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Application of the Unified Theory of Acceptance and Use of Technology Approach to Analyze User Acceptance of Digital Banking Services

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Abstract

The Purpose Of This Study Is To Ascertain The Degree Of User Acceptance Of Digital Banks And To Test Theories On The Variables That Affect Users' Approval Of These Financial Institutions. This Research Employs A Quantitative Methodology. Questionnaires, observations, and a literature review are used to gather data for this study. The Jabodetabek Area's digital bank customers make up the research population. Purposive Sampling Was The Method Utilized For This Study, And There Were 100 Respondents In All. Statistical Analysis And Demographic Analysis Make Up Data Analysis. The Researcher Conducted Demographic Analysis Using Microsoft Excel And Performed Statistical Analysis By Analyzing The Outer And Inner Models With The PLS-SEM Approach Using Smartpls. The Research Results Showed That The Behavioral Intention Variable Showed An Influence Of 80%, While The Use Behavior Variable Had An Influence Of 70%. Furthermore, The Factors Or Variables That Influence The Behavioral Intention Of Digital Bank Users Include Social Influence, Price Value, Perceived Credibility, Self-Efficacy, Facilitating Conditions, And Habit. Meanwhile, Factors Or Variables That Influence The Use Behavior Of Digital Bank Users Involve Facilitating Conditions, Habit, And Behavioral Intention. With Most Hypotheses Accepted, This Research Makes A Positive Contribution To Understanding The Factors That Influence User Acceptance Of Digital Banks.

Keywords: User Acceptance, Digital Bank, UTAUT.

1. Introduction

Information technology, as part of information systems has undergone significant changes and has become part of people's daily lives. Internet use continues to increase day by day. The COVID-19 pandemic has caused internet users to increase drastically, with many people using e-learning, e-commerce, e-banking, video streaming, etc. The high level of public interest in using the Internet has made companies in various sectors compete to provide services based on digital technology [1]. Digital technologies increasingly influence innovation, customer relationships, business relationships, and IT, especially in industries such as the financial services industry and the banking sector, where a shift to online services occurs. Financial services companies must react to changing customer behavior and needs. The COVID-19 pandemic has also caused many sectors to decline, one of which is the economic and banking sectors [2]. The banking sector, which is one of many sectors, must continue to innovate to improve its services in carrying out banking activities, namely by providing digital banks. A digital bank is one that only has its main office and all other physical locations are done online for its operational activities. Mobile and online banking are not the same as digital banking [3].

While internet and mobile banking are add-on services for traditional banking operations, digital banks are distinct financial products or entities. A digital bank is one that does not offer any offline services and instead conducts business through electronic or digital means. The existence of digital banks is certainly inseparable from the needs of people who want to be fast and flexible in adopting banking services. Other factors, such as the entry of financial technology into the financial sector, have also caused the emergence of digital banks. The services available at digital banks are actually the same as those at conventional banks in general, but what makes them different is the service [4]. Customers need to come to a physical office for several services provided by conventional banks, whereas digital banks offer services that are entirely conducted online. As a result, customers only need to use the application, and the company can support all customer service activities

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according to their needs. Customers will find it easier to transact anytime, anyplace, and banks will be able to offer more creative banking products and services because all data is digitally stored in the system [5].

The digital banking trend is considered to have experienced quite rapid development in the last few years because it is considered practical, fast, and very in line with the dynamic developments of the times. Digital banking institutions are competing to develop existing online technology to provide better service and convenience to customers. Ease of transactions is one of the reasons people migrate to digital banks, so the potential for digital bank development is considered to be very promising [6]. Despite the fact that there aren't enough digital bank operators operating in Indonesia, the country's growing number of digital bank users indicates this potential. In Indonesia, digital banks have been around since 2015. Digital banks have been a frequent topic of discussion in the financial services industry and started to emerge in large numbers in Indonesia, making them relatively new. People, especially the millennial generation, see that internet banking, mobile banking, ATMs, etc. are very common things, so they think about how to carry out banking services such as opening an account, saving, applying for a loan, etc [7]. without having to visit directly to the relevant bank. The presence of digital banks is a promising opportunity for banks to increase flexibility so as to attract potential customers to become customers at the bank [8].

Other digital ecosystems, such as e-commerce, will continue to encourage digital banks. By taking advantage of this potential, digital banks will function better going forward and more will start to appear. Additionally, the value of digital bank transactions has continued to rise, according to Bank Indonesia. The value was only 16 trillion in 2016. By 2023, it had increased to 50 trillion. The competition amongst digital banking businesses has become more intense due to the growth of digital bank transactions [9]. Users' acceptance of a technology is always determined by how much they can comprehend and accept it. Testing a technology's acceptability among users is a crucial step in determining whether or not its application is effective. Before turning a profit, the owner's first difficulty is to successfully apply a technology. Business continuity and financial losses will result from not implementing technology. Banks that wish to see a rise in the number of customers utilizing smartphone banking must come up with creative ways to keep customers coming back. Banks must understand what factors influence users' intentions to continue using them [10].

The degree of user acceptability of a system is gauged using technology acceptance models, such as the Unified Theory of acceptability and Use of Technology 2 (UTAUT 2) model. Venkatesh et al. used a number of research theories that emerged from the creation of the previous model, UTAUT, to create a thoroughly developed UTAUT 2. UTAUT 2 focuses on how technology is used by adapting it to the consumer context because it takes into account three variables price value, habit, and hedonic motivation [11]. This research measured user acceptance, and the previous UTAUT model only examined how technology is used in an organizational context. With the strongest predictive power among the other theories, UTAUT 2 is the most updated and complete theory on technology adoption. The Jenius application was analyzed using the UTAUT 2 model (updated by adding the trust variable), which has been used in numerous prior studies to measure user approval [12][13][14][15]. As a result, adoption is influenced by facilitating factors, behavior intention, and performance expectation, which in turn are influenced by trust and performance expectation [16][17][18]. A different study on digital banking made use of UTAUT 2. All of the hypotheses were shown to be true, with the exception of price value, performance expectancy, enabling conditions, and effort expectancy [19][20][21][22].

2. Research Methods

The quantitative method used in this study collects data using research instruments, analyzes the data statistically, and looks at a particular population or sample in order to test preexisting hypotheses. In order to gather data for this study, a literature review, direct observation, and the distribution of Google Forms surveys via social media are all included in the data gathering process. The Jabodetabek area's digital bank customers make up the research's population. Purposive sampling was the method utilized for this study, and there were 100 respondents in all. Creating suggested models and research hypotheses, setting up and testing research tools, and identifying the research population and sample are all examples of data processing. Statistical analysis and demographic analysis make up data analysis. In order to classify respondent data according to gender, age, residence, occupation, duration of use, and frequency of use, demographic analysis was done using Microsoft Excel. Statistical analysis was done by utilizing SmartPLS to analyze the outer and inner models using the PLS-SEM approach. There will be an interpretation of the analysis's findings and recommendations.

3. Results and Discussion

The findings of the route coefficient test reveal that the H1 value is -0.06, which suggests that there is little correlation between behavioral intention and performance expectation. With a value of 1.2, the t-test likewise rejects H1, suggesting that behavioral intention is not significantly impacted by performance expectancy. In the context of this study, users' trust in digital banks' ability to enhance their performance which encompasses features of productivity and usefulness as well as the efficacy and efficiency of utilizing digital banks in daily

life is the performance expectancy variable. These results, however, suggest that users' intentions to keep using the app are not much impacted by their level of trust in digital banks. Additional investigation reveals that respondents are divided about ways to improve the efficacy and efficiency of transactions at digital banks. This could be because of the banks' continued inability to live up to user expectations. The hypothesis was rejected due to the discrepancy between user expectations and the actual performance of digital banks. These findings differ intriguingly from those of past studies that demonstrated a robust relationship between behavioral intention and performance expectation. These differences in results show that we need to learn more about what makes people accept digital banks.

The route coefficient test findings reveal that the H2 value is -0.1, suggesting a negligible impact on the relationship between behavioral intention and effort expectancy. With a value of 1.6, the t-test likewise rejects H2, suggesting that behavioral intention is not considerably impacted by effort expectancy. In the context of this study, user confidence in the simplicity of using digital banks which encompasses features of complexity, ease of use, and learning how to use digital banks is the effort expectancy variable. These results, however, suggest that users' intentions to keep using the application are not much impacted by their confidence in the use of digital banks. Subsequent investigation showed that respondents tended to differ on how simple digital banks were to use, maybe as a result of thinking that their personal digital banks were not user-friendly enough. The rejection of the hypothesis explains the mismatch between user expectations and the reality of the ease of use of digital banks. It's interesting that these results go against earlier research that showed a strong link between effort expectancy and behavioral intention. This shows that we need to learn more about digital banks and the factors that affect user acceptance.

The results of the path coefficient test reveal that the H3 value is 0.2, suggesting a strong influence in the relationship between behavioral intention and social influence. With a value of 2.7, the t-test also accepts H3, indicating a considerable impact of social influence on behavioral intention. The social influence variable in the context of this research encompasses the user's belief that other people influence their use of digital banks, including recommendations from people around them, their own willingness due to observing others using digital banks, and the perception of enhancing their social status by using a digital bank. These findings confirm that social influence has a significant role in shaping users' intentions to continue using digital banks. Aspects such as recommendations from people around, self-motivation based on common use in the social environment, and the perception of increasing social status through the use of digital banks also influence user decisions. These results are in line with the social influence dimension, which includes these factors. Therefore, the influence of social factors needs to be considered in marketing and development strategies for digital banks in order to increase acceptance and sustainability of use.

The findings of the path coefficient test reveal that the H4 value is 0.05, meaning that there is little evidence of a link between behavioral intention and hedonic motivation. With a value of 0.7, the t-test likewise rejects H4, suggesting that hedonic incentive has no discernible impact on behavioral intention. The user's perception that utilizing a digital bank offers a pleasurable experience, encompassing elements of comfort, pleasure, and enjoyment of the services offered by the digital bank, is included in the hedonic motivation variable in the context of this research. These results, however, suggest that users' intentions to keep using the program are not much impacted by their perceptions of the positive elements of utilizing digital banks. Further analysis revealed that respondents tended to disagree regarding the pleasure aspect of using digital banks, perhaps due to the lack of point promotions or rewards given for each transaction, so that users did not feel the expected pleasure in transactions. The rejection of the hypothesis can be attributed to the mismatch between user expectations regarding enjoyment and the reality of user experience in transactions via digital banks. There needs to be a marketing strategy that places more emphasis on the fun factor to increase user attraction and acceptance of digital banks.

The findings of the route coefficient test reveal that the H5 value is 0.2, demonstrating the substantial influence of the relationship between price value and behavioral intention. With a value of 2.2, the t-test likewise shows that H5 is acceptable, indicating a considerable impact of price value on behavioral intention. In the context of this study, the price value variable refers to users' perceptions that the quality of services at digital banks is commensurate with the costs incurred by users. This includes perceptions of the suitability of facilities and services in relation to the costs charged by digital banks, the affordability of those costs, and the standard of service quality offered by digital banks. These results demonstrate that consumers' decision to stick with digital banks is significantly influenced by their level of trust in price value. Aspects such as suitability between costs and services, affordability of costs, and level of service quality are determining factors that influence users' decisions in using the application. These results support the price-value dimension involving these considerations. Therefore, the digital bank development strategy can place more emphasis on increasing the price value provided to users in order to strengthen the attractiveness and acceptance of digital bank services by users.

According to the results of the path coefficient test, there is a strong influence between behavioral intention and perceived credibility, with a H6 value of 0.4. Additionally, the results of the t-test demonstrate that H6 is

accepted with a value of 4.1, demonstrating the considerable relationship between behavioral intention and perceived trustworthiness. In the context of this study, the perceived credibility variable refers to the user's perception of the security and privacy of the data contained in the digital bank. This includes the user's assessment of the risk of potential fraud, the security of their personal information, and the security of using the digital bank's services to conduct transactions. These results demonstrate that consumers' intentions to keep using digital banks are highly influenced by their level of confidence in the legitimacy of these institutions. Aspects such as data security, fraud risk, and transaction security are crucial factors in shaping user perceptions of application credibility. These results support the perceived credibility dimension, which includes these considerations. Therefore, increasing the security and credibility of digital banks can be the focus of development strategies to strengthen user confidence and encourage continued use of digital bank services.

The results of the path coefficient test reveal that the H7 value is 0.2, suggesting a strong influence from the relationship between behavioral intention and self-efficacy. With a value of 2.2, the t-test also shows that H7 is accepted, indicating a substantial relationship between behavioral intention and self-efficacy. In the context of this study, the self-efficacy variable refers to users' confidence and self-confidence that they can use digital banks. This includes aspects of users' confidence to use digital banks on their own, with the assistance of others, with online instructions serving as a reference, and with confidence to use a digital bank even if they have never used an application similar to it. These results demonstrate that users' intentions to stick with digital banks are significantly influenced by their degree of trust and self-assurance in using these services. Aspects such as user independence in using the application without external assistance, the ability to refer to online instructions, and the courage to try new applications are important factors in shaping users' desire to use digital banks on an ongoing basis. These results support the self-efficacy dimension, which includes these considerations. Therefore, digital bank development strategies can place greater emphasis on increasing the level of user confidence and self-confidence to increase acceptance and sustainability of the use of digital bank services.

The findings of the route coefficient test reveal that the H8 value is 0.2, demonstrating the substantial influence of the relationship between behavioral intention and enabling conditions. By accepting H8 with a value of 3.5, the t-test further shows a significant impact of enabling conditions on behavioral intention. Regarding the elements of the resources required to use digital banks, customer support, and compatibility owned by digital banking, users' perceptions that the resources they have can support the use of digital banks are included in the facilitating conditions variable in the context of this research. These results demonstrate that users' intention to stick with digital banks is significantly influenced by their level of confidence in the resources' accessibility and readiness. The availability of technological resources, efficient customer support, and application compatibility with user requirements are all important elements that influence consumers' desire to use digital banks regularly. These findings provide credence to the notion of enabling conditions, which takes these factors into account. Therefore, in order to improve user acceptance and sustainability of digital bank services, development strategies for digital banks can emphasize more readily available resources and user-friendliness.

The results of the path coefficient test reveal that the H9 value is 0.4, demonstrating the considerable influence of the link between behavioral intention and habit. The results of the t-test further demonstrate that habit has a considerable impact on behavioral intention, with a value of 6.5 supporting the acceptance of H9. Because this behavior has been researched, including parts of the influence of habit, addiction, and automatic behavior that result from using digital banks, the habit variable in the context of this research includes the user's predisposition to use digital banks automatically. These results imply that user behaviors are important in determining whether or not users intend to stick with digital banks. The urge of users to use the program consistently is shaped by factors such as automatic behaviors, level of addiction, and habits acquired by using digital banking. The habit dimension, which takes these factors into account, is supported by these findings. Consequently, in order to improve user comfort levels and increase adoption of digital bank services, development strategies for digital banks can emphasize the formation of positive habits even more.

The results of the route coefficient test reveal that the H10 value is 0.3, demonstrating the considerable influence of the interaction between enabling conditions and usage behavior. With a result of 3.7, the t-test further validates the adoption of H10 and shows the substantial impact of favorable conditions on usage behavior. In the context of this study, the facilitating conditions variable consists of users' perceptions about the capacity of their existing resources to support the use of digital banks. These resources include the smartphones and internet networks required for using digital banks, customer support, and bank compatibility. These results validate that consumers' usage behavior is significantly influenced by their confidence in the resources' availability and preparedness to utilize digital banks. User behavior when using digital banks is greatly influenced by aspects including application compatibility, customer support effectiveness, and the accessibility of technological resources. These findings provide credence to the notion of enabling conditions, which takes these factors into account. Consequently, to improve the adoption and sustainability of digital banking services, the development strategy for digital banks can emphasize on the availability of resources and their ease of use.

According to the path coefficient test results, there is a considerable influence between habit and use behavior, as evidenced by the H11 value of 0.3. With a value of 3.6, the t-test also shows that H11 is accepted, indicating a considerable impact of habit on use behavior. Because this behavior has been researched, including elements of the influence of habits, addictions, and automatic behavior that result from using digital banks, the habit variable in the context of this research includes the user's predisposition to use digital banks automatically. These results demonstrate how important a role user habits play in determining how people use digital banks. Their usage behavior is greatly influenced by factors including habit formation, degree of addiction, and automatic actions that result from utilizing digital banks. The habit dimension, which takes these factors into account, is supported by these findings. Therefore, in order to enhance the acceptance and durability of the use of digital bank services, development strategies for digital banks might emphasize more on creating positive habits and making users more comfortable using applications.

According to the path coefficient test results, there is a considerable influence between behavioral intention and use behavior, as evidenced by the H12 value of 0.5. With a score of 6.8, the t-test further shows that H12 is acceptable and that behavioral intention has a considerable impact on use behavior. Within the context of this study, the behavioral intention variable pertains to the intention of the user to use digital banks consistently. This includes the intention to use digital banks going forward, the intention to consistently strive to use digital banks in daily life, and the intention to frequently conduct transactions via digital banks. These findings confirm that users' intentions to continue using digital banks have a significant impact on their usage behavior. Aspects such as a strong intention to use digital banks on an ongoing basis, the desire to keep trying, and the frequency of transactions through digital banks are determining factors in shaping behavior in using digital bank services. These results support the behavioral intention dimension, which includes these considerations. Therefore, digital bank development strategies can place more emphasis on strengthening users' intentions to use applications on an ongoing basis in order to ensure the sustainability and success of using digital bank services.

4. Conclusion

The R2 number suggests that it is feasible to gauge how well users adopt digital banks. The behavioral intention variable has an 80% influence in this instance. The modified UTAUT 2 model in this research predicts user acceptance of digital banks with a medium ability. Furthermore, factors or variables that influence the behavioral intention of digital bank users include social influence, price value, perceived credibility, self-efficacy, facilitating conditions, and habit. Meanwhile, factors or variables that influence the use behavior of digital bank users involve facilitating conditions, habit, and behavioral intention. The social influence variable relates to the belief that other people influence the use of a digital bank, while the self-efficacy variable relates to the user's self-confidence in their ability to use the application. Additionally, studies indicate that two variables perceived credibility and self-efficacy should be added to the UTAUT 2 model since they have both been shown to significantly influence behavioral intention. This research contributes positively to our understanding of the elements influencing users' acceptance of digital banks, with the majority of the hypotheses being accepted.

Based on the findings of this investigation, the researcher makes a number of recommendations for additional research. Initially, the researcher ought to broaden the study area to encompass digital bank customers beyond the Jabodetabek region. As a result, we advise broadening the study region to collect additional data that will maximize the results. Second, this study disproves the notions that there is a link between behavioral intention and effort expectancy, behavioral intention and performance expectancy, and behavioral intention and hedonic motivation. In order to comprehend the dynamics of their relationship better, future researchers should go over the indicators of these factors. Future studies could also think at adding or combining other variables, like satisfaction, perceived risk, and those already looked at, to give a more thorough understanding of the elements affecting users' adoption of digital banks. This can give the investigation and comprehension of the variables influencing users' acceptance of digital banks a new perspective. By integrating additional variables, research can make a more comprehensive contribution to understanding user behavior toward the application.

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