







International Conference on Economics, Business, Social, and Humanities (ICEBSH)



## **CERTIFICATE**

of Achievement

No: i67 /Presenter-ICEBSH/III/2022

## Agus Zainul Arifin

for the contribution as:

#### Presenter

Paper Title:

The Impact Of Implementing Digital Technology Innovation On Banking Performance In Indonesia

Director Institute of Research and Community Engagement Universitas Tarumanagara

Assoc. Prof. Ir. Jap Tji Beng, MMSI., Ph.D

Chairperson CEBSH 2022 **ICEBSH** 

Dr. Eng. Titin Fatimah, S.T., M.Eng.

















#### LETTER OF ACCEPTANCE

Jakarta, March 07, 2022

Number: 167-ICEBSH/2601/UNTAR/II/2022

Attention to : Selvi Dharsono, Agus Zainul Arifin

The Author(s) of Paper ID: 167-ICEBSH

#### The Impact Of Implementing Digital Technology Innovation On Banking Performance In Indonesia

We are pleased to inform you that your submission is **Accepted** for presentation in **International Conference on Economics, Business, Social, and Humanities (ICEBSH) 2022** will be held online on March 23 – 24, 2022, using a video conference platform. This Paper will be electronically published in the ICEBSH 2022 Proceeding, after being reviewed and approved by our Publisher (Atlantis Press Publisher).

Thank you very much for your attention.

Jakarta, March 07, 2022 The ICEBSH 2022 Chairperson



Dr. Eng. Titin Fatimah, M.Eng.

# The Impact Of Implementing Digital Technology Innovation On Banking Performance In Indonesia

Selvi Dharsono <sup>1,2,</sup> Agus Zainul Arifin<sup>1\*</sup>

selvi.117201043@stu.untar.ac.id/aguszarifin@gmail.com

#### **ABSTRACT**

The purpose of this study is to obtain empirical evidence whether customer experience and customer satisfaction affect the financial performance of a bank for users digital banking in Indonesia. The number of samples in this study were 261 respondents. The criteria for respondents in this study are respondents who live in Jakarta, Bogor, Depok, Tangerang and Bekasi and respondents who are users of banking services digital banking. This study uses a non-probability sampling technique. Data collection techniques through questionnaires online. Data analysis using PLS-SEM. The result of the first research is that customer experience has a positive effect on financial performance. Second, customer satisfaction has a positive effect on financial performance.

**Keywords:** Financial Performance, Customer Experience, Customer Satisfaction.

#### 1. INTRODUCTION

The rapid development of technology in the world, especially technological developments in the banking sector has a significant impact on bank marketing efforts. In the current pandemic, the use of digital banks has experienced a very significant increase. Digital banking has become the main choice for conducting banking transactions such as transferring a certain amount of money, opening a bank account and others. Digital banking changes the traditional banking model to digitalization, which provides convenience and effectiveness for its users [1]. This shift in model shows that it is important for banks to understand the impact of digital banking on customer experience.

Customer is a source for all companies. Without it company wouldn't have any revenue, profit or market value. Factors that maintain customer satisfaction on users of digital banking such as ease of use digital services, fast response to risks, and protection of customer personal data [2], so it can be able to create long-term relationships. In addition, the emotional value of sympathy and empathy created in long-term relationships that result in customer loyalty to the bank has a positive impact on the bank's financial performance [3].

One of the Banks in Indonesia that has had an increase in digital banking users is also known as BCA Bank. Which was increased 28.9 percent users for mobile banking user

and increased 5.7 percent users for internet banking user [4]. Meanwhile, compared with increases on digital banking user numbers such as mobile banking or internet banking, the unbankable number is more high than it [5]. Compared the high of the unbankable number in Indonesia has become the main reason for Indonesia to review and also evaluate toward bank services, so that can reduce number of the unbankable in Indonesia [6]. Therefore, bank should understand what is the factor that will have an impact on customer experiences and customer satisfaction which is a consideration in the use of digital banking services.

While customer has good experience toward of product use or digital banking services. It affects to customer satisfaction, which is able to form an emotional outcome that is a long-term relationship, where the customer assesses that the product or service has met their expectations and needs, so that the customer will be committed to always using digital banking services and also recommend it to others. In this research, the researcher reviews and integrates existing knowledge about customer experience and provides some generalizations about its impact on the financial performance of bank. Marketing seeks to maintain accountability. It is important for banks to know how the customer experience with profit.

#### 1.1. Research Objectives

The purpose of this study is to analyze and determine the effect of customer experience and on financial

<sup>&</sup>lt;sup>1</sup>Master of Management Program, Tarumanagara University, Indonesia

<sup>&</sup>lt;sup>2</sup>Master of Management Program, Tarumanagara University, Indonesia

<sup>\*</sup>Corresponding author. Email: aguszarifin@gmail.com

performance of banks on users of digital banking in Indonesia. And the effect of customer satisfaction on financial performance of banks on users of digital banking in Indonesia.

#### 2. LITERATURE

#### 2.1. Customer Experience

According to Chandra [7] customer experience or customer evaluation is a service where the experience is mentioned by feelings and social dimensions. This relates to the feeling of satisfaction felt by the customer if the expectations or expectations of the customer are met [8].

#### 2.2. Customer Satisfaction

According to Obeng and Mkhize [9]. Customer satisfaction or financial satisfaction [10] is a specific transaction which is an after-opinion or evaluation. Ratings from customers after purchase or transaction or cumulative, which means the overall evaluation of the purchase amount and the experience of using the product or service [11].

#### 2.3. Financial Performance

No

According to Fusva et al. [12] Financial performance is a unit of measurement used to assess the health of a bank. The health of a bank includes several risk assessments, used as a key internal performance measure for each bank entity[13].

## 2.4. The Relationship Between Variables 2.4.1. Customer Experience has a positive effect on Financial Performance

According to Mbama and Ezepue [15], improving experience handling customer in using services, in the form of good product quality, fast risk, and ease of use of digital banking. These factors are able to form a customer service perspective that has an positive impact on company profits. According to research by Bennett and Molisani [16] and Berrais and Hamouda [17] that has a significant and positive impact of customer experience on financial performance. Those Factors be able form perspective of customer services impact on profit.

 $\ensuremath{H_{\mathrm{1}}}$  : Customer Experience has a positive effect on Financial Performance

### 2.4.2. Customer Satisfaction has a positive effect on Financial Performance

According to Chandra [7] customer satisfaction as a feeling or evaluation of the customer towards the product or service. Where customer satisfaction is the customer fulfillment of expectations or needs for products or services. Such satisfaction is more than being willing to pay a premium, recommend the service and continue to use it. This can have an impact on the company's profits and reduce bank costs associated with providing services [18]. According to research by Obeng and Mkhize [9] and Fusva et al. [12] customer satisfaction has a significant impact on financial performance. Satisfaction is an opinion or evaluation from a customer after product use or transaction or experience of product or service use [17].

H<sub>2</sub>: Customer Satisfaction has a positive effect on Financial Performance

#### 3. RESEARCH METHODOLOGY

In this study, the method of this research used a descriptive cross-sectional method. The sampling method in this research is the non-probability sampling, which is convenient sampling so that data collection will be more easy. The sample of this study amounted to 261 respondents who used digital banking services in Jakarta, Bogor, Depok, Tangerang and Bekasi. The measurement of the research object was measured using a Likert scale. Financial performance of banks is measured using a proxy of financial performance as NPS (CLV) [19]. The data analysis method in this study uses structure equation modeling (SEM) with the help of the Smart PLS 3.3.3 program. The level of significance used in this study was 5% [20]. The value of t-statistics used in this study is higher than 1.96 and p-value lower than 0.05. In the analysis of the outer model, all the variables in the study met the value of the outer model, namely the loading factor > 0.7 and the average variance extracted (AVE) value > 0.50. The reliability test that measures composite reliability and Cronbach's alpha in this study obtained a value of > 0.5.

The measurement of the variables used refers to the previous research as shown in Table 1.

Variable Indicator Source

NO	variable	Indicator	Source
1	Customer Experience (CE)	12	Mbama and Ezepue 2018
2	Customer Satisfaction (CS)	5	Mbama and Ezepue 2018
3	Financial Performance (FP)	3	(Mbama and Ezepue 2018), (Reichheld, 2003)

Table 1 The Measurement of the Variabels

#### 3.1. Statistical Test Results

The result of testing shows 261 respondents show that majority of respondents are women (60.54%). Furthermore, the majority of respondents are 18-25 years old (60.54%). The last education are bachelor's degree (72.03%). Live in Jakarta (50.58%). And 60.53% of the respondents use a mobile banking service for 2-5 years (51.34%) for personal use (55.56%). The result of validation shows this research is valid, where all values are Loading Factor > 0.7 and Average Variance Extracted > 0.5. The result of realibility show this research has a coefficient Cronbach Alpha and Composite Reliability value are > 0.5 it means reliable.

**Table 2. Characteristics of Participants** 

Characteristics	Participants for construct validity n= 261		Characteristics	construct	Participants for construct validity n= 261	
	Σ	%		Σ	%	
Age			Digital Banking Services			
< 18 years	2	00.76%	Mobile Banking	158	60.53%	
18-25 years	158	60.54%	Internet Banking	10	03.83%	
26-35 years	78	29.88%	Both	93	35.64%	
36-45 years	10	03.83%	Duration of Use			
>45 years	13	04.99%	< 1 year	9	03.45%	
Gender			1-2 years	24	09.19%	
Female	158	60.54%	2-5 years	134	51.34%	
Male	103	39.46%	> 5 years	94	36.02%	
Education			Address (City)			
< High School	40	15.33%	Bekasi	7	02.68%	
D3	5	01.92%	Bogor	2	00.77%	
Bachelor	188	72.03%	Depok	1	00.38%	
Master	22	08.43%	Jakarta	132	50.58%	
Doctoral	6	02.29%	Tangerang	119	45.59%	
Purp	ose of Use	1			I	
Personal Use	145	55.56%	1			
Business	3	01.14%				
Both	113	43.40%	-			

Table 3. R-Square Anlysis  $(Q^2)$ 

	Q Square
Financial Performance	0,339

Source: The Results of Data Analysis using Smart PLS

Table 4. Cross Validated Redundancy (R2)

	R Square
Financial Performance	0,399

Source: The Results of Data Analysis using Smart PLS

The result of the coefficient of determination  $R^2$  from this study shows the percentage value of the variable of financial performance is 0.399, meaning that the influence of customer experience and customer satisfaction on financial performance is 39.9%. Based on the test results, the value of R square in this study is classified as weak [21]. Then the test results are predictive relevance  $(Q^2)$  0.339 which means that the variable constructs contained in this study are relevant to measuring the research . Given the results, we can conclude that the structural model has a very good fit. [21].

The result of Hypothesis test to know wether a variable has a significant or not impact is look at t-statistic value > 1.96 and p-values < 0.05. The research showed that "customer experience" and "customer satisfaction" positively affect banking performance (Financial Performance). Customer experience has coefficient value 0.196, T-statistics value 2.801 and P-value 0.005 which it means has a positive impact on financial performance. Customer satisfaction has coefficient value 0.465, T-statistics value 6,776 and P-value 0.000 which means has a positive impact on financial performance.

Thus, we can confirm that there is a significant direct relationship between the independent variable and the dependent variable of the model. So the results are H1 and H2 are not rejected. Customer experience and banking performance has a significant and positive effect. This result supports Berraies dan Hamouda (2018) dan Bennett dan Molisani (2020) researches.

This research showed that bank use customer experience as a measure of bank performance especially digital banking services. Customer satisfaction and banking performance has a significant and positive effect. This result supports Bennett dan Molisani (2020) research. Customer satisfaction is an evaluation of the use of digital banking services. Customer satisfaction is formed because digital banking is able to meet customer's expectation such as the fulfillment of financial transactions, obtaining information related to digital banking services and ease of using digital banking.

This research shows complaints or negative comments about the product, so that positive customer reactions such as recommending products to others are considered to improve company performance.

#### 4. DISCUSSION

The results of testing hypothesis  $H_1$  proves that the customer experience is able to positively affect to financial performance. A positive experience is able to give a distinct impression on the customer so as to reduce.

Results of testing the hypothesis H<sub>2</sub> prove that customer satisfaction is able to influence positively affect on financial performance. Customer satisfaction is formed because of the fulfillment of the expectations or expectations of these customers. If this is fulfilled, it can be concluded that if the customer is satisfied with the performance of digital banking, the customer will use the service continuously and will indirectly help promote digital banking to other customers. This is able to increase users of digital banking which has an impact on the bank's profit. The results of this study are in line with research conducted by Bennett and Molisani [16], and Berraies and Hamouda [17].

#### 5. CONCLUSIONS

The conclusion that can be drawn based on the results of this study is that customer experience and customer satisfaction have a positive effect on financial performance. The results of this study also provide suggestions so that companies can provide good experience and satisfaction for customers as long as customers use digital banking services. By increasing these two things, consumers will feel satisfied and happy so as to create loyal customers.

#### 6. RECOMMENDATIONS

In the future, it is considered essential to extend this research to bank in Indonesia, for example West Java. So in order to have a clearer view of the notions of the respondents who have financial products in more than Jakarta, Bogor, Depok, Tangerang and Bekasi. Another, recommendation would be to use sample for ages in a at range above 25 years old, so next research can find another perspective from another age gap. This would provide more accurate outcomes in the next research. For next research, researchers can combine with other variables that can show another effect on bank's financial performance. In the future, for next research can added new criteria for example revenue from respondents and the average of transactions on digital banking in a day.

#### 7. MANAGERIAL IMPLICATIONS

In relation to the results of the research, several managerial implications that can be applied by banks can be conveyed. Seeing from the positive impact of customer experience and customer satisfaction, banks are encouraged to continue to improve services such as service quality, quick response to risks and provide ease of use in creating customer experience and satisfaction.

#### REFERENCES

- [1] C. I. Mbama and P. O. Ezepue, "Digital banking, customer experience and bank financial performance: UK customers' perceptions," *Int. J. Bank Mark.*, vol. 36, no. 2, pp. 230–255, 2018, doi: 10.1108/IJBM-11-2016-0181.
- [2] S. S. Andaleeb, M. R. Quazi, and A. Rahman, "'A model of customer-centric banking practices for corporate clients in Bangladesh', International Journal of Bank Marketing, Vol. 34 Iss 4 pp. -," *Int. J. Res. Dev.*, vol. 7, no. 1, pp. 63–83, 2016.
- [3] S. Levy and H. Hino, "Emotional brand attachment: a factor in customer-bank relationships," *Int. J. Bank Mark.*, vol. 34, no. 2, pp. 136–150, 2016, doi: 10.1108/IJBM-06-2015-0092.
- [4] Desy Setyowati, "Transaksi Digital Bank Melonjak, Aka Bersaing Ketat dengan Fintech. Reimagining The Future of Indonesia," 2021. https://katadata.co.id/desysetyowati/digital/602 4eb09db45f/transaksi-digital-bank-melonjak-akan-bersaing-ketat-dengan-fintech database (accessed Nov. 23, 2021).
- [5] A. Fernando, "Semua Bakal Digital, Begini Masa Depan Perbankan RI. Market," 2021. https://www.cnnindonesia.com/ekonomi/20200 914191949-78-546411/bi-ungkap-913-jutamasyarakat-belum-terjamah-layanan-bank database. (accessed Nov. 23, 2021).
- [6] C. Indonesia, "BI Reveals 91.3 Million People Untouched by Bank Services," 2020. https://www.cnnindonesia.com/ekonomi/20200 914191949-78-546411/bi-unjuk-913-jutadatabase (accessed Nov. 23, 2021).
- [7] S. Chandra, "The Impact of Customer Experience toward Customer Satisfaction and Loyalty of Ciputra World Surabaya," *iBuss Manag.*, vol. 2, no. 2, pp. 1–11, 2014.
- [8] R. Garg, Z. Rahman, and M. N. Qureshi, "Measuring customer experience in banks: scale development and validation," *J. Model. Manag.*, vol. 9, no. 1, pp. 87–117, 2014, doi: 10.1108/JM2-07-2012-0023.

- [9] A. Y. Obeng and M. L. Peter, "Interrelationships and consequential effects among technological innovation, service consistency, customer satisfaction and loyalty in banking," *Int. J. Financ. Bank. Stud.*, vol. 6, no. 3, p. 51, 2017, doi: 10.20525/ijfbs.v6i3.716.
- [10] A. Z. Arifin, "Influence factors toward financial satisfaction with financial behavior as intervening variable on Jakarta area workforce," *Eur. Res. Stud. J.*, vol. 21, no. 1, pp. 90–103, 2018.
- [11] A. Kusuma and D. S. S. Wuisan, "Effect of brand credibility to word of mouth via customer satisfaction and customer loyalty at Hypermart Cyberpark Karawaci," *J. Ilmu Manaj.*, vol. 1, pp. 49–61, 2021, [Online]. Available: https://journal.uny.ac.id/index.php/jim/article/view/37885.
- [12] A. Fusva *et al.*, "Loyalty formation and its impact on financial performance of Islamic banks evidence from Indonesia," *J. Islam. Mark.*, vol. 12, no. 9, pp. 1872–1886, 2020, doi: 10.1108/JIMA-12-2019-0258.
- [13] E. Keisidou, L. Sarigiannidis, D. I. Maditinos, and E. I. Thalassinos, "Customer satisfaction, loyalty and financial performance: A holistic approach of the Greek banking sector," *Int. J. Bank Mark.*, vol. 31, no. 4, pp. 259–288, 2013, doi: 10.1108/IJBM-11-2012-0114.
- [14] F. F. Reichheld, *Grow*. Harvard Business Review, 2003.
- [15] C. Mbama, "Digital Banking Services, Customer Experience and Financial Performance in UK Banks," no. February, pp. 1–324, 2018, [Online]. Available: http://shura.shu.ac.uk/23305/1/Mbama\_2018\_PhD\_DigitalBankingServices.pdf.
- [16] M. Bennett and A. Molisani, "Defining customer experience and measuring its impact on financial performance of US publicly traded companies," no. April, 2020, doi: 10.31235/osf.io/mzepq.
- [17] et al (2018) Yen, "기사 (Article) 와 안내문 (Information) [," *Eletronic Libr.*, vol. 34, no. 1, pp. 1–5, 2018.

- [18] K. A. Sun and D. Y. Kim, "Does customer satisfaction increase firm performance? An application of American Customer Satisfaction Index (ACSI)," *Int. J. Hosp. Manag.*, vol. 35, no. Sun, K. A., Kim, D. Y. (2013). Does customer satisfaction increase firm performance? An application of American Customer Satisfaction Index (ACSI). International Journal of Hospitality Management, 35, 68–77. https://doi.org/10.1016/j.ijhm.2013.05.008, pp. 68–77, 2013, doi: 10.1016/j.ijhm.2013.05.008.
- [19] H. B. Review, "Grow."
- [20] & H. L. Ghozali, Imam., Partial Least Squares: Concepts, Techniques and Applications Using the 2nd Edition SmartPLS3.0 Program. Semarang, 2015.
- [21] J. F. Hair, M. Sarstedt, L. Hopkins, and V. G. Kuppelwieser, "Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research," *Eur. Bus. Rev.*, vol. 26, no. 2, pp. 106–121, 2014, doi: 10.1108/EBR-10-2013-0128.