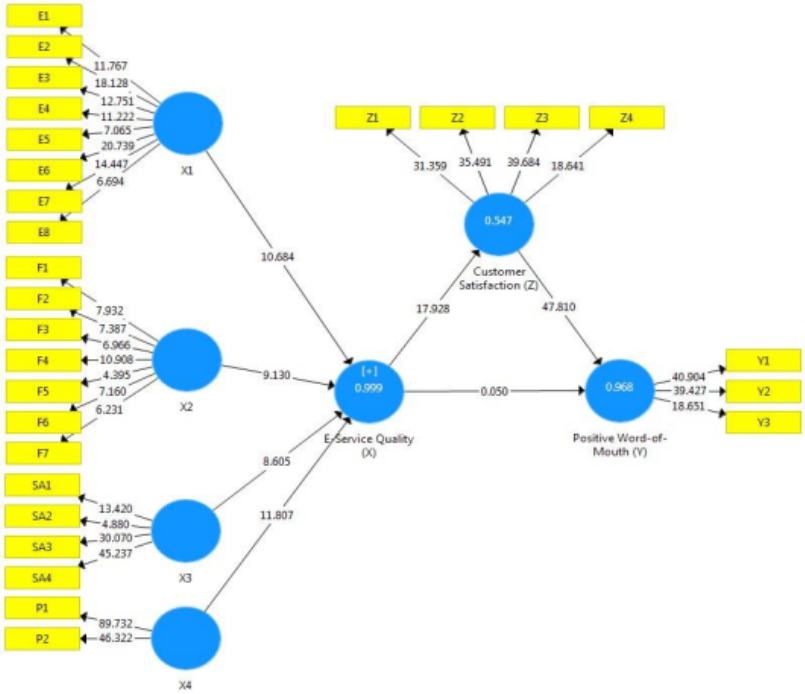


Fig. 8. Significance Value (t-test)

3.14. Impact of E-Service Quality (X) on Customer Satisfaction (Z)

The path coefficient value of the original sampling estimate (beta) is 0.740 indicates that the direction of the link among E-Service Quality (X) and Customer Satisfaction (Z) is positive or unidirectional (Table 16). The relation indicates that if E-Service Quality (X) increases, Customer Satisfaction (Z) will excess. The influence of E-Service Quality (X) toward Customer Satisfaction (Z) was significant in the two-tailed test (t-table = 1.96) with the t-statistical value of 17,928 more significant than the t-table as well as a p-value smaller than alpha 5% (0.000 < 0.05). Thus, H2 accepted that E-Service Quality (X) significantly affects Customer Satisfaction (Z).

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

Table 16. Path Coefficient and T-test of E-Service Quality (X) -> Positive Word-of-Mouth (Y)

Influence	*Path Coefficient (beta)*	*t-test*	*P-value*	*Conclusion*
E-Service Quality (X) -> *Positive Word-of-Mouth* (Y)	-0.001	0.050	0.960	H1 rejected
E-Service Quality (X) -> *Customer Satisfaction* (Z)	0.740	17.928	0.000	H2 accepted

Customer Satisfaction (Z) -> *Positive Word-of-Mouth* (Y)	0.985	47.810	0.000	H3 accepted
E-Quality (X) -> *Customer Satisfaction* (Z) -> *Positive Wordof-Mouth* (Y)	0.729	18.338	0.000	H4 accepted

3.15. Impact of Customer Satisfaction (Z) on Positive Word of Mouth (Y)

From Table 16, the path coefficient value of the original sample estimate (beta) of 0.985 indicates the direction of the relationship between Customer Satisfaction (Z) and Positive Word-ofMouth (Y) is positive or unidirectional. If Customer Satisfaction (Z) increases, positive Word-ofMouth (Y) will also increase, and vice versa. The relationship between Customer Satisfaction (Z) and Positive Word-of-Mouth (Y) is significant in the two-tailed test (t-table = 1.96) with a Tstatistical value of 47,810 more significant than the t-table, as well as a p-value smaller than alpha 5% (0.000 < 0.05). Thus, H3 is accepted, Customer Satisfaction (Z) has a significant effect on Positive Word-of-Mouth (Y).

3.16. Effect of E-Service Quality (X) on Positive Word-of-Mouth (Y) through Customer Satisfaction (Z)

Table 16 shows the value of the original sample estimation coefficient (beta) of 0.729 so that it has a positive impact between X and Y through Z. If variable X increases, then variable Y increases through variable Z. H4 is accepted because X has significant effect on Y through Z.

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 wordof-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 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. Conclusions

E-Service Quality has no significant effect on Positive WOM. On the other hand, E-Service Quality has a significant impact 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 EService 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, EService Quality has no direct impact 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, but also in the development of performing sensors for environmental monitoring and other applications.

References

Adji A.R.F.H.M., (2017), The effect of organization culture and technology on motivation, knowledge asset, and knowledge management, *International Journal of Law and Management*, **34**, 1–5.

Afthanorhan A., Awang Z., Rashid N., Foziah H., Ghazali P.L., (2019), Assessing the effects of service quality on customer satisfaction, *Management Science Letters*, **9**, 13–24.

Ahmad S., Bhatti S.H., Hwang Y., (2020), E-service quality and actual use of e-banking: Explanation through the Technology Acceptance Model, *Information Development*, **36**, 503–519.

Amit S., Charles J., (2019), The influence of e-banking service quality on customer loyalty: A moderated mediation approach, *International Journal of Bank Marketing*, **37**, 1119–1142.

Andriani K., Sri R.K., (2020), The effect of experience quality on customer perceived value and customer satisfaction and its impact on customer loyalty, *The TQM Journal*, **32**, 1525–1540.

Babin B.J., Lee Y., Kim E., Griffin M., (2005), Modeling consumer satisfaction and word-of-mouth: restaurant patronage in Korea, *Journal of Services Marketing*, **19,** 133–139.

Bank Kalsel, (2020), Tunjukkan Kinerja dan Layanan Terbaik, Bank KALSEL Raih Infobank Award, Bank Kalsel, On line at: http://www.bankkalsel.co.id/index.php/profil/galeri-kegiatan/714-tunjukkan-kinerjadan-layanan-terbaik-bank-kalsel-raih-infobank-award

Cohen M., Fried A., Shah T., (2019), Municipal Bank Feasibility Task Force Report, On line at: https://sftreasurer.org/files/2019-08/1.%20Municipal%20Bank%20Report%20Executive%20Summary03-01-19.pdf

Dash G., Kiefer K., Paul J., (2021), Marketing-to-Millennials: Marketing 4.0, customer satisfaction and purchase intention, *Journal of Business Research*, **122**, 608–620.

Ershova I., Belyaeva O., Obukhova A (2019) Investment in human capital education under the digital economy *Economic Annals-XXI*, **180**, 69–77.

Fida B.A., Ahmed U., Al-Balushi Y., Singh D., (2020), Impact of service quality on customer loyalty and customer satisfaction in islamic banks in the Sultanate of Oman, *SAGE Open*, **10**, 215824402091951. https://doi.org/10.1177/2158244020919517

Gentjan Ç., Ina P., Ajaz K.K., Lindita M., (2020), Mobile banking usage and gamification: the moderating effect of generational cohorts, *Journal of Systems and Information Technology*, **12**, 243–263.

Heidary S., Imani M., Mostafavi S.M., (2017), A validated and rapid HPLC method for quantification of human serum albumin in interferon beta-1a biopharmaceutical formulation, *MedBioTech Journal*, **1**, 2630.

Iivari N., Sharma S., Ventä-Olkkonen L., (2020), Digital transformation of everyday life – How COVID-19 pandemic transformed the basic education of the young generation and why information management research should care?, *International Journal of Information Management*, 102183, https://doi.org/10.1016/j.ijinfomgt.2020.102183

Islam R., Ahmed S., Rahman M., Al Asheq A., (2020), Determinants of service quality and its effect on customer satisfaction and loyalty: an empirical study of private banking sector, *The TQM Journal*, **33**, 1163-1182

Kalinić Z., Marinković V., Djordjevic A., Liebana-Cabanillas F., (2019), What drives customer satisfaction and word of mouth in mobile commerce services? A UTAUT2-based analytical approach, *Journal of Enterprise Information Management*, **33**, 71–94.

Kaur B., Kaur J., Pandey S.K., Joshi S., (2020), E-service quality: development and validation of the scale. *Global Business Review*, https://doi.org/10.1177/0972150920920452

Kotler P., Keller K.L., Ancarani F., Costabile M., (2014), *Marketing Management 14/e*. Pearson Education, New Jersey, USA.

Lentner C., Vasa L., Kolozsi P.P., Zéman Z., (2019), New dimensions of internal controls in banking after the GFC, *Economic Annals-XXI*, **176**, 38–48.

Li H., Liu Y., Tan C.-W., Hu F., (2020), Comprehending customer satisfaction with hotels, *International Journal of Contemporary Hospitality Management*, **32**, 1713-1735.

Loh J., Strachan J., Johns R., (2020), How rude is rude: an exploratory study among Australian Millennials, Generation 'X'and Baby Boomers mobile phone users, *Behaviour and Information Technology*, **40**, 15161527.

Man Z., Ebadi A.G., Mostafavi S.M., Surendar A., (2019), Fuel oil characteristics and applications: economic and technological aspects, *Petroleum Science and Technology*, **37**, 1041-1044.

Merhi M., Hone K., Tarhini A., Ameen N., (2020), An empirical examination of the moderating role of age and gender in consumer mobile banking use: a cross-national, quantitative study, *Journal of Enterprise Information Management,* **34,** 1144-1168.

Milaković I.K., Anić I.-D., Mihić M., (2020), Drivers and consequences of word of mouth communication from the senders' and receivers' perspectives: the evidence from the Croatian adult population, *Economic Research-Ekonomska Istraživanja*, **33**, 1667–1684.

Mostafa R.B., (2020), Mobile banking service quality: a new avenue for customer value co-creation, *International Journal of Bank Marketing*, **38**, 1107–1132.

Nashar N.A.B., Jumintono Pudyastuti R.R., Handayani, E., Indarto, M.R., Sunardi J., Retnowati N.D., Sawitri S., (2020), Increasing understanding of general knowledge of plastics with video-based learning, *Universal Journal of Educational Research*, **8**, 5913–5917.

Nawi M.N.M., Nasir N.M., Azman M.N.A., Jumintono, Khairudin M., (2019), Investigating factors of delay in IBS construction project: Manufacturer perspectives, *Journal of Engineering Science and Technology*, **14**, 59–66.

Pakurár M., Haddad H., Nagy J., Popp J., Oláh J., (2019), The service quality dimensions that affect customer satisfaction in the Jordanian banking sector, *Sustainability (Switzerland)*, **11**, 1113, https://doi.org/10.3390/su11041113

Parasuraman A., Zeithaml V.A., Malhotra A., (2005), E-S-QUAL a multiple-item scale for assessing electronic service quality, *Journal of Service Research*, **7**, 213–233.

Piercy K.L., Troiano R.P., Ballard R.M., Carlson S.A., Fulton J.E., Galuska D.A., George S.M., Olson R.D., (2018), The physical activity guidelines for Americans, *JAMA - Journal of the American Medical Association*, **320**, 2020–2028.

Rakhmetova A., Budeshov Y., (2020), Quality of life as an indicator of public management performance in the Republic of Kazakhstan, *Economic Annals-XXI*, **184**, 133–153.

Raza S.A., Umer, A., Qureshi M.A., Dahri A.S., (2020), Internet banking service quality, e-customer satisfaction and loyalty: the modified e-SERVQUAL model, *The TQM Journal*, **32**, 1443–1466.

Shanmugam M., Wang Y.-Y., Bugshan H., Hajli N., (2015), Understanding customer perceptions of internet banking: the case of the UK, *Journal of Enterprise Information Management*, **28**, 622–636.

Suhartanto D., Helmi Ali M., Tan K.H., Sjahroeddin F., Kusdibyo L., (2019), Loyalty toward online food delivery service: the role of e-service quality and food quality, *Journal of Foodservice Business Research*, **22**, 81–97.

Yuzvovich L., Razumovskaya E., Maramygin M., Ponkratov V., Kuznetsov N., Bashkirova N., (2020), Econometric model of the impact of the interest rate on the economic development, *Industrial Engineering and Management Systems*, **19**, 254–265.

Zabihi O., Mostafavi, S.M., Ravari F., Khodabandeh A., Hooshafza A., Zare K., Shahizadeh M., (2011), The effect of zinc oxide nanoparticles on thermo-physical properties of diglycidyl ether of bisphenol A/2, 2′Diamino-1, 1′-binaphthalene nanocomposites, *Thermochimica Acta*, **521**, 49-58.

Pushing Digital Paradigm...

ORIGINALITY REPORT

2%	2%	0%	0%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

MATCH ALL SOURCES (ONLY SELECTED SOURCE PRINTED)

4%

★ Jeeva Venkatakrishnan, Ravikumar Alagiriswamy, Satyanarayana Parayitam. "Web design and trust as moderators in the relationship between e-service quality, customer satisfaction and customer loyalty", The TQM Journal, 2023

Publication

Exclude quotes	On	Exclude matches	< 2%
Exclude bibliography	On		

Pushing Digital Paradigm...

GRADEMARK REPORT

FINAL GRADE

/0

GENERAL COMMENTS

Instructor

PAGE 1

PAGE 2

PAGE 3

PAGE 4

PAGE 5

PAGE 6

PAGE 7

PAGE 8

PAGE 9

PAGE 10

PAGE 11

PAGE 12

PAGE 13

PAGE 14

PAGE 15

PAGE 16

PAGE 17

PAGE 18

PAGE 19

PAGE 20