

The role of effort expectancy and facilitating conditions in enhancing digital banking adoption: A pathway towards sustainable financial services

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ABSTRACT

Background: The adoption of digital banking has become increasingly important as financial institutions strive to enhance customer experience and service accessibility. However, the factors influencing users' intention to adopt digital banking remain complex. This study aims to explore the factors influencing the behavioral intention to adopt digital banking, focusing on these three key constructs. Methods: The study employs a quantitative research design using a survey to collect data from users of digital banking services. A structured questionnaire was developed to measure the three factors: performance expectancy, effort expectancy, and facilitating conditions. The data were analyzed using multiple regression analysis to assess the impact of each factor on users' intention to adopt digital banking. Findings: The results reveal that effort expectancy has the most significant positive influence on users' intention to adopt digital banking. This suggests that the perceived ease of use plays a critical role in adoption decisions. Facilitating conditions, such as infrastructure and technical support, were also found to be important in encouraging users to engage with digital banking services. However, performance expectancy was found to have a statistically insignificant relationship with behavioral intention, which contrasts with prior studies that emphasize its importance. Conclusion: This study highlights the importance for banks to prioritize user-friendly platform design, minimize effort and complexity, while ensuring the availability of technical infrastructure and supporting systems. This study suggests that focusing on ease of use and providing enabling conditions are critical to increasing digital banking adoption rates and sustaining long-term user engagement. Novelty/Originality in this article: This article contributes to the existing literature by providing new insights into the role of effort expectancy in digital banking adoption, contrasting with prior research that emphasizes performance expectancy. It also highlights the significant role of facilitating conditions, offering practical recommendations for banks to enhance digital banking adoption by focusing on user accessibility and support systems.

KEYWORDS: digital banking; effort expectancy; facilitating conditions; performance expectancy; user adoption intentions.

1. Introduction

The rapid evolution of the technology ecosystem has made it necessary for all economic sectors to undergo digitalization, as emphasized by Deng et al. (2019). Digital transformation is a process that involves the integration of data, communication,

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information technology, and connectivity to enhance functions through significant structural changes, as defined by Vial (2019). Technology has the power to significantly impact both individuals and organizations, with the banking sector serving as a clear example of this phenomenon (Sardana & Singhania, 2018). As digitization, radical innovation, and advanced technologies continue to reshape industries, traditional business models and practices are undergoing substantial shifts. In particular, banks are urged to adapt their strategies to better interact with customers, improve both front and back-office operations, and ensure long-term sustainability in a digital world (Cziesla, 2014). With the increasing adoption of digital solutions, the banking sector must rethink its approach and develop new models that focus on comprehensive banking services (Nichkasova & Shmarlouskaya, 2020; Sanyaolu et al., 2024). As consumer demand for digital innovation grows, banks are pushed to remain agile and responsive to emerging trends (Omarini, 2022; Wewege et al., 2020) . These new business models should be designed to address key aspects of banking, ranging from service delivery to internal operations (Hanafizadeh & Marjaie, 2021; Kitsios et al., 2021; Ramdani et al., 2022).

The impact of digital disruption in the banking sector is undeniable, with technology changing the way financial institutions operate and engage with customers (Sadigh et al., 2022; Murinde et al., 2022). As new technological advancements continue to emerge, traditional banking processes and methods are no longer sufficient to meet modern demands (Kasturi, 2023). This shift has led to the need for banks to embrace innovation and rethink their operational strategies (Gomber et al., 2018). In response, there has been an increasing push for digital transformation to streamline operations, enhance customer engagement, and maintain competitive relevance in a rapidly evolving marketplace (Yip & Bocken, 2018). Banks are now focusing on adopting technology-driven solutions that enable greater efficiency and responsiveness (Mogaji, 2023; Sheth et al., 2022). This transformation includes the implementation of advanced technologies to improve the customer experience, such as digital banking apps and artificial intelligence (Indriasari & Matsuo, 2019). The move toward digitalization is not just about improving existing systems, but also about creating entirely new business models that align with future market demands. To stay competitive and ensure future growth, the banking industry must continue to innovate and adapt to the ever-changing technological landscape.

The traditional banking landscape has undergone significant changes due to the technological advancements sweeping across the financial industry. Several factors have reshaped how digital banking is perceived, including the rise of online banking, the availability of self-service devices, financial integration, and the growing demand for roundthe-clock accessibility (Chauhan, 2018). These innovations have not only changed consumer expectations but have also driven banks to evolve and embrace digital platforms for delivering their services. As customers increasingly seek more convenient and flexible ways to manage their finances, digital banking has become a crucial element in meeting these needs. The ability to perform banking transactions without physical branches or faceto-face interactions has opened new possibilities for consumers, enabling them to access services anytime and anywhere. This shift represents a significant departure from traditional banking, where in-person visits were the norm. Additionally, digital banking offers more than just mobile banking, as it encompasses a broader range of digital channels and services designed to cater to diverse customer preferences. With digital transformation continuing to gain momentum, it is clear that traditional banking models must adapt to this new reality.

A digital bank refers to a financial institution that delivers its services entirely through digital platforms, allowing customers to conduct their financial transactions using internetconnected devices. This model eliminates the need for physical branches, offering users the convenience of managing their accounts remotely. Through digital banking, customers can access a wide range of banking services, such as account management, money transfers, bill payments, and more, from the comfort of their homes or while on the go. Unlike traditional banking, which requires in-person visits to branches, digital banks provide 24/7 access to banking services, empowering users to take control of their finances at their convenience. This shift also removes the dependency on conventional banking infrastructure, such as ATM machine/*Anjungan Tunai Mandiri* (ATMs) or bank counters, which had once been essential to the banking experience. Moreover, digital banking is not limited to mobile banking apps; it encompasses various digital channels that allow for a more comprehensive range of banking services, including online banking websites and integrated financial tools. As the demand for more flexible and efficient financial services grows, digital banking is proving to be a vital solution for modern consumers.

Indonesia has experienced remarkable progress in the development of digital banking over the past few years. One of the pioneering steps was taken by Jenius, a digital bank launched by National Pension Savings Bank/Bank Tabungan Pensiunan Nasional (BTPN) in 2016, followed by the launch of Digibank by Development Bank of Singapore Limited (DBS) Bank in 2017. These innovations marked the beginning of a transformation in Indonesia's banking sector, signaling a shift toward fully digitalized services. In 2020, Bank Rakyat Indonesia's subsidiary transitioned into Bank Raya, further expanding the digital banking landscape in the country. A significant development came in 2021 when Bank Central Asia, Indonesia's largest private bank, introduced BLU by BCA, a digital banking service aimed at reaching a broader customer base. Meanwhile, Bank Mandiri, the largest state-owned bank in Indonesia, has been exploring ways to differentiate its mobile banking platform, Livin' by Mandiri, by considering its spin-off as a separate business entity rather than establishing a new digital bank. This move indicates the growing importance of digital banking platforms and the need for banks to strategically position themselves in a rapidly changing financial environment. As Indonesia continues to embrace digital transformation, the banking sector is set to witness even more innovation and growth in the coming years.

The rapid growth of digital banking in Indonesia can be attributed to several key factors, including the increasing internet penetration, demographic shifts, and supportive government initiatives. Particularly in Jabodetabek, the most populous urban area in Indonesia, internet usage is at its highest, with Jakarta alone accounting for 72% of active internet users. The changing preferences of banking consumers, especially among the younger generation, have also played a major role. Indonesia's population is increasingly dominated by Gen Z, who make up nearly 28% of the total population. This generation, having grown up in a digital era, is highly accustomed to technology and views the internet as an essential part of daily life. As a result, their tech-savviness has driven them to adopt digital banking platforms, which provide convenient, flexible solutions that align with their needs (Donovan et al., 2020). The banking sector in Indonesia is responding to this shift by embracing new technologies that cater to the evolving preferences of younger consumers who expect faster and more seamless services.

Alongside the growth in digital banking, customer expectations regarding interactions with financial institutions are also changing. While traditional face-to-face engagement remains valuable, customers now prioritize factors such as efficiency, convenience, reliability, and helpfulness, all of which contribute to an enhanced user experience. Research by Pricewaterhouse Coopers (2018) suggests that creating a more personalized experience through technology is essential for fostering business growth in the banking sector. As noted by Sloboda et al. (2018), the digitalization of banking provides mutual benefits for both financial institutions and their customers. Banks can offer higher-quality services, save operational costs, and improve processes like risk assessment and security through digital advancements. Digital banking also enables customers to complete transactions more quickly and efficiently, making financial services more accessible and convenient. Additionally, digital banking platforms function similarly to physical wallets by storing temporary tokens, processing payments, and safeguarding personal information, thus enhancing overall banking functionality (Ebringer et al., 2000).

Despite the many benefits and conveniences of digital banking, customers must also consider the associated risks and rewards. One significant drawback is that some users may be hesitant to adopt digital banking due to concerns over security and privacy. The potential dangers related to the protection of personal and financial information may make individuals cautious in their decision to engage with digital banking services (Alkhowaiter, 2020). Consequently, each consumer must carefully assess the risks before making financial decisions in the digital realm. Additionally, as banks evolve their marketing and financial management strategies to appeal to digital banking users, they may struggle to effectively connect with their clients (Mbama & Ezepu, 2017). The primary goal for financial institutions today is to encourage more customers to embrace digital banking and to foster stronger relationships between the business and its clients (Mendoza et al., 2020). To achieve this, banks must not only enhance their services but also address concerns that could hinder adoption.

For banks to succeed in promoting digital banking, they must understand the underlying reasons behind users' decisions to adopt such services. However, research into the adoption and intention to use digital banking remains relatively scarce (Vally & Shankar, 2020). Over the past decade, only 26 journals with the keyword "digital banking adoption" have been published in Proquest. This suggests a gap in empirical studies on the topic. By applying the Unified Theory of Acceptance and Use of Technology (UTAUT) model, it becomes evident that there is limited access to information regarding digital banking adoption in countries like Indonesia (Deniswara, 2022). This lack of comprehensive data underscores the need for further investigation into the factors influencing digital banking adoption, as it remains a crucial aspect of understanding the challenges and opportunities within the digital financial landscape.

The application of this model is anticipated to enhance the implications and predictability of the research, addressing inconsistencies in past literature regarding the relationships between variables. Previous studies on digital banking adoption have highlighted the roles of performance expectancy, effort expectancy, pricing value, and habit in influencing adoption, yet factors such as facilitating conditions and hedonic motivation were not supported in these contexts. However, other research has yielded contrasting results. For instance, Vally & Shankar (2020) did not confirm the role of pricing value, while Anggraeni et al. (2021) found significant effects from hedonic motivation and habit on digital banking adoption. These discrepancies underline the need for further exploration into the factors that drive adoption and use of digital banking, suggesting that additional variables might play a role in shaping consumers' behavioral intentions. As a result, this research will delve deeper into these factors using the UTAUT model framework, introducing new variables such as habit, hedonic motivation, and perceived value, specifically within the Jabodetabek area.

This study aims to explore the variables that influence consumers' behavioral intentions to adopt and use digital banking services. By identifying and analyzing these factors, the research seeks to provide banks with valuable insights into the changes needed to improve customer acceptance and satisfaction with digital banking offerings. Focusing on users in the Jabodetabek region, the study will examine the impact of key factors, such as performance expectancy, effort expectancy, facilitating conditions, habit, hedonic motivation, and perceived value, on the adoption of digital banking. The results of this research will contribute to a deeper understanding of consumer behavior and adoption trends within the digital banking sector. The study will address several objectives: first, to assess whether performance expectancy positively influences behavioral intention; second, to investigate the role of effort expectancy in shaping behavioral intention; and third, to evaluate the effect of facilitating conditions on the intention to adopt digital banking. Through these objectives, the research aims to offer practical recommendations that can help banks enhance user experience and expand digital banking services, ultimately facilitating broader adoption.

2. Methods

2.1 Research model

This study builds on the work of Vally & Shankar (2020), who made modifications to the UTAUT 2 model by removing two constructs: social influence and use behavior. The

decision to exclude social influence allows for a more focused examination of the individual factors affecting user behavior, providing a clearer understanding of how each component contributes to the adoption process. Although social influence is considered a relevant factor in many models, Alalwan et al. (2017) found that individual factors, such as performance expectancy and effort expectancy, had a stronger influence on users' behavior in the context of technology adoption. This modification helps refine the model by emphasizing the direct effects of these personal expectations on behavioral intention.

By excluding social influence, the research can focus on context-specific elements that offer more accurate and detailed insights into the factors influencing digital banking adoption. This adjustment eliminates potential redundancies within the model, improving its overall validity and making the findings more applicable to real-world scenarios. As Hilal & Varella (2022) suggest, removing unnecessary variables enhances the precision of the analysis, leading to more robust conclusions. The revised model thus provides a clearer picture of how performance expectancy and effort expectancy impact users' decisionmaking processes. This approach is expected to yield more targeted recommendations for enhancing the adoption of digital banking services. By refining the focus of the study, the research aims to offer deeper insights into consumer behavior without the confounding effects of extraneous factors.

2.2 Research data

To collect primary data for this study, the researchers utilized a quantitative approach. Respondents were asked to complete self-administered questionnaires distributed through Google Forms, which were shared via Slack. The questionnaire comprised structured, closed-ended questions designed to gather specific information from the participants. These questions were carefully formulated, ensuring clarity and directness, with a focus on adhering to particular standards as recommended by Malhotra & Majchrzak (2014). The questionnaire format aimed to streamline data collection and ensure consistency across all responses. Alongside the primary data, secondary data were incorporated to enrich the study's findings. These secondary sources included literature reviews, academic journals, books, and reputable websites related to the research topic. Malhotra & Majchrzak (2014) defines secondary data as information that is collected from existing resources, providing additional context and supporting evidence for the study.

In this study, a non-probability sampling method was used, specifically judgmental sampling, which was adapted from a reference journal. This sampling technique involved selecting respondents based on their initial answers, helping researchers identify individuals who were most appropriate for the study. The judgmental sampling process was guided by predetermined characteristics aligned with the research objectives. To ensure the relevance of the respondents, a screening question was included in the survey. This question filtered out individuals who did not meet the criteria, such as those without a digital bank account or those residing outside the Jabodetabek region. This method of targeted selection helped refine the sample, ensuring that the collected data was pertinent to the study's focus. By focusing on respondents who fit these specific criteria, the researchers aimed to gather meaningful data that would provide valuable insights into the adoption of digital banking.

According to Hair et al. (1998), the number of research samples should be adjusted based on the total number of questions in the questionnaire. To calculate the minimum sample size for this study, the method proposed by Hair et al. (2017) was applied, which suggests that the sample size should be at least five times the number of research indicators. The more samples collected, the more reliable and precise the results are expected to be. In this study, there are 22 research indicators, which means the minimum sample size required is 110 participants. This calculation ensures that the sample size is sufficient to produce accurate and valid results. By following this approach, the study aims to gather enough data to provide a comprehensive understanding of the factors influencing digital banking adoption. Increasing the sample size beyond the minimum requirement could

further enhance the reliability of the study's conclusions. Therefore, the research will aim to meet or exceed this sample size threshold to ensure robust findings.

2.3 Questionnaires

Questionnaires are a method of data collection where a set of questions or written statements is provided to respondents for them to answer, as defined by Malhotra & Majchrzak (2014). This technique is commonly used in research to assess respondents' attitudes, behaviors, and characteristics, which reflect the broader population of the study. In this research, the questionnaire will start with an introduction from the researcher, which includes their name and the university they are affiliated with. Following this, the researcher will provide an overview of the research topic and its objectives to ensure the respondents understand the purpose of the study. The questionnaire will also inform respondents that the estimated time for completing the survey is between 6 and 8 minutes. Lastly, respondents will be assured that the data collected will only be used for thesis preparation.

At the end of the introduction, respondents will be asked for their consent to participate in the study. This step ensures that participation is voluntary, and respondents are fully aware of the study's context and their involvement. The inclusion of this consent section aligns with ethical research practices, emphasizing transparency and respect for participants' privacy. The questionnaire will also highlight that the information provided will be kept confidential and solely used for academic purposes. This process aims to create a comfortable environment for respondents, ensuring they are informed and willing to contribute to the study. By explaining the purpose and assuring confidentiality, the study aims to foster trust and encourage honest and accurate responses.

2.4 Data analysis method

This study includes a series of tests, such as a wording test, pre-test, and main test. To assess the validity, reliability, and structural model, the study utilizes the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach, with data processed using the SmartPLS software. SmartPLS is designed specifically for Structural Equation Modeling, allowing researchers to simultaneously examine both the measurement and structural models. The software is capable of calculating important metrics like the Average Variance Extracted (AVE) and composite reliability scores.

These metrics help in evaluating the quality and consistency of the measurement model, ensuring that the constructs are accurately represented by the observed variables. PLS-SEM offers a robust methodology for analyzing complex relationships between variables, making it an ideal choice for this study. According to Malhotra & Majchrzak (2014), PLS-SEM is widely used to model relationships in complex conceptual frameworks. The approach is especially useful when testing hypotheses involving multiple variables, as it accounts for both direct and indirect effects among constructs.

In the context of this research, the PLS-SEM method is applied due to its capability to handle multiple question items from various variables, all of which exhibit exit relationships. This method allows for the testing of two types of variables: measurement variables, also known as manifest variables, and latent variables (Malhotra, 2016). Manifest variables are the question items used to measure the constructs, while latent variables represent the underlying factors that are not directly observed. In this study, six latent variables are considered for analysis. By using PLS-SEM, the research can examine the relationships between these latent constructs and their impact on one another. This approach not only facilitates a comprehensive analysis of the data but also provides insights into how the constructs in the conceptual framework are interrelated. Through this method, the study aims to derive meaningful conclusions about the factors influencing digital banking adoption and usage behavior.

3. Results and Discussion

Table 1. Reliability test

To assess the significance of the relationships between the constructs in the study, path coefficients were analyzed using the Partial Least Squares Structural Equation Modeling (PLS-SEM) method. The path coefficients indicate the strength and direction of the relationships between the independent and dependent variables, which in this case, is the behavioral intention to adopt digital banking. In addition to the path coefficients, other metrics such as sample mean, standard deviation, and T statistics are calculated to determine the reliability and significance of these relationships.

	Cronbach's Alpha	Composite Reliability	
Behavioral Intention	0.815	0.890	
Effort Expectancy	0.704	0.819	
Facilitating Condition	0.782	0.873	
Performance expectancy	0.773	0.870	

The T statistic value is used to assess whether the relationship is statistically significant, while the P value helps in confirming the validity of the path coefficients. A lower P value typically indicates a stronger statistical significance. The results of the path coefficient analysis are summarized in the table below, which presents the key findings regarding the relationships between performance expectancy, effort expectancy, facilitating conditions, and behavioral intention. The table 1 includes the original sample values, sample mean, standard deviation, T statistics, and P values for each relationship tested in the study. These values provide insights into which factors most significantly influence the behavioral intention to use digital banking.

Table 2. Significance of path coefficients test

	Original	Sample	Standard	T Statistics	P Values			
	Sample	Mean	Deviation	(O/STDEV)				
	(0)	(M)	(STDEV)					
Performance expectancy ->	0.086	0.078	0.065	1.328	0.092			
Behavioural Intention								
Effort Expectancy -> Behavioural	0.402	0.403	0.07	5.71	0			
Intention								
Facilitating Condition ->	0.208	0.206	0.083	2.518	0.006			
Behavioural Intention								

The results presented in the table 2 above show the significance of the path coefficients between the constructs and behavioral intention to adopt digital banking. The path from effort expectancy to behavioral intention has the highest coefficient (0.402) and is statistically significant with a T statistic of 5.710 and a P value of 0.000, indicating a strong and significant influence. This suggests that users' expectations about the effort required to use digital banking significantly impact their intention to adopt the service. In contrast, the path from performance expectancy to behavioral intention shows a coefficient of 0.086, with a T statistic of 1.328 and a P value of 0.092, which is not statistically significant at the conventional 0.05 threshold. This implies that performance expectancy. The facilitating condition also shows a significant effect on behavioral intention with a coefficient of 0.208, T statistic of 2.518, and P value of 0.006, suggesting that the availability of resources and infrastructure plays a role in encouraging users to adopt digital banking. These findings provide valuable insights into which factors most strongly drive the intention to use digital banking, helping to identify areas for improvement in service design and user experience.

The hypothesis testing results presented in the Table 3 below summarize the findings of the study concerning the relationships between the constructs and behavioral intention to adopt digital banking. Each hypothesis was tested based on the data collected, and the results were compared with those from previous studies to determine consistency and support. The first hypothesis (H1), which posits that performance expectancy has a positive influence on behavioral intention, was not supported by the data in this study. This contrasts with the findings from previous research, which supported the relationship between performance expectancy and behavioral intention. In contrast, the second hypothesis (H2), which suggests that effort expectancy positively influences behavioral intention, was supported by the data, aligning with previous studies. The third hypothesis (H3) also showed that facilitating conditions have a positive influence on behavioral intention, which was consistent with prior research findings. The following table provides a detailed comparison of the results from this study and the reference journal results, highlighting the areas where the findings align and differ.

Hypothesis	Hypothesis Statement	Result	Reference Journal Result
H1	Performance expectancy has a positive influence on behavioral intention	Hypothesis testing not supported by data	Hypothesis testing supported by data
H2	Effort expectancy has a positive influence on behavioral intention	Hypothesis testing supported by data	Hypothesis testing supported by data
Н3	Facilitating conditions has a positive influence on behavioral intention	Hypothesis testing supported by data	Hypothesis testing supported by data

Table 3. Hypothesis testing

The hypothesis testing for the first proposed hypothesis (H1), which suggests that performance expectancy has a positive influence on behavioral intention, did not receive support from the data in this study. As shown in Table 1, the p-value of 0.092 exceeds the significance level of 0.05, indicating that the relationship between performance expectancy and behavioral intention is not statistically significant. Furthermore, the t-statistics value of 1.328 is below the critical threshold of 1.645, reinforcing the conclusion that there is insufficient evidence to support the proposed positive effect. These results suggest that, in this study, performance expectancy does not appear to have a significant influence on individuals' intention to adopt digital banking.

This outcome contrasts with the findings of a previous study by Vally & Shankar (2020), which reported a positive relationship between performance expectancy and behavioral intention. Their research provided evidence that performance expectancy significantly influenced users' intentions to adopt new technologies, including digital banking. However, in this study, the data do not provide strong enough evidence to confirm this relationship. The difference in findings may be attributed to various contextual factors, such as the study's sample population or the specific circumstances surrounding digital banking adoption in this research setting. Therefore, while earlier studies have supported the hypothesis, the current research fails to replicate the same results, suggesting that further investigation may be needed to understand the varying influence of performance expectancy on behavioral intention across different contexts.

The second proposed hypothesis (H2), which posits that effort expectancy has a positive influence on behavioral intention, is supported by the data in this study, as demonstrated by the hypothesis testing results presented in Table 1. The p-value of 0.000 is well below the significance level of 0.05, indicating that the relationship between effort expectancy and behavioral intention is statistically significant. Furthermore, the t-statistics value of 5.710 exceeds the critical value of 1.645, further confirming that the effect is significant. These findings suggest that users' expectations regarding the ease of using digital banking significantly impact their intention to adopt the service. The more users perceive digital banking as easy to use, the more likely they are to intend to use it, highlighting the importance of user-friendly interfaces and accessibility in driving adoption.

These results align with the findings of a previous study by Vally & Shankar (2020), which also found that effort expectancy positively influences behavioral intention. In their research, the authors concluded that when users perceive a technology or service as easy to

use, their intention to adopt it increases. This study corroborates those findings, as the data provides sufficient evidence to confirm that effort expectancy has a significant and positive effect on behavioral intention. The consistency of these results across different studies suggests that effort expectancy is a robust predictor of users' adoption behaviors, especially in the context of digital banking. Given the similarity of these findings with earlier research, it reinforces the idea that ease of use plays a crucial role in determining the success of digital banking adoption.

The third proposed hypothesis (H3), which suggests that facilitating conditions have a positive influence on behavioral intention, is confirmed by the data in this study, as shown in the hypothesis testing results in Table 1. The p-value of 0.006, which is below the significance threshold of 0.05, indicates that facilitating conditions have a statistically significant impact on behavioral intention. In addition, the t-statistics value of 2.518 exceeds the critical value of 1.645, reinforcing the statistical significance of the effect. These findings suggest that when individuals perceive that the necessary resources, infrastructure, and support systems are in place to enable the use of digital banking, they are more likely to intend to adopt the service. Facilitating conditions thus play a crucial role in the decision-making process by assuring users that they will have the support and resources needed to effectively use digital banking.

This outcome is consistent with the findings of Vally & Shankar (2020), who also found that facilitating conditions positively influence behavioral intention. Their research indicated that when users are confident in the availability of adequate resources and support, their likelihood of adopting a new technology increases. Similarly, the results from this study provide sufficient evidence to support the notion that facilitating conditions significantly affect users' behavioral intentions to use digital banking. The congruence between the current study's findings and previous research highlights the importance of ensuring that users have access to the appropriate resources, such as technical support, infrastructure, and education, to foster the adoption of digital banking. This reinforces the idea that facilitating conditions are a key determinant in the successful adoption of digital technologies, particularly in the context of digital banking services.

Since performance expectancy has a significant positive influence on customers' behavioral intention to use digital banking, it is essential for banks to focus on demonstrating the value and benefits of using their digital banking services. Customers are more likely to engage with digital banking if they perceive it as providing tangible benefits, such as increased efficiency, convenience, and enhanced financial management. Banks should emphasize how their digital platforms improve customers' overall experience, whether through faster transactions, easier access to account information, or better control over financial decisions. By communicating the advantages clearly and highlighting the potential gains in productivity and convenience, banks can help users recognize the value of adopting digital banking services. Additionally, offering features that directly address customers' needs and desires will enhance their perception of the platform's usefulness. This can be achieved through targeted marketing, personalized services, and showing how digital banking can simplify and optimize users' daily financial activities. Ultimately, if customers believe that using digital banking improves their financial management and lifestyle, they are more likely to adopt it. Therefore, making performance expectancy a priority in digital banking strategies will increase the likelihood of greater customer adoption.

In addition to demonstrating the benefits, banks must ensure that digital banking services consistently meet users' performance expectations. To achieve this, the services offered must be reliable, fast, and deliver on the promises made to customers. Ensuring that digital platforms perform optimally, with minimal disruptions and delays, is key to reinforcing the perceived value of these services. Providing robust customer support and effective troubleshooting options will also contribute to customers' belief that using digital banking is a worthwhile experience. When users encounter issues, having quick and reliable solutions will build trust in the platform and further strengthen their perception of the service's value. Moreover, continual updates and improvements to the digital banking

platform can maintain and even enhance performance expectations, keeping customers engaged and satisfied over time. By aligning digital banking offerings with users' expectations for performance, banks can foster long-term loyalty and encourage consistent usage. Therefore, ensuring that the digital banking services are perceived as reliable and valuable is critical for banks to boost customers' behavioral intention to use these services.

Given that effort expectancy has the most significant positive influence on customers' behavioral intention to use digital banking, it is crucial for banks to focus on creating seamless and user-friendly experiences. By investing in intuitive designs and simplifying digital platforms, banks can reduce the effort required for customers to engage with their services. This can be achieved through user-centered design, which prioritizes ease of navigation and clear, accessible instructions for new users. Banks should focus on streamlining processes, eliminating redundant steps, and minimizing the complexity of their platforms to make them more accessible to a broader audience. Additionally, offering clear guidance on how to use digital banking services will enhance customers' confidence and perception of ease. A user-friendly interface that is easy to navigate and understand will significantly influence users' willingness to engage with the technology. Ultimately, by reducing the perceived effort involved in using digital banking, banks can increase customer satisfaction and foster greater adoption. Therefore, prioritizing customer ease of use should be a central strategy in the development of digital banking services.

In addition to focusing on effort expectancy, it is also essential for banks to ensure facilitating conditions are in place to support the adoption of digital banking. Facilitating conditions, such as technical support, infrastructure, and resources, have a positive influence on customers' behavioral intention to use digital banking. Banks should focus on providing the necessary tools and resources to create an environment where users feel supported in their digital banking journey. This can include offering accessible customer service, providing training on how to use digital platforms, and ensuring that reliable infrastructure is in place. A culture that encourages the use of digital banking, along with a support system to help users overcome any challenges they may face, can significantly boost customer confidence. By promoting an environment where customers' intention to adopt and continue using digital banking services. Providing facilitating conditions not only ensures smooth interactions but also builds trust, which is essential for long-term customer engagement. Therefore, managers should emphasize the importance of facilitating conditions in their digital banking strategies.



4. Conclusions

The study provides valuable insights into the factors influencing the behavioral intention to adopt digital banking, with a focus on performance expectancy, effort

expectancy, and facilitating conditions. The analysis reveals that effort expectancy has the most significant positive influence on users' intention to adopt digital banking. The findings suggest that when users perceive digital banking as easy to use, they are more likely to adopt the service. This highlights the importance of creating user-friendly digital banking platforms that are intuitive and accessible to a broad range of users. In addition, facilitating conditions, such as the availability of infrastructure and technical support, also play a crucial role in encouraging users to adopt digital banking. The study emphasizes the importance of ensuring that necessary resources are in place to support the users' experience with digital banking. However, the relationship between performance expectancy and behavioral intention was found to be statistically insignificant in this study, which contrasts with previous research. This outcome suggests that the perceived benefits of using digital banking might not be as influential in the decision-making process for users in the current study context.

The significant role of effort expectancy in shaping users' adoption intentions underlines the necessity for banks to focus on designing digital banking platforms that minimize user effort. Simplifying interfaces, streamlining processes, and enhancing user accessibility are essential strategies to reduce the perceived effort required to engage with digital banking. Banks must prioritize ease of use to ensure that potential users, regardless of their technical proficiency, can easily navigate and utilize digital banking services. Providing clear instructions and guidance will further enhance users' confidence and willingness to adopt digital banking solutions. Furthermore, efforts to continuously improve and update digital platforms will help maintain user engagement and satisfaction. It is crucial for banks to invest in the design and development of digital banking services that meet users' expectations for ease and convenience. These initiatives not only improve the adoption rate but also ensure long-term customer loyalty by consistently meeting the users' needs. By focusing on reducing the complexity of the services, banks can increase the likelihood of successful digital banking adoption among a wider audience.

In addition to improving the user interface, the study underscores the significance of facilitating conditions in supporting the adoption of digital banking. Banks must provide the necessary technical infrastructure, support systems, and resources to ensure that users can easily transition to digital banking platforms. Offering training, accessible customer support, and robust technical assistance can help overcome barriers to adoption. Additionally, creating a supportive environment where users feel confident in their ability to access and utilize digital banking services is essential. The presence of facilitating conditions can significantly enhance users' perception of digital banking's value, leading to increased adoption rates. Banks should also foster a culture that encourages digital banking adoption, ensuring that users are well-equipped with the knowledge and resources they need to succeed. By addressing these facilitating conditions, banks can effectively build trust and confidence among their users, which is vital for encouraging both initial and continued use of digital banking services. This research reinforces the idea that facilitating conditions play a critical role in the success of digital banking adoption.

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References

- Alalwan, A. A., Dwivedi, Y. K., Rana, N. P., & Algharabat, R. (2018). Examining factors influencing Jordanian customers' intentions and adoption of internet banking: Extending UTAUT2 with risk. *Journal of Retailing and Consumer Services*, 40, 125-138. <u>https://doi.org/10.1016/j.jretconser.2017.08.026</u>
- Alkhowaiter, W. A. (2020). Digital payment and banking adoption research in Gulf countries: A systematic literature review. *International Journal of Information Management, 53,* 102102. <u>https://doi.org/10.1016/j.ijinfomgt.2020.102102</u>
- Anggraeni, R., Hapsari, R., & Muslim, N. A. (2021). Examining factors influencing consumers intention and usage of digital banking: evidence from Indonesian digital banking customers. *APMBA (Asia Pacific Management and Business Application)*, 9(3), 193-210. <u>https://doi.org/10.21776/ub.apmba.2021.009.03.1</u>
- 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 Marketing*, *37*(1), 323–339. https://doi.org/10.1108/IJBM-02-2018-0028
- Cziesla, T. (2014). A literature review on digital transformation in the financial service industry. *BLED 2014 Proceedings*. *18*. <u>https://aisel.aisnet.org/bled2014/18</u>
- Deniswara, K., Nurjadi, K. A., Nathaniel, E., Lisanti, Y., Lega, A. D. P., & Wardhani, M. A. (2022, October). Factors that Affect the Adoption of Digital Bank in Indonesia. In *Proceedings* of the 2022 6th International Conference on E-Business and Internet (pp. 161-167). https://doi.org/10.1145/3572647.3572671
- Deng, X., Huang, Z., & Cheng, X. (2019). FinTech and sustainable development: Evidence from China based on P2P data. Sustainability, 11(22), 6434. <u>https://doi.org/10.3390/su11226434</u>
- Donovan, E., Wilcox, C. R., Patel, S., Hay, A. D., Little, P., & Willcox, M. L. (2020). Digital interventions for parents of acutely ill children and their treatment-seeking behaviour: a systematic review. *British Journal of General Practice*, *70*(692), 172-178. https://doi.org/10.3399/bjgp20X708209
- Ebringer, T., Thorne, P., & Zheng, Y. (2000). Parasitic authentication to protect your e-wallet. *Computer*, *33*(10), 54-60. <u>https://doi.org/10.1109/2.876293</u>
- Gomber, P., Kauffman, R. J., Parker, C., & Weber, B. W. (2018). On the fintech revolution: Interpreting the forces of innovation, disruption, and transformation in financial

services. *Journal of management information systems, 35*(1), 220-265. <u>https://doi.org/10.1080/07421222.2018.1440766</u>

- Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial* management & data systems, 117(3), 442-458. <u>https://doi.org/10.1108/IMDS-04-2016-0130</u>
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate Data Analysis*. 5th Edn Prentice Hall International. Upper Saddle River, NJ.
- Hanafizadeh, P., & Marjaie, S. (2021). Exploring banking business model types: A cognitive view. *Digital Business*, *1*(2), 100012. <u>https://doi.org/10.1016/j.digbus.2021.100012</u>
- Hilal, A., & Varela-Neira, C. (2022). Understanding consumer adoption of mobile banking: extending the UTAUT2 model with proactive personality. *Sustainability*, 14(22), 14708. <u>https://doi.org/10.3390/su142214708</u>
- Indriasari, E., Gaol, F. L., & Matsuo, T. (2019). Digital banking transformation: Application of artificial intelligence and big data analytics for leveraging customer experience in the Indonesia banking sector. In 2019 8th International Congress on Advanced Applied Informatics (IIAI-AAI) (pp. 863-868). IEEE. <u>https://doi.org/10.1109/IIAI-AAI.2019.00175</u>
- Kasturi, S. (2023). Evolving consumer expectations and the future of digital banking. *Journal* of Digital Banking, 8(1), 37-48. <u>https://www.ingentaconnect.com/content/hsp/jdb001/2023/0000008/00000001</u> /art00005
- Kitsios, F., Giatsidis, I., & Kamariotou, M. (2021). Digital transformation and strategy in the banking sector: Evaluating the acceptance rate of e-services. *Journal of Open Innovation: Technology, Market, and Complexity, 7*(3), 204. https://doi.org/10.3390/joitmc7030204
- Malhotra, A., & Majchrzak, A. (2014). Enhancing performance of geographically distributed teams through targeted use of information and communication technologies. *Human Relations*, *67*(4), 389-411. <u>https://doi.org/10.1177/0018726713495284</u>
- Mbama, C. I., & Ezepue, P. O. (2018). Digital banking, customer experience and bank financial performance: UK customers' perceptions. *International journal of bank marketing*, 36(2), 230-255. <u>https://doi.org/10.1108/ijbm-11-2016-0181</u>
- Mendoza, M. C. O., Santos, R. R. C., & Magdaraog, J. E. H. (2020, April). Assessment of E-service quality dimensions and its influence on customer satisfaction: a study on the online banking services in the Philippines. In 2020 IEEE 7th international conference on industrial engineering and applications (ICIEA) (pp. 1076-1081). IEEE. https://doi.org/10.1109/ICIEA49774.2020.9101940
- Mogaji, E. (2023). Redefining banks in the digital era: a typology of banks and their research, managerial and policy implications. *International Journal of Bank Marketing*, *41*(7), 1899-1918. <u>https://doi.org/10.1108/IJBM-06-2023-0333</u>
- Murinde, V., Rizopoulos, E., & Zachariadis, M. (2022). The impact of the FinTech revolution on the future of banking: Opportunities and risks. *International review of financial analysis*, *81*, 102103. <u>https://doi.org/10.1016/j.irfa.2022.102103</u>
- Nichkasova, Y., & Shmarlouskaya, H. (2020). Financial technologies as a driving force for business model transformation in the banking sector. *International Journal of Business and Globalisation*, *25*(4), 419-447. <u>https://doi.org/10.1504/IJBG.2020.109120</u>
- Omarini, A. (2022). The changing landscape of retail banking and the future of digital banking. In *The Future of Financial Systems in the Digital Age: Perspectives from Europe and Japan* (pp. 133-158). Singapore: Springer Singapore. https://doi.org/10.1007/978-981-16-7830-1_8
- Pricewaterhouse Coopers. (2018). *Digital Banking in Indonesia by Pricewaterhouse Coopers.* Pricewaterhouse Coopers.

https://www.pwc.com/id/en/publications/assets/financialservices/digital-bankingsurvey-2018-pwcid.pdf

- Ramdani, B., Binsaif, A., Boukrami, E., & Guermat, C. (2022). Business models innovation in investment banks: a resilience perspective. *Asia Pacific Journal of Management, 39*(1), 51-78. <u>https://doi.org/10.1007/s10490-020-09723-z</u>
- Sadigh, A N., Asgari, T., & Rabiei, M. (2022). Digital transformation in the value chain disruption of banking services. *Journal of the Knowledge Economy*, *13*(2), 1212-1242. https://doi.org/10.1007/s13132-021-00759-0
- Sardana, V., & Singhania, S. (2018). Digital Technology in the Realm of Banking: A Review of Literature. *International Journal of Research in Finance and Management*, 1(2), 28–32. https://www.researchgate.net/publication/329514279
- Sanyaolu, T. O., Adeleke, A. G., Azubuko, C. F., & Osundare, O. S. (2024). Exploring fintech innovations and their potential to transform the future of financial services and banking. *International Journal of Scholarly Research in Science and Technology*, *5*(01), 054-073. <u>https://doi.org/10.56781/ijsrst.2024.5.1.0033</u>
- Sheth, J. N., Jain, V., Roy, G., & Chakraborty, A. (2022). AI-driven banking services: the next frontier for a personalised experience in the emerging market. *International Journal of Bank Marketing*, *40*(6), 1248-1271. <u>https://doi.org/10.1108/IJBM-09-2021-0449</u>
- Sloboda, L., Dunas, N., & Limański, A. (2018). Contemporary challenges and risks of retail banking development in Ukraine. *Banks & bank systems, 13*(1), 88-97. https://www.ceeol.com/search/article-detail?id=695577
- Vally, K S., & Shankar, C. (2020). Factors that affect the digital banking adoption in Hyderabad city-UTAUT model approach. *European Journal of Molecular and Clinical Medicine*, 7(4), 857–865. <u>https://www.scopus.com/inward/record.uri?eid=2-s2.085097163647&partnerID=40&md5=83163c578b70992a0a28f5113a4da80a</u>
- Vial, G. (2021). Understanding digital transformation: A review and a research agenda. *Managing digital transformation*, 13-66. <u>https://www.taylorfrancis.com/chapters/edit/10.4324/9781003008637-</u> <u>4/understanding-digital-transformation-gregory-vial</u>
- Wewege, L., Lee, J., & Thomsett, M. C. (2020). Disruptions and digital banking trends. *Journal* of Applied Finance and Banking, 10(6), 15-56. <u>https://www.scienpress.com/journal focus.asp?main id=56&Sub id=IV&Issue=1889</u> 279
- Yip, A. W., & Bocken, N. M. (2018). Sustainable business model archetypes for the banking industry. *Journal of cleaner production*, 174, 150-169. <u>https://doi.org/10.1016/j.jclepro.2017.10.190</u>

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