Value Adoption Model (VAM) and Users' Intentions to Use Mobile Banking: Examining Perceived Usefulness, Perceived Sacrifice and Perceived Risk

Rinaldi Bursan

Department of Management, Faculty of Economics and Business, Universitas Lampung, Bandar Lampung, Lampung 35141, Indonesia
E-Mail: rbursan@gmail.com

Ali Berto

Department of Management, Faculty of Economics and Business, Universitas Lampung, Bandar Lampung, Lampung 35141, Indonesia
E-Mail: ali.berto@gmail.com

ABSTRACT

The financial services sector in Indonesia is highly competitive due to advancements in technology and changing customer behavior. Banks are challenged to adopt customer-centric strategies, particularly in the context of mobile banking. This study introduces a Value Adoption Model (VAM) based on consumer choice theory to investigate the factors influencing customers' intentions to use mobile banking services. In the highly competitive landscape of Indonesia's financial services sector, this study introduces a VAM to understand the drivers behind customers' intentions to use mobile banking services. Drawing on dimensions like accessibility, enjoyment, perceived usefulness, perceived sacrifice, and perceived risk, this research demonstrates that these factors significantly influence users' adoption. Notably, enjoyment emerges as the most influential factor, followed by perceived usefulness, perceived sacrifice, accessibility, and perceived risk. This study provides valuable insights for financial institutions seeking to enhance their mobile banking services, offering a pathway to better understand and cater to customers' needs in an evolving technological landscape.
Keywords: Mobile banking, customer satisfaction, consumer value, financial services, VAM

ABSTRAK

Sektor jasa keuangan di Indonesia sangat kompetitif akibat kemajuan teknologi dan perubahan perilaku pelanggan. Bank-bank dihadapkan pada tantangan untuk mengadopsi strategi berorientasi pelanggan, terutama dalam konteks perbankan mobile. Penelitian ini memperkenalkan Model Penerimaan Nilai (Value Adoption Model - VAM) berdasarkan teori pilihan konsumen untuk menginvestigasi faktor-faktor yang memengaruhi niat pelanggan untuk menggunakan layanan perbankan mobile. Dalam lanskap persaingan yang ketat di sektor jasa keuangan Indonesia, penelitian ini memperkenalkan VAM untuk memahami faktor-faktor pendorong niat pelanggan untuk menggunakan layanan perbankan mobile. Dengan mengacu pada dimensi seperti aksesibilitas, kepuasan, kegunaan yang dirasakan, pengorbanan yang dirasakan, dan risiko yang dirasakan, penelitian ini menunjukkan bahwa faktor-faktor ini secara signifikan memengaruhi niat pengguna dalam mengadopsi layanan tersebut. Terutama, kepuasan muncul sebagai faktor yang paling berpengaruh, diikuti oleh kegunaan yang dirasakan, pengorbanan yang dirasakan, aksesibilitas, dan risiko yang dirasakan. Penelitian ini memberikan wawasan berharga bagi lembaga keuangan yang mencari cara untuk meningkatkan layanan perbankan mobile mereka, menawarkan jalan untuk lebih memahami dan memenuhi kebutuhan pelanggan dalam lanskap teknologi yang terus berkembang.
Kata kunci: M-banking, kepuasan pelanggan, nilai konsumen, layanan keuangan, VAM

INTRODUCTION

The financial services industry in Indonesia plays a crucial role in the country's economy (Guild, 2020). The presence of numerous financial service providers has led to intensified competition, especially in customer acquisition. This growing competition among financial service providers is fueled by advancements in information technology and changes in customer behavior when utilizing the services they offer (Breidbach et al., 2020). As a result, financial service providers are encouraged to enhance the quality of their services and add value to retain customers and ensure their sustainability (Halvorsrud et al., 2016).

Banks, being major players in the financial services sector, must innovate their service offerings. Currently, interactions between banks and customers primarily involve physical engagements, conducted through branch networks or manual processes with bank-owned devices. Conversely, customer service in Indonesian banks still tends to be product centric. To address the challenges posed by increasing competition, the banking industry must realign its financial service delivery strategies towards customer-centric approaches (Nicoletti & Nicoletti, 2017).

For financial institutions, mobile banking represents a breakthrough in remote banking services. Nevertheless, many traditional customers are uncertain about its utility and security (Widanengsih, 2021). Drawing from consumer choice theory and decision-making research in economics and marketing, this study develops a Value Adoption Model (VAM) to influence intentions to use mobile banking services from a value maximization perspective.

VAM is based on the optimization of value and predicts how users influence their perceptions of value and their willingness to adopt information technology through multidimensional perception evaluations (Ratna, 2012; Kim et al., 2007 in Chen et al., 2018). As a foundational research model, VAM consists of dimensions such as accessibility (Flow), enjoyment (Enjoyment), perceived usefulness (Perceived Usefulness), perceived sacrifice (Perceived Sacrifice), and perceived risk (Perceived Risk), all of which impact customers' intentions to use mobile banking services.

Features in mobile banking enhance convenience for customers when accessing banking services, aligning with the findings of Chen et al. (2018), who argue that enjoyment represents the level of satisfaction consumers experience while making online purchases on a specific website, with its capacity limited to providing happiness. Bashir & Madhavaiah (2015) also assert that experiences during the flow stage influence consumer attitudes and intentions. As customers access mobile banking features, they encounter smooth and straightforward accessibility.

Hamid et al. (2016) define perceived usefulness as the expected performance. Customers evaluate the utility of mobile banking services in supporting various financial transactions, including bill payments, interbank transfers, digital wallet top-ups, and more. The conveniences offered by mobile banking services continually evolve to align with technological advancements and match the consumer behavior of users. The usage of mobile banking in Indonesia is expanding, not only in major cities but also in smaller towns, provided that these areas have access to a stable and adequate internet network.

In 2019, various payment methods were utilized by online shoppers, categorized by gender. Among women, 21% made payments on National Online Shopping Day using mobile banking, while men accounted for 23% of payments made through this channel (Nurhayati, 2020). The option to open savings accounts online piques customers' interest in using mobile banking, supporting their daily activities such as bill payments and online shopping. People tend to show greater interest in products or services that offer ease of use and can be accessed whenever and wherever they are needed.

LITERATURE REVIEW

The concept of value in economics refers to the overall ratio between interest earned and costs paid by customers. The perception of customer value was initially proposed by

Monroe and Krishnan (1985), stating that customer perceived value is formed after a comprehensive analysis of the perceived quality of a product or service and the perceived sacrifices required to obtain that product or service. Thus, when perceived quality surpasses perceived sacrifice, customers view the value as positive, which has a consequent positive effect on purchase intentions (Dodds et al., 1991).

Based on research conducted by Kim et al. (2007) VAM is a model based on perceived value and explores users' willingness to use mobile internet from a value optimization perspective. According to Ratna (2012), VAM is based on value optimization and predicts the effects that users have on value and their willingness to adopt information technology through multidimensional perception evaluations. VAM, as a foundational research model, consists of dimensions such as accessibility, enjoyment, perceived usefulness, perceived sacrifice, and perceived risk.

Accessibility is used to describe an individual's experience in participating in an activity. When an individual is fully focused on an activity, they enter a state of deep experience, focusing their awareness on a narrow scope, ignoring the presence of other things, and responding only to specific goals and clear feedback. Hoffman and Novak (1996) noted that when users are in an immersive internet environment, they enter a state of mediation, which is a form of continuous action.

According to cognitive evaluation theory, behavioral motivation can be categorized into two types: extrinsic and intrinsic motivation. Extrinsic motivation generally refers to behavior aimed at achieving specific goals. Intrinsic motivation refers to internal psychological factors that emerge during ongoing activities. Kim et al. (2007) argue that enjoyment is considered an extrinsic motivational factor.

Wang et al. (2013) define enjoyment as the amount of pleasure customers receive from using service offerings. Enjoyment refers to a level at which performing a certain task or activity is perceived as enjoyable (Venkatesh, 2000, as cited in Kim et al., 2007). When someone accesses mobile banking, efficient accessibility and an appealing interface create comfort for customers during transactions.

Based on cognitive theory, intrinsic motivation refers to internal psychological factors that emerge during ongoing activities. Kim et al. (2007) state that, in the VAM, the factor of perceived usefulness is considered intrinsic motivation. According to relevant previous research, both intrinsic and extrinsic motivational factors can influence user perceived value and their behavioral intentions (Kim et al., 2007; Ratna, 2012; Chen et al., 2018).

Venkatesh et al. (2003) define perceived usefulness as the expected performance, where using a specific technology will benefit the user when performing specific activities, and the user of that technology will believe that using it can improve their performance in the workplace. Customers perceive usefulness based on the accessibility and enjoyment they experience when accessing mobile banking.

Cost is another important indicator to measure value. This study categorizes costs into perceived sacrifice and perceived risk. When customers contemplate a purchase, the sacrifices they consider generally include physical costs and perceived past experiences related to the purchasing process. Therefore, when evaluating perceived sacrifices associated with a product or service, customers consider the necessary costs and relevant past experiences (Ratna, 2012). Perceived sacrifice refers to what customers give up using a product or service, such as time, money, and more (Chen et al., 2018).

When making transactions in mobile banking, customers incur sacrifices such as administrative fees for bill payments or interbank transfers, time spent during transactions, and the use of internet data. Perceived sacrifice can be categorized into monetary and non-monetary expenditures. Ratna (2012) states that monetary costs refer to the actual prices paid by customers, while non-monetary costs include time, experiences, and other expenses.

Consumers may not always prioritize low administrative costs; instead, the quality of service and features in mobile banking can be the primary factors for customers when choosing to use mobile banking (Omoregie et al., 2019). In some cases, non-monetary sacrifices such as time, effort, and energy expended may be even more important than

monetary sacrifices for some consumers. Perceived risk involves the risks that customers believe they have to bear when using mobile banking. Nepomuceno et al. (2014) consider perceived risk to refer to unexpected losses encountered during the process of achieving results. There are many types of perceived risks: performance, social, time, financial, privacy, physical, and psychological (Martins et al., 2014).

Currently, mobile phone numbers play a crucial role in both mobile banking and mobile payment processes. This is because for any confirmation of personal data, companies typically send a specific password via mobile phone, known as OTP (One Time Password). Most problems occur when OTP requests are sent directly to the victim via voice or SMS to the victim's mobile phone number. This can happen because to register or create a new account, it can be done with an application on a new mobile phone by entering the number, and the number will be sent OTP by the bank. This vulnerability is prone to fraudulent activities, which customers may have to bear the risk of.

RESEARCH METHODS

Sampling was carried out with the consideration that the existing population is exceedingly large, making it unfeasible to examine the entire population. Consequently, a representative sample of the population was created. In this study, a nonprobability sampling technique was employed. This technique entails selecting samples in which not all members of the population are included.

One of the sampling techniques used in this research, classified as a nonprobability sampling method, is the purposive sampling technique. Purposive sampling involves selecting samples based on specific considerations, carried out randomly. The sample criteria employed in this study are Bank customers who have the intention to use mobile banking in the city of Bandar Lampung.

If the population is unknown, as per Malhotra (2014:63), the minimum sample size should be five times the number of items or statements in the questionnaire. In this study, there are five independent variables and one dependent variable. There are a total of 19 statements in this study, thus the minimum sample size for this research is 19 x 5 = 95. Based on this calculation, the total number of respondents obtained is 95 individuals. However, to account for potential issues such as failed or defective questionnaires, the researcher will distribute a total of 100 questionnaires in this study.

The independent variables in this research encompass five variables: accessibility (flow), enjoyment (enjoyment), perceived usefulness (perceived usefulness), perceived sacrifice (perceived sacrifice), and perceived risk (perceived risk). The dependent variable in this research is the intention to use (Intention to Use). The analytical method employed is multiple regression analysis.

.

$$Y = a + \beta1X1 + \beta2X2 + \beta3X3 + \beta4X4 + \beta5X5 + \varepsilon$$

Explanation:
Y = *Intention to Use*
a` = *Constant or intercept*
β = Regression Coefficients for Each Variable
X1 = *Accessibility*
X2 = *Enjoyment*
X3 = *Perceived Usefulness*
X4 = *Perceived Sacrifice*
X5 = *Perceived Risk*

RESULTS and DISCUSSION

The finding indicates that the value of the Accessibility Dimension variable (X1) is 0.141, the value of the Enjoyment Dimension (X2) is 0.451, the value of the Perceived

Usefulness Dimension (X3) is 0.229, the value of the Perceived Sacrifice Dimension (X4) is 0.190, and the value of the Perceived Risk Dimension (X5) is 0.111. Based on these values, the regression equation is as follows:

$$Y = 0.141 X1 + 0.451 X2 + 0.229 X3 + 0.190 X4 + 0.111 X5$$

Table 1. Hypothesis Testing

Hypothesis	Beta Coefficient	t-value	t-table	p-value	Verification	Confirmation
Accessibility → Intention to Use	0.141	2.917	1.661	0.004	<0.05	Accepted
Enjoyment → Intention to Use	0.451	5.732	1.661	0.000	<0.05	Accepted
Perceived Usefulness → Intention to Use	0.229	3.000	1.661	0.002	<0.05	Accepted
Perceived Sacrifice → Intention to Use	0.190	3.117	1.661	0.003	<0.05	Accepted
Perceived Risk → Intention to Use	0.111	2.354	1.661	0.021	<0.05	Accepted

Hypothesis 1 has a t-value of 2.917, which is greater than the critical t-table value of 1.661, with a significance level of 0.004, which is less than 0.05. This indicates that the alternative hypothesis (Ha) is accepted. It suggests that there is a partial influence of the accessibility dimension (X1) on the intention to use mobile banking services (Y). The interpretation of the regression test results for the Accessibility Dimension variable (X1) is 0.141. The coefficient of the Accessibility Dimension has a positive effect on the intention to use mobile banking. This means that for every one-unit increase in the Accessibility Dimension, the intention to use mobile banking services increases by 0.141, independently of other factors.

Hypothesis 2 has a t-value of 5.732, which exceeds the critical t-table value of 1.661, with a significance level of 0.000, less than 0.05. This means that the alternative hypothesis (Ha) is accepted, indicating a partial influence of the enjoyment dimension (X2) on the intention to use mobile banking services (Y). The interpretation of the regression results for the enjoyment dimension variable (X2) is 0.451. The enjoyment dimension coefficient positively affects the intention to use mobile banking. For every one-unit increase in the enjoyment dimension, the intention to use mobile banking services increases by 0.451, independently of other factors. This suggests that as customers enjoy the service features more, it strengthens their intention to use mobile banking.

Hypothesis 3 has a t-value of 3.000, exceeding the critical t-table value of 1.661, with a significance level of 0.002, less than 0.05. This means that the alternative hypothesis (Ha) is accepted, indicating a partial influence of the Perceived Usefulness Dimension (X3) on the intention to use mobile banking services (Y). The interpretation of the regression results for the Perceived Usefulness Dimension variable (X3) is 0.229. The coefficient of the Perceived Usefulness Dimension positively affects the intention to use mobile banking. For every one-unit increase in the Perceived Usefulness Dimension, the intention to use mobile banking services increases by 0.229, independently of other factors.

Hypothesis 4 has a t-value of 3.117, surpassing the critical t-table value of 1.661, with a significance level of 0.003, below 0.05. Thus, the alternative hypothesis (Ha) is accepted, indicating a partial influence of the perceived sacrifice dimension (x4) on the intention to use mobile banking services (Y). The interpretation of the regression results for the Perceived Sacrifice Dimension variable (X4) is 0.190. The coefficient of the Perceived Sacrifice Dimension positively affects the intention to use mobile banking. For every one-unit increase in the Perceived Sacrifice Dimension, the intention to use mobile banking services increases by 0.190, independently of other factors.

Hypothesis 5 has a t-value of 2.354, exceeding the critical t-table value of 1.661, with a significance level of 0.021, below 0.05. Thus, the alternative hypothesis (Ha) is accepted, indicating a partial influence of the Perceived Risk Dimension (X5) on the intention to use mobile banking services (Y). The interpretation of the regression results for the Perceived Risk Dimension variable (X5) is 0.111. The coefficient of the perceived risk dimension positively affects the intention to use mobile banking. for every one-unit increase in the Perceived Risk Dimension, the intention to use mobile banking services increases by 0.111, independently of other factors.

The variable with the most significant influence is the enjoyment dimension (x2) on the intention to use mobile banking services in Bandar Lampung City, with an accepted coefficient of 0.451. This is evident from the t-value of the independent variable, the enjoyment dimension, which is 5.732, with a significance level of 0.000, below 0.05. these results indicate that the enjoyment dimension variable has a positive and significant impact on the intention to Use. It suggests that the features of mobile banking provide comfort to customers, thereby influencing their intention to use mobile banking services. This finding aligns with a study conducted by Chen et al. (2018), which also found that enjoyment had a significant indirect effect on purchase intentions from social commerce websites that offered a reasonable level of pleasure, ultimately increasing customer purchase intentions.

The second variable with the most significant influence is the perceived usefulness dimension (X3) on the intention to use mobile banking, with an accepted coefficient of 0.229. This is evident from the t-value of the independent variable, the perceived usefulness dimension, which is 3.117, with a significance level of 0.002, below 0.05. These results indicate that the perceived usefulness dimension variable has a positive and significant impact on the intention to use, suggesting that the features of mobile banking create a strong perception of usefulness among customers, thereby influencing their intention to use mobile banking services in Bandar Lampung City. However, the results of the perceived sacrifice dimension test are contradictory and do not support the findings of Munoz-Leiva et al. (2016), which argue that there is no empirical evidence to support the concept of perceived usefulness, thus failing to establish its importance in influencing the intention to use mobile banking. Studies related to the perceived usefulness effect in new technology fields present varying results. While some studies support the significant and positive influence of this construct on the intention to use (Malik & Annuar, 2021), others do not find significant results for this relationship (Moslehpour et al., 2018).

The third variable with the most significant influence is the perceived sacrifice dimension (X4) on the Intention to Use Mobile Banking Services in Bandar Lampung City, with an accepted coefficient of 0.190. This is evident from the t-value of the independent variable, the perceived sacrifice dimension, which is 3.000, with a significance level of 0.003, below 0.05. These results indicate that the Perceived Sacrifice Dimension variable has a positive and significant impact on the intention to use. It suggests that customer expenditures such as administrative fees and transaction fees on mobile banking services have been able to create a positive perception of sacrifice, which correlates positively, thus shaping the intention to use mobile banking services in Bandar Lampung City.

However, the results of the Perceived Sacrifice dimension test are contradictory and do not support the research by Kim et al. (2007). When the perceived sacrifices required to obtain a product or service exceed the customer's tolerance, the perceived value of the

product or service is reduced, affecting the customer's willingness to make a purchase. The fourth variable with the most significant influence is the accessibility dimension (X1) on the Intention to use mobile Banking Services in Bandar Lampung City, with an accepted coefficient of 0.141. This is evident from the t-value of the independent variable, the Accessibility Dimension, which is 2.917, with a significance level of 0.004, below 0.05. These results indicate that the Accessibility Dimension variable has a positive and significant impact on the Intention to Use. It suggests that smooth access to mobile banking features has been able to create good Accessibility for customers, thus shaping the intention to use mobile banking services in Bandar Lampung City. This finding aligns with the research conducted by Chen et al. (2018), which found a positive and significant correlation between Accessibility and purchase intentions on social commerce websites.

The variable with the least influence is the Perceived Risk Dimension (X1) on the Intention to Use Mobile Banking Services in Bandar Lampung City, with an accepted coefficient of 0.111. This is evident from the t-value of the independent variable, the Perceived Risk Dimension, which is 2.354, with a significance level of 0.021, below 0.05. These results indicate that the Perceived Risk Dimension variable has a positive and significant impact on the Intention to Use. It suggests that the level of security and customer concerns related to transaction errors and the leakage of personal and financial data create a positive perception of risk, which correlates positively with customers, thus shaping the intention to use mobile banking services in Bandar Lampung City. However, these findings contradict the research by Chen et al. (2018), which found that perceived risk does not significantly influence purchase intention, and excessive risk directly reduces purchase intention.

CONCLUSION

Based on the demographic characteristics of the respondents, it can be concluded that customers who intend to use mobile banking services are female, aged 18-30 years, and have a student status, with a monthly expenditure of <Rp. 2,000,000. Overall, the Value-Based Adaptation Model consisting of the accessibility dimension (X1), comfort dimension (X2), perceived usefulness dimension (X3), perceived sacrifice dimension (X4), and perceived risk dimension (X5) has an influence on the intention to use (Y). This is evidenced by the significance values below 0.05. Based on these calculations, it can be concluded that the overall value-based adaptation model has a simultaneous and partial effect on the intention to use mobile banking services in Bandar Lampung City.

Based on the beta values, it can be seen that the component of the Value-Based Adaptation Model, consisting of the accessibility dimension (X1), enjoyment dimension (X2), perceived usefulness dimension (X3), perceived sacrifice dimension (X4), and perceived risk dimension (X5), that has the highest influence on the Intention to Use (Y) is the Comfort Dimension because it has the largest beta value of 0.451. The coefficient of determination (R^2) is 0.820, which means that the Value-Based Adaptation Model (X) plays a role in influencing the Intention to Use (Y) by 82%, while the remaining 18% is influenced by other factors outside the Value-Based Adaptation Model that were not studied.

Suggestion

Mobile Banking services should continue to improve the innovation of service features in the Accessibility dimension, such as simplifying the flow of mobile banking transactions to avoid confusion. The highest neutral response is found in the question "the flow of mobile banking transactions is not confusing." Banks should make improvements and enhancements to the transaction flow to ensure that no customers feel confused when accessing mobile banking features. This can be a factor in customers' intentions to use mobile banking services in Bandar Lampung City.

Mobile Banking services should optimize the values in the Risk dimension, stating that banks should take responsibility for risks in case of errors during transactions. The highest neutral response is found in the question "when transacting in mobile banking, I feel the

bank should bear the risk in case of errors during transactions." Banks should enhance the service and security of mobile banking to minimize errors during transactions, ensuring that customers do not worry when conducting transactions. This can increase customer interest and intentions to use mobile banking services.

Mobile Banking services should provide more information and adjust costs in the Sacrifice Perception dimension, such as understanding the risks of every transaction in the mobile banking application, reasonable monthly administrative fees, affordable transaction costs, and access that does not require a large amount of internet data. Neutral responses are consistently high in all questions related to the sacrifice dimension. This indicates that customers still perceive the information they receive, and the costs involved as burdensome. Banks can adjust transaction costs in mobile banking services and expand information about potential consequences during transactions. This can improve customers' perception of sacrifice and further shape their intentions to use mobile banking services in Bandar Lampung City.

It is highly recommended for future researchers to expand the scope of independent variables that influence usage intentions. In this study, only the value-based adaptation model measured through the Accessibility Dimension (X1), Comfort Dimension (X2), Perceived Usefulness Dimension (X3), Perceived Sacrifice Dimension (X4), and Perceived Risk Dimension (X5) were used. There are still other factors that need to be investigated to gain a clearer understanding of what influences customer usage intentions.

REFERENCES

[1]   Chen, C.-C., Hsiao, K.-L. and Wu, S.-J. (2018), "Purchase intention in social commerce: An empirical examination of perceived value and social awareness", Library Hi Tech,36 (4),583-604.
[2]   Dodds, W.B., Monroe, K.B. and Grewal, D. (1991), "Effects of price, brand, and store information on "buyers' product evaluations", Journal of Marketing Research,28 (3), 307-319.
[3]   Hoffman, D.L. and Novak, T.P. (1996), "Marketing in hypermedia computer- mediated environments: "conceptual foundations", Journal of Marketing, 60 (3), 50-68.
[4]   Kim, H.W., Chan, H.C. and Gupta, S. (2007), "Value-based adoption of mobile internet: an empirical "investigation", Decision Support Systems, 43 (1), 111-126.
[5]   Kim, E.E.K., Mattila, A.S. and Baloglu, S. (2011), "Effects of gender and expertise on consumers'"motivation to read online hotel reviews", Cornell Hospitality Quarterly, 52. (4), 399-406.
[6]   Martins, C., Oliveira, T. and Popovic, A. (2014), "Understanding the internet banking adoption: a "unified theory of acceptance and use of technology and perceived risk application", International Journal of Information Management, 34 (1), pp 1-13.
[7]   Monroe, K.B. and Krishnan, R. (1985), "The effect of price on subjective product evaluations", in Jacoby, J."and Olson, J.C. (Eds), Perceived Quality: How Consumers View Stores and Merchandise, Lexington Books, Lexington, MA, . 209-232.
[8]   Munoz-Leiva, S. Climent-Climent, F. Liébana-Cabanillas (2016), "Determinants of intention to use the mobile banking apps: An extension of the classic TAM model" Spanish Journal of Marketing - ESIC (2016), 1(14), 1-14
[9]   Nepomuceno, M.V., Laroche, M. and Richard, M.O. (2014), "How to reduce perceived risk when buying online: the interactions between intangibility, product knowledge, brand familiarity, privacy and security concerns", Journal of Retailing and Consumer Services, 21(4), 619-629.
[10]   Ratna, R. (2012), "Mobile internet acceptance among university students: a value- based adoption model", International Journal of Research in Management & Technology, 2 (1), 2249-9563.
[11]   Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of thetechnology acceptance model: Four longitudinal field studies.Management Science, 46(2), 186-204.
[12]   Venkatesh, M.G. Morris, G.B. Davis, F.D. Davis, (2003) User acceptance of information technology: toward a unified view, MIS Quarterly 27
[13]   Wang, Y.S., Yeh, C.H. and Liao, Y.W. (2013), "What drives purchase intention in the context of online "content services? The moderating role of ethical self- efficacy for online piracy", International Journal of Information Management. 33. (1), 199-208.
[14]   Malhotra, Naresh. 2014. Basic Marketing Research. Pearson Education. England.
[15]   Guild, J. (2020). The political and institutional constraints on green finance in Indonesia. Journal of Sustainable Finance & Investment, 10(2), 157-170.
[16]   Breidbach, C. F., Keating, B. W., & Lim, C. (2020). Fintech: research directions to explore the digital transformation of financial service systems. Journal of Service Theory and Practice, 30(1), 79-102.

[17] Halvorsrud, R., Kvale, K., & Følstad, A. (2016). Improving service quality through customer journey analysis. Journal of service theory and practice, 26(6), 840-867.

[18] Nicoletti, B., & Nicoletti, B. (2017). Financial services and Fintech. The Future of FinTech: Integrating Finance and Technology in Financial Services, 3-29.

[19] Widanengsih, E. (2021). Technology acceptance model to measure customer's interest to use mobile banking. Journal of Industrial Engineering & Management Research, 2(1), 73-82.

[20] Bashir, I., & Madhavaiah, C. (2015). Consumer attitude and behavioural intention towards Internet banking adoption in India. Journal of Indian Business Research, 7(1), 67-102.

[21] Hamid, A. A., Razak, F. Z. A., Bakar, A. A., & Abdullah, W. S. W. (2016). The effects of perceived usefulness and perceived ease of use on continuance intention to use e-government. Procedia economics and finance, 35, 644-649.

[22] Hanadian Nurhayati. (2020, March 2). Indonesia: Gender Distribution of National Online Shopping Day users 2019. Statista. https://www.statista.com/statistics/1101207/indonesia-shopping-on-the-national-online-shopping-day-by-gender/

[23] Omoregie, O. K., Addae, J. A., Coffie, S., Ampong, G. O. A., & Ofori, K. S. (2019). Factors influencing consumer loyalty: evidence from the Ghanaian retail banking industry. International Journal of Bank Marketing, 37(3), 798-820.

[24] Malik, A. N. A., & Annuar, S. N. S. (2021). The effect of perceived usefulness, perceived ease of use, reward, and perceived risk toward e-wallet usage intention. In Eurasian Business and Economics Perspectives: Proceedings of the 30th Eurasia Business and Economics Society Conference (pp. 115-130). Springer International Publishing.

[25] Moslehpour, M., Pham, V. K., Wong, W. K., & Bilgiçli, İ. (2018). E-purchase intention of Taiwanese consumers: Sustainable mediation of perceived usefulness and perceived ease of use. Sustainability, 10(1), 234.

Value Adoption Model
(VAM)

402