The Effect Of Perceived Usefulness, Perceived Ease Of Use, Perceived Risk And Technology Readiness On Intention To Use E-Banking In Jakarta

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Abstract: The transaction activity of e-banking in Indonesia has showed an increased percentage of 480% in April 2020. By taking it as phenomena, this study focuses on the intention to use e-banking in Jakarta. Independent variables such as perceived usefulness, perceived ease of use, perceived risk, and technology readiness were taken to be examined. The design of this study is a quantitative research. The sample size contains 94 respondents of e-banking users collected from Jakarta area. Data from respondents were measured using bivariate Pearson correlation to examine significant relationships between the variables, with the help of computer software SPSS for statistics. The findings of this research showed perceived usefulness, perceived ease of use and technology readiness having significant effect on the intention to use e-banking services..

Keywords: perceived usefulness, perceived ease of use, perceived risk, technology readiness, intention to use e-banking.

1. Introduction

The advancement of technology of information and the use of internet have transformed the methods of delivering service in the last few years (Shankar & Jebarajakirthy, 2019). Companies such as banks use the internet to employ e-banking as a tool to incorporate e-commerce services, to reimburse costs, and to improve banking services and operational systems (Salimon et al., 2017), and also to enable higher efficiency for banking activities and processes (Anouze & Alamro, 2019). According to Miftahudin (2020), the transaction activity of e-banking in Indonesia has increased in March 2020 with the percentage of 320%, and more in April 2020 with the percentage of 480%, including SMS banking, internet banking, and mobile banking. This can be proven with BRI, a bank company in Indonesia, which was also having an increased usage of internet banking and mobile banking compared from March until January 2020, with the percentage of 61% increase (Sofuroh, 2020). In BNI, an increased usage of mobile banking was also accounted for 44% as in the first three months of 2020 (Aldin & Aria, 2020).

The adoption of e-banking has become the main interest of research studies (Salimon et al, 2017; Anouze & Alamro, 2019; Chauhan et al., 2019). For this matter, the Technology Acceptance Model (TAM) has been proven as a valid theory in predicting individuals' adoption behavior and behavioral intention of new technologies with the emphasis on perceived usefulness and perceived ease of use as the most noticeably important drivers in individuals (Anouze & Alamro, 2019). The perceived usefulness and perceived ease of use have shown to be the key factors that significantly influence behavioral intention to use technology (Elkaseh et al., 2016; Stocchi et al., 2019). Contrary to the previously mentioned findings, a study by Salimon et al. (2017), find that the perceived ease of use does not have a significant relationship with e-banking adoption, however, it was suggested for future studies to use the same model using TAM in other developing countries, which Indonesia is one of them, to test the veracity of their findings.

In addition to TAM, the TRI (Technology Readiness Index) can be used to explain people's acceptance of new technologies (Davis, 1989; Parasuraman, 2000). The technology readiness of customers showed a significant positive impact on customer satisfaction which links the stages of consumer purchasing behavior (Pooya et al., 2019). Satisfaction appears to be the strongest predictor of adoption and the intention to continue to use various mobile technologies (Humbani & Wiese, 2019). It was previously examined that customers' level of technology readiness directly affects behavioral intention (Nagdev et al., 2019).

Based on the background, we take the most notable variables from TAM, which are the perceived usefulness and perceived ease of use, along with other varibles such as perceived risk and technology readiness (TR) to examine the relationships with the intention to use e-banking. This research includes perceived risk as the perceived risk acts as a major barrier in the growth of e-banking (Chauhan at al., 2019). As many researches have adopted the technology acceptance model with attitude as mediator (Elkaseh et al., 2016; Singh & Srivastava, 2018; Anouze & Alamro, 2019), our study will not include attitude as a mediating variable for the sake of focusing on the direct effects as previous studies has shown that TAM, TR, and perceived risk directly affect the intention to use (Chauhan et al., 2019; Kim & Chiu, 2019; Nagdev et al., 2019). Therefore, the objective of this research is to find the effect between perceived usefulness, pereived ease of use, perceived risk and technology readiness on intention to use e-banking.

2.Literature Review

2.1.Intention To Use E-Banking

Shankar (2019) E-banking is a process of interaction between customers and banks digitally via a computer without the need for human interaction (Shankar, 2019) this is significantly influenced by customer performance (Herington & Weaven, 2007). E-banking offers services in terms of information, ease of service, convenience and a variety of other services (Arora & Sandhu, 2018), such as checking information on balances of downloading bank accounts, bill payments, transferring funds, improving deposit management, stock investment and insurance period payments. (Tan & Teo, 2000)

Apart from its function, an increase in the number of e-banking users is not aligned with the requirements of cashless in developing countries. The success of an innovation is very dependent on customer consumption patterns, customer attitude is very important to determine whether the customer intends to use innovative services offered or not (Arora & Sandhu, 2018).

Intention to use is a factor that measures the level of success in the use of technology (Namahoot & Laohavichien, 2016). The customer's intention to use technology is a measurement of individual interest, which links individual attitudes and recognition of service contributions. The relationship between attitude and behavioral intention to use results in an individual's intention to decide to use the service (Namahoot & Laohavichien, 2016). The intention to use e-banking services is influenced by several major factors, including perceived usefulness, perceived ease of use, security, and reasonable price (Anouze & Alamro, 2019).

2.2.Perceived Usefulness

The perceived usefulness is an important antecedent of behavior, such as consumer behavior and sharing behavior (Peng et al., 2019). This variable is taken from Theory of Reasoned Action developed by Fishbein and Ajzen (1975), which is used specifically for users of information systems or computers, and is equipped with a Technology Acceptance Model (TAM) developed by Davis (1989). According to TAM, the intentional behavior of a person to use technology is influenced by their perception of the usefulness of the technology (Ozbek et al., 2015). TAM states that perceived usefulness influences behavioral intentions (Abdullah et al., 2018). Perceived usefulness can be interpreted as a subjective probability that illustrates whether a customer will adopt certain technologies such as information systems, this can improve performance related to the technology objects used (Gong et al., 2004). From this definition it can be concluded that the more useful a system will be the higher one's intention to use the system. Therefore, we can assume:

H1: Perceived usefulness has a positive effect on intention to use e-banking.

2.3.Perceived Ease of Use

The perceived ease of use variable is derived from the Technology Acceptance Model (TAM). TAM is a way to predict behavioral intention of individual to adopt computer technology and information systems. Consumer's attitude and behavioral intention to use technology or system depends on the perceived usefulness (PU) and the perceived ease of use (PEoU) (Chauhan et al., 2019). TAM has been used widely as the most suitable theory for computers and technology-related behavior researches, including the intentions to adopt e-banking (Chauhan et al., 2019). It also has been used to investigate factors that affect individual's acceptance and intentions to adopt technological innovations.

In the literature review by Chauhan et al. (2019), perceived ease of use has been cited from according to Davis as "the degree to which a person believes that using a particular system will be free of effort". Chauhan et al. (2019), states that individuals are inclined to adopt innovative technologies if they perceive that the technology is easy to understand and to use. Perceived usefulness and perceived ease of use have been considered as significant determinants of intention to use (IU) innovative information technologies. Amin et al. and Belanche et al (Chauhan et al, 2019) have found that one significant factor to develop consumer satisfaction is individual's perceived ease of use, which then also influences their intention to use (IU) mobile website in their study of mobile website satisfaction. Perceived ease of use has an indirect effect on the behavioral intention to use (IU) via attitude toward innovative technology. The perceived ease of use has positive influence on consumers' adoption intentions toward technology of information via attitude (Chauhan et al., 2019). It can be implied that perceived ease of use influences the intention to use technology indirectly, but there hasn't been many studies that investigate the direct effect. Therefore, we can assume:

H2: Perceived ease of use has a significant positive effect on intention to use e-banking

2.4.Perceived Risk

Perceived risks are negative impacts that can arise from consumer actions (Bauer, 1960; Ostlund, 1974), which will then lead to important concepts in consumer relations (Martins et al., 2014). Kuisma et al. (2007) have examined the rejection of e-banking and its relationship with existing values in individuals and concluded that

functional and psychological barriers stem from services, channels, consumers, and communication. Perceived risk as the expectation of causing adverse decision outcomes (Dowling & Staelin, 1994) or subject losses (Grewal et al., 2007) in a consumer's decision making when uncertainty is present.

The intention to use e-banking is typically more complex than online purchasing and involves inherent risks because it initiates a relationship between the consumer and banking service (Lee, 2009). For individuals with high risk acceptance, the effect of perceived risk on intention to use e-banking is lower than it is for individuals with low risk acceptance (Marafon & Basso, 2017). User's concerns about privacy (Loh & Ong, 1998), security risks (Chauhan et al., 2018) and functional risks (Lee, 2020) would be one of the key determinants of the intention to use e-banking. Zhang at al (2018) found that perceived risk has significant impact on e-banking adoption.

Recent studies have shown that the higher the perceived risk, the lower the intention to use (Zhang et al., 2018), security risks can reduce the intention of consumer behavior in the pre and post adoption stages (Lee, 2020). The perceived risk has a direct influence on behavioral intentions to use e-banking at a significance level of 0.001 (Namahoot & Laohavichien, 2016). Therefore, we can assume:

H3: Perceived risk has a negative effect on intention to use e-banking.

2.5.Technology Readiness

Parasuraman has conceptualized the determinants of an individual's inclination or predisposition to adopt and use new technologies (Celik & Kocaman, 2017). An individual's propensity to use new technologies to reach goals in their home life and work can be defined as Technology Readiness (TR). In that concept, an individual's proneness to use new technology can be determined collectively by their mental enablers and inhibitors. It is also said that TR is different from technology acceptance research as TR focuses on general beliefs about technology products and services instead of the perceived characteristics of specific technology services and products. The central importance of technology readiness research is that it appears to be individual specific instead of system specific.

It is stated that Parasuraman proposed the four TR dimensions to grasp the positive and negative feelings towards technology, named respectively as the enablers and inhibitors. The enablers consist of optimism (a positive view of technology and their belief that technology would offer people more control, flexibility and efficiency in their lives) and innovativeness (an inclination to become a technology pioneer and to influence others by it). Meanwhile the inhibitors consist of discomfort (a feeling of being intimidated or lacking control over technology) and insecurity (a cognitive belief of distrust and scepticism about technology's ability to work as it should). Thus, the technology readiness of an individual can be assimilated by combining the enablers that encourage the adoption and usage of a technology and the inhibitors that restrain them from the technology. It is said that these dimensions represent individuals' attitudes towards the new technology rather than their competencies to use it. Based on the literature, we can assume:

H4: Technology readiness has a significant positive effect on intention to use e-banking.

Based on the hypotheses development, we examine the effect of perceived usefulness (H1), the effect of perceived ease of use (H2), the effect of perceived risk (H3), and the effect of technology readiness (H4), each to the intention to use e-banking. The H1, H2, and H4 were hypothesized to positively affect the intention to use e-banking, meanwhile H3 was hypothesized to affect negatively. We have conceptualized the theoretical framework as the following figure:





3.Research Metodology

This research uses quantitative analysis to empirically test the research questions through primary data collection. The data is collected by using online survey method after determining each variables' indicators. In the third quarter of 2019, the users of e-banking were accounted for approximately 8,6 million transactions with 40%

of active users (Hutauruk & Kartika, 2019). The continuous increase of the users is huge and inceasing over time (Sofuroh, 2020).

According to the rule of thumb of Roscoe, the appropriate amount of sample size would be more than 30 and less than 500 respondents for researches (Sekaran & Bougie, 2016). As for the sampling technique, the nonprobability sampling is favorable for this research because it is the most suited technique for either wide population and because there is no predetermined amount of the population (Sekaran & Bougie, 2016). The online survey is then conducted by distributing questionnaire on the internet.

The questionnaire contains constructs and their items which have been adopted from extensive literature to measure the consumer's intention to use e-banking, they are Perceived Usefulness, Perceived ease of use, Perceived risk, Technology readiness and Intention to use. For this research's operationalization we define each of the variables as the following. Peng (2019) said perceived usefulness is defined as the degree to which a person lies that using a particular system would enhance his performance. According to Davis (1989), perceived ease of use is defined as "the degree to which a person believes that using particular system will be free of effort". Perceived risk is defined as the expectation of causing adverse decision outcomes (Dowling & Staclin, 1994) or subjective losses (Grewal et al, 2007) in a consumer's decision making when uncertainty is present (Lee, 2019). According to Parasuraman and Colby (2001), technology readiness is described exactly as "the extent to which people's propensity to embrace and use new technologies to accomplish goals in home life and at work" (Celik & Kocaman, 2017). Lee (2019) has defined adoption intention as "the intention to adopt and use the Internet-only bank in the future", and continuance intention was also defined as "the degree of intention to continue using the Internet-only bank after adoption".

The operationalization of each variables is determined by the indicators which were adopted from previous researches. As can be seen in Appendix A, the indicators are delivered as quesionnaire of the online survey to measure each variables. The data measurement uses a 1-5 Likert scale, ranging from the choice of "strongly disagree" to "strongly agree". The appropriate reliability analysis for each indicators is by using the Cronbach's Alpha, meanwhile the appropriate construct validity analysis is by using item correlation analysis (Sekaran & Bougie, 2016).

The qualification of the subjects are determined by filtering the users of e-banking from the non users. In terms of time horizon, this study is a cross-sectional study, means, the data is only collected once in order to answer research questions (Sekaran & Bougie, 2016). The data collected is then processed by using SPSS through bivarate Pearson correlation after the reliability and validity of the items are determined.

4. Results And Discussions

4.1. The Descriptive Analysis Of Respondent Profile And Indicators

From the questionnaires distributed through online media, there were 94 respondents were qualified as ebanking user. In terms of gender, the respondent profile consists of 59 (37.23%) female and 35 (63.77%) male correspondents. In terms of job career, 59 (62.77%) employees in private companies, 4 (4.26%) employees in public companies, 10 (10.64%) students or college students, 2 (2.13%) entreprenerus, 9 (9.57%) housewives, and 10 (10.64%) identified as other profession. In terms of age, 29 (30.85%) respondents are between 18-25 years old, 36 (38.30%) are between 26-35 years old, 14 (14.89%) are between 36-45 years old, 11 (11.70%) are between 46-53 years old, and 4 (4.26%) are between 56-64 years old. In terms accounts possessed, 37 (39.36%) only have 1 ebanking account, 33 (35.11%) have 2 accounts, 15 (15.96%) have 3 accounts, and the rest have more than 3. Most of the respondents answered they to have used more than nine times of e-banking transaction in the past one month, and the most used features were balance checking, transfer, e-payment, and e-commerce.

4.2. Reliability and Validity Analysis

The reliability and validity of the items are measured by conducting item correlation analysis with the data that has been collected. The result of item correlation analysis can be seen on the following table

Items	Corrected Correlation	Item-Total
PU 1	.679	
PU 2	.630	
PU 3	.751	
PU 4	.421	
PEoU 1	.671	

Table 4.1. Item	Correlation	Analysis
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PEoU 2 .635 PEoU 3 .653 PEoU 4 .393 PR 2 .312 TR 1 .486 TR 2 .511 TR 7 .263 IU 1 .692 IU 2 .774			
PEoU 3 .653 PEoU 4 .393 PR 2 .312 TR 1 .486 TR 2 .511 TR 7 .263 IU 1 .692 IU 2 .774	PEoU 2	.635	
PEoU 4 .393 PR 2 .312 TR 1 .486 TR 2 .511 TR 7 .263 IU 1 .692 IU 2 .774	PEoU 3	.653	
PR 2 .312 TR 1 .486 TR 2 .511 TR 7 .263 IU 1 .692 IU 2 .774	PEoU 4	.393	
TR 1 .486 TR 2 .511 TR 7 .263 IU 1 .692 IU 2 .774	PR 2	.312	
TR 2 .511 TR 7 .263 IU 1 .692 IU 2 .774	TR 1	.486	
TR 7 .263 IU 1 .692 IU 2 .774	TR 2	.511	
IU 1 .692 IU 2 .774	TR 7	.263	
IU 2 .774	IU 1	.692	
UL 2 500	IU 2	.774	
10.3 .522	IU 3	.522	
IU 4 .772	IU 4	.772	

The item correlation analysis results to a list of items which are valid for the research. The validity is determined by the corrected item-total correlation, which, each items must show a higher value than 0.2 to be considered valid (Medeiros et al., 2004). Items that are not valid should be eliminated from the data. The whole steps of the item correlation analysis can be referred from Appendix B. As for the reliability, we show the result into the following table.

Table	4.2 .	Reliability	Statistics
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Cronbach's Alpha	N of Items
.891	16

For the data to be reliable, the value of Cronbach's Alpha should be at least higher than 0.7 (Taber, 2017). The table above shows that our data has a high reliability.

4.3.Descriptive Analysis of Indicators

Each of the indicators has a minimum score of 1 to show "strongly disagree" and a maximum score of 5 to show "strongly agree". With total number of 94 participants, we show the mean score of each indicators into the following table.

Items	Mean
PU 1	4.67
PU 2	4.78
PU 3	4.62
PU 4	4.35
PEoU 1	4.48
PEoU 2	4.41
PEoU 3	4.38
PEoU 4	4.14
PR 2	2.37
TR 1	4.47
TR 2	4.24
TR 7	3.32
IU 1	4.21
IU 2	4.34

 Table 4.3. Mean of Each Indicators

IU 3	4.45	
IU 4	4.40	

The mean score shows the central distribution of participants' responses. If neutral responses can be counted as a score of 3, then the scores of more than 3 can be counted as higher score, meanwhile the scores of less than 3 can be counted as lower scores. From the table above, we can see that PU, PEoU, TR, and IU have higher scores. Meanwhile, the PR shows lower score. This means that all of the participants perceive higher PU, PEoU, TR, and IU on e-banking. In contrast, they do not perceive PR high enough.

4.4.Bivariate Pearson Correlation

To see the relationships the independent variables, we use the bivariate Pearson correlation. The independent variables such as PU, PEoU, TR, and PR were hypothesized to affect IU, the dependent variable. By using the Bivariate Pearson Correlation method, the result can be seen on the following table.

	Table 4.4. Divariate i carson	Conclation
		IU
PU	Pearson Correlation	0.654
	Sig. (2-tailed)	.000
PEoU	Pearson Correlation	0.696
	Sig. (2-tailed)	.000
PR	Pearson Correlation	0.268
	Sig. (2-tailed)	.009
TR	Pearson Correlation	0.502
	Sig. (2-tailed)	.000

Table 4.4. Bivariate Pearson Correlation

The independent variables on the left can be determined to correlate with the intention to use e-banking (IU) if they have a significance value lower than 0.01. Here, we can see that the perceived usefulness, perceived ease of use, and technology readiness positively and significantly correlate to the intention to use e-banking, meanwhile perceived risk does not affect the intention to use e-banking. Thus, we can conclude that H1, H2, and H4 are confirmed, and H3 is rejected. This confirmed hypotheses were in accordance with previous researches, that the perceived usefulness, perceived ease of use, and technology readiness adheres to behavioral intention (Anouze & Alamro, 2019; Nagdev, Rajesh & Misra, 2019). Meanwhile the rejected H3 could be caused by other unknown factors, it needs to be examined by future researchers to further understand the effect by using different method. The details of the statistics can be seen on the Appendix C.

5.Conclusion

This research uses perceived usefulness, perceived ease of use, perceived risk, and technology readiness as variables that influence one's intention to use e-banking. This research proves that perceived risk does not affect the intention to use e-banking. This is in line with the research of Yadav et al. (2014) who said perceived risk failed to show any significant influence over intention to use e-banking. Whereas perceived usefulness, perceived ease of use, and technology readiness has a significant positive effect on intention to use e-banking.

Perceived usefulness, perceived ease of use and technology readiness have a significant effect on consumer behavioral intentions, bank practitioners must strive to improve the quality of e-banking from several aspects so as to increase customer intentions to use e-banking and can improve services and satisfaction the customer.

Data for this research were collected by an online survey of bank customers in Greater Jakarta, so the results of the study were less representative of bank customers throughout Indonesia because the number of samples obtained was still insufficient in this study. Our suggestion for researchers who want to examine the intention to use e-baking in the future is to increase the amount of sample data so that research results can be more accurate and it would be better if the data collection was done face-to-face so that the results could be more accountable and more accurate when compared by distributing questionnaires online. Furthermore, this research only measures perceptions held by users, not involving non-users of e-banking, so in subsequent studies, researchers can involve non-users and report differences about both (users and non-users).

References

- Aldin, U. I. & Aria, P. (2020). Sepanjang Pandemi, Pengguna BNI Mobile Banking Meningkat 84%. Katadata, Berita, Bisnis. Retrieved from https://katadata.co.id/pingitaria/berita/5ebf599a9bfab/sepanjang-pandemi-pengguna-bni-mobilebanking-meningkat-84
- Anouze, A. L. M. & Alamro, A. S. (2020). Factors affecting intention to use e-banking in Jordan. International Journal of Bank Marketing. Vol. 38 No. 1, pp. 86-112. DOI: 10.1108/IJBM-10-2018-0271
- Arora, S. & Sandhu, S. (2018). Usage based upon reasons: the case of electronic banking services in India. International Journal of Bank Marketing. Vol. 36 No. 4, pp. 680-700. DOI: https://doi.org/10.1108/IJBM-03-2017-0060
- 4. Celik, H. & Kocaman, R. (2017). Roles of self-monitoring, fashion involvement and technology readiness in an individual's propensity to use mobile shoping. Journal of Systems and Information Technology. Vol. 19 No. ³/₄, pp. 166-182. DOI: 10.1108/JSIT-01-2017-0008
- Chauhan, V., Yadav, R., & Choudhary, V. (2019). Analyzing the impact of consumer innovativeness and perceived risk in internet banking adoption: A study of Indian consumers. International Journal of Bank Markeing. Vol. 37 No 1, pp. 323-339. DOI: 10.1108/02652320910928245
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. Management Information Systems Research Center. Vol. 13 No. 3, pp. 319-340. DOI: 10.2307/249008
- 7. Gong, M., Xu, Y., & Yu, Y. (2004). An Enhanced Technology Acceptance Model For Web-Based Learning. Journal of Information Systems Education. Vol. 15 No. 4, pp. 365-374.
- Humbani, M. & Wiese, M. (2019). An integrated framework for the adoption and continuance intention to use mobile payment apps. International Journal of Bank Marketing. Vol. 37 No. 2, pp. 646-664. DOI: 10.1108/IJBM-03-2018-0072
- Kim, T. & Chiu, W. (2019). Consumer acceptance of sports wearable technology: the role of technology readiness. International Journal of Sports Marketing and Sponsorship. Vol. 20 No. 1, pp. 109-126. DOI: 10.1108/IJSMS-06-2017-0050
- 10. Hutauruk, D. M. & Kartika, H. (2019). Kuartal III-2019, transaksi mobile banking sejumlah bank tumbuh signifikan. Kontan.
- 11. https://keuangan.kontan.co.id/news/kuartal-iii-2019-transaksi-mobile-banking-sejumlah-bank-tumbuh-signifikan
- 12. Lee, J. & Kim, H. (2020). Determinants of adoption and continuance intentions toward Internet-only banks. International Journal of Bank Marketing. DOI: 10.1108/IJBM-07-2019-0269
- Marafon, D. L., Basso, K., Espartel, L. B., Barcellos, M. D., & Rech, E. (2018). Perceived risk and intention to use Internet banking: the effects of self-confidence and risk acceptance. International Journal of Bank Marketing. Vol. 36 No. 2, pp. 277-289. DOI: 10.1108/IJBM-11-2016-0166
- 14. Miftahudin, H. (2020). Penggunaan Layanan Perbankan Digital Meningkat Pesat. Medcom.id, Ekonomi, Keuangan. Retrieved from https://www.medcom.id/ekonomi/keuangan/nN90mejK-penggunaan-layanan-perbankan-digital-meningkat-pesat
- Nagdev, K., Rajesh, A., & Misra, R. (2019). The mediating impact of demonetisation on customer acceptance for IT-enabled banking services. International Journal of Emerging Markets. DOI: 10.1108/IJOEM-05-2018-0263
- Namahoot, K. S. & Laohavichien, T. (2018). Assessing the intentions to use internet banking: The role of perceived risk and trust as mediating factors. International Journal of Bank Marketing. Vol. 36 No. 2, pp. 256-276. DOI: 10.1108/IJBM-11-2016-0159
- 17. Parasuraman, A. & Colby, C. L. (2015). An Updated and Streamlined Technology Readiness Index: TRI. 2.0. Journal of Service Research. Vol. 18 No. 1, pp. 59-74. DOI: 10.1177/1094670514539730
- Pooya, A., Khorasani, M. A., & Ghouzhdi, S. G. (2020). Investigating the effect of perceived quality of self-service banking on customer satisfaction. International Journal of Islamic and Middle Eastern Finance and Management. DOI: 10.1108/IMEFM-12-2018-0440

- Salimon, M. G., Yusoff, R. Z. B., & Mokhtar, S. S. M. (2017). The mediating role of hedonic motivation on the relationship between adoption of e-banking and its determinants. International Journal of Bank Marketing. Vol. 35 No. 4, pp. 558-582. DOI: 10.1108/IJBM-05-2016-0060
- 20. Sekaran, U. & Bougie, R. (2016). Research Methods for Business: A Skill Building Approach 7th Edition. Chichester, West Sussex, United Kingdom: John Wiley & Sons.
- Shankar, A. & Jebarajakirthy, C. (2019). The influence of e-banking service quality on customer loyalty: A moderated mediation approach. International Journal of Bank Marketing. Vol. 37 No, 5, pp. 1119-1142. DOI: 10.1108/IJBM-03-2018-0063
- Singh, S. & Srivastava, R. K. (2018). Predicting the intention to use mobile banking in India. International Journal of Bank Marketing. Vol. 36 No. 2, pp. 357-378. DOI: 10.1108/IJBM-12-2016-0186
- Sofuroh, F. U. (2020). Transaksi Digital BRI Meningkat 61% Saat Pandemi COVID-19. detikFinance, Moneter. Retrieved from https://finance.detik.com/moneter/d-5003398/transaksi-digital-bri-meningkat-61-saat-pandemi-covid-19
- Stocchi, L., Michaelidou, N., & Micevski, M. (2019). Drivers and outcomes of branded mobile app usage intention. Journal of Product & Brand Management. Vol. 28 No. 1, pp. 28–49. DOI: 10.1108/JPBM-02-2017-1436
- 25. Taber, K. (2017). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. Research in Science Education, 48. https://doi.org/10.1007/s11165-016-9602-2
- Yadav, R., Chauhan, V., & Pathak, G. S. (2015). Intention to adopt internet banking in an emerging economy: a perspective of Indian youth. International Journal of Bank Marketing. Vol. 33 No. 4, pp. 530-544. DOI: 10.1108/IJBM-06-2014-0075
- Yaseen, S. G. & Qirem, I. A. E. (2018). Intention to use e-banking services in the Jordanian commercial banks. Interntional Journal of Bank Marketing. Vol. 36 No. 3, pp. 557-571. DOI: 10.1108/IJBM-05-2017-0082
- Zhang, Y., Chen, X., Liu, X., & Zhu, N. (2018). Exploring trust transfer between internet enterprises and their affiliated internet-only banks: An Adoption study of internet-only banks in China. Chinese Management Studies. Vol. 12 No. 1, pp. 56-78. DOI: 10.1108/CMS-06-2017-0148