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# Understanding the Key Drivers Behind User Selection of Digital Banks

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**ABSTRACT**

**This study aims** to understand the key drivers underlying the selection of digital banks by users in Indonesia. The research model uses a modified **UTAUT** (Unified Theory of Acceptance and Use of Technology) framework with additional variables of Perceived Trust, Fear Of Financial Lost, Perceived Online Identity Theft, and Security & Privacy Concern. A total of 434 respondents who use digital bank applications were analyzed using the PLS-SEM technique through SmartPLS 4 software. **The results** showed that the factors of Performance Expectancy, Social Influence, and Perceived Trust are the key drivers towards behavioral intentions. Meanwhile, the variables of Expected Effort, Fear Of Financial Lost, and Perceived Online Identity Theft did not show significant effects. **The findings** provide strategic insights to increase the adoption of digital banking services in Indonesia.



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## 1. INTRODUCTION

In the current era of globalization, internet users are increasing from year to year. This is evidenced by the increasing internet penetration in Indonesia year by year. In a survey conducted by the Association of Indonesian Internet Service Providers (APJII) in 2023, it was found that the internet penetration rate, which is the ratio of internet users to the population, increases every year. In 2023, it reached 78.19%, an increase of 1.17% from 2022, which was 77.02%. In terms of numbers, in 2023, it amounted to 215 million, compared to 210 million in 2022 [1].

Significant changes have also occurred in the banking industry in Indonesia due to the emergence of digital banks, such as Bank BHI, which provide and conduct business activities primarily through electronic channels without physical branches other than Customer Points (KP) or with limited physical branches [2]. During the Board of Governors Meeting (RDG) of Bank Indonesia on January 16-17, 2024, it was mentioned that in 2023, the value of digital banking transactions reached Rp 58,478.24 trillion, an increase of 13.48% (yoy), and in 2024, it is estimated to increase by 9.11% (yoy) to reach Rp 63,803.77 trillion [3]. With the increasing value of digital banking transactions from year to year and predicted to continue rising as previously

explained, it turns out that digital banks face challenges or issues both from the user side and the digital bank side itself.

The proliferation of digital banks in Indonesia is driven by changes in customer behavior during the pandemic, with more people preferring digital banking services for their efficiency and convenience. Competition between digital banks and conventional banks pushes companies to focus on personalized innovations to retain customers. These innovations include tailoring products and services to individual needs as well as effective marketing strategies. Some digital banks offer high interest rates to attract customers, but long-term strategies need to focus on services that understand and respond to customers' needs personally to enhance loyalty [4].

This study fills a critical gap in the prior literature by integrating trust-related variables such as Perceived Trust, Fear Of Financial Lost, and Perceived Online Identity Theft into the UTAUT2 framework. Previous research on digital banking adoption has largely focused on standard UTAUT2 variables like Performance Expectancy and Social Influence, neglecting the important role of user trust and security concerns. By incorporating these factors, this study offers a more comprehensive understanding of the key drivers behind the behavioral intentions of digital banking users in Indonesia, addressing a significant gap in trust-related banking research.

In 2022, digital banks faced various challenges, both externally and internally. Seabank confronted fierce competition in the digital banking space, prompting innovations like product diversification and attractive promotions. BCA Digital, as a newcomer, focused on gaining customer trust by offering secure, convenient, and innovative services. NeoCommerce Bank worked on ensuring the security of customer information and transactions while staying up-to-date with technology to remain competitive. Bank Jago's 2022 Customer Satisfaction Survey revealed that 87% of respondents were satisfied with its services, especially its user-friendly features and free fees. Meanwhile, Bank BTPN's Jenius product focused on expanding features like investment, foreign currency transactions, and Flexi Cash loans, all while prioritizing data and transaction security.

According to a survey conducted by Populix in 2022 titled "Consumer Preference Towards Banking and E-Wallet Apps" with 1000 respondents, the top 5 digital banks mentioned were Jago (46%), BNC (NeoCommerce Bank) (40%), Jenius (32%), SeaBank (27%), and blu (BCA Digital) (25%) [5].

Table 1. Bank App Reviews

| **Bank** | **Rating** | **Reviewer** |
|---|---|---|
| BNC (Bank Neo Commerce) | 3.7/5 | 267 K |
| Jenius | 3.7/5 | 195 K |
| blu (BCAdigital) | 4.5/5 | 77 K |
| Jago | 4.6/5 | 137 K |
| Seabank | 4.8/5 | 754 K |

In Table 1 above, user reviews of digital banking apps from Google Playstore (January 25, 2024) show that BNC (Bank Neo Commerce) and Jenius received the lowest ratings among the top 5 banks in the Populix survey. From the Google Review data (December 1, 2023 - January 11, 2024), users complained about slow app performance, issues with money not being credited, and other problems. The rise in digital banking transactions highlights the need for digital banks to continuously develop technology and add new features to enhance customer experiences. Research is essential to understand factors that influence customers choices, such as fast and efficient transactions, new features, and trust and security. This research aims to provide insights to digital bank operators, which can be adapted to similar emerging markets such as Southeast Asia and Latin America, where digital banking adoption is increasing rapidly. These insights can help operators create strategies that offer secure, user-friendly, and personalized banking services to boost adoption rates. Furthermore, the adoption of digital banking aligns with SDG 9, promoting innovation and the development of digital infrastructure, and SDG 16, contributing to the creation of transparent, accessible, and efficient institutions [6]. The growth of digital banking in Indonesia serves as a catalyst for fostering inclusive economic growth and strengthening institutions that support sustainable development [7].

## 2. LITERATURE REVIEW

### 2.1. Digital Bank

As per Financial Services Authority Regulation No. 12/POJK.03/2021, a Digital Bank is a Commercial Bank primarily operating through electronic channels with limited or no physical branches [8]. Digital Banks differ from traditional banks offering digital services by their absence of physical branch offices, conducting all operations virtually [9].

Digital banks offer online platforms for account opening and financial management, emphasizing efficiency, cost reduction, and innovation compared to traditional banking methods [10]. They facilitate transactions through electronic media, including digital payment methods, mobile wallets, P2P banking, and cryptocurrencies, reflecting a shift towards digital transactions [11].

### 2.2. Unified Theory of Acceptance and Use of Technology 2

The Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) is an advanced model designed to comprehensively understand the adoption and usage of new technology by individuals, integrating both quantitative and qualitative methods. This model discards the Voluntariness of Use construct from its predecessor and emphasizes factors such as Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Hedonic Motivation, Price Value, Habits, Behavioral Intention, Use Behavior, as well as individual differences like Gender, Age, and Experience as significant moderators [12, 13]. Performance Expectancy assesses perceived benefits, Effort Expectancy gauges perceived ease of use, Social Influence captures the influence of important others, Facilitating Conditions considers organizational and technical support, Hedonic Motivation highlights satisfaction derived from technology use, Price Value underscores the influence of cost, Habits measure routine actions, Behavioral Intention gauges desire to use, Use Behavior quantifies frequency of usage, while Gender, Age, and Experience account for individual disparities. Overall, UTAUT2 offers a holistic framework to comprehend the multifaceted dynamics influencing technology acceptance and usage [14].

### 2.3. Perceived Trust

Perceived Trust can be defined as a positive belief in the reliability of a service, particularly in the context of mobile banking services (m-banking). This trust is conceptualized as consumers' belief in the reliability and integrity of a retailer, which significantly influences customer intentions and behavior. This definition aligns with previous research that emphasizes trust as an important factor affecting customer satisfaction and commitment to a service [15].

### 2.4. Security & Privacy

The research conducted by [16] suggests that efforts to increase customers' intention to use mobile banking in Jakarta can be made by enhancing security measures, such as improving privacy, authentication, integrity, and non-repudiation. The study also found that as a person's intention to use mobile banking increases, their use behavior also increases. Similarly, [17] mentioned that security will influence the level of desire to continue using technology, and security is closely related to privacy in technology usage [18]. In the development of software for banking digitization, security and privacy should be of special concern because they greatly influence customers intention to use banking applications, as highlighted by [19].

## 3. METHODOLOGY

The study utilizes the UTAUT research model developed by [20]. Figure 1 depicts the research model using part of the UTAUT model and also includes other variables such as Perceived Trust, Fear Of Financial Lost, Perceived Online Identity Theft, and Security & Privacy. This extended framework aims to give a clearer understanding of user behavioral intentions in adopting digital banking by combining UTAUT constructs with risk-related factors.

According to [18], Perceived Trust plays a crucial role as an important predictor influencing behavioral intentions. This is because users believe that technology can optimize their work and provide maximum benefits from its use. Conversely, when it comes to using digital banks, there may also be resistance due to concerns about security & privacy. Therefore, the level of security and privacy in using digital banks will also affect the desire to use them. As mentioned by [21] security & privacy are also influenced by Fear Of Financial Lost, Perceived Online Identity Theft, and Security & Privacy.

In the context of this research, situational adjustments and environmental conditions result in the researchers not including the variables Price Value, Hedonic Motivation, and Habits in the research model. This is because bank applications can be downloaded for free through the Play Store platform, so the Price Value factor does not have a significant influence on the use of digital banks. Additionally, the Habits variable is not relevant in this study because digital banks are a new technology in the banking industry and do not have historical comparisons that can be used to analyze usage habits.

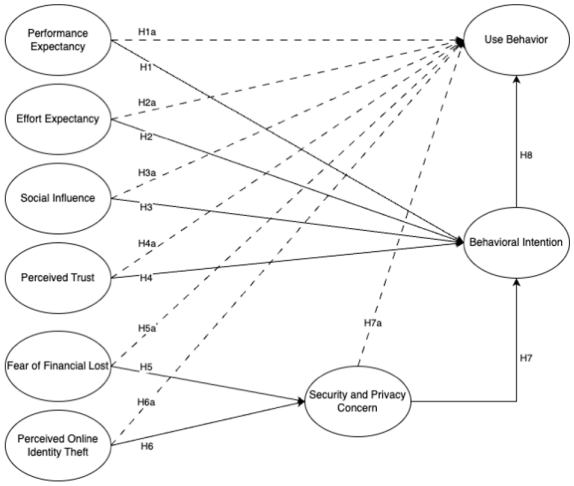


Figure 1. Research Model

Based on Figure 1, this research model outlines the key variables that affect the intention and behavior of using digital banking. The primary focus of this study is to analyze the impact of performance expectancy, effort expectancy, social influence, and other related factors on users intention and behavior in adopting digital banking services. Variables such as price value, hedonic motivation, and user habits are excluded because they are considered irrelevant in the context of digital banking, which is a new technology. This is due to the fact that digital banking services can be downloaded for free, and there are no historical comparisons available to analyze usage habits [22, 23].

### 3.1. Hypothesis

In this section, the research hypotheses related to the utilization of digital banking services are presented. These hypotheses aim to explore various factors that influence users behavioral intentions and actual usage behaviors in the context of digital banking. The following Table 2 outlines the proposed hypotheses, which are tested to analyze the relationships between these variables and the behavior of users.

Table 2. Caption

| No | | Hypothesis |
|---|---|---|
| 1 | H1 | Performance Expectancy in utilizing digital banking services has a positive impact on Behavioral Intention. |
| 2. | H1a | Performance Expectancy has a positive impact on Use Behavior in the utilization of digital banking. |
| 3 | H2 | Effort Expectancy in utilizing digital banking services has a positive impact on Behavioral Intention. |
| 4 | H2a | Effort Expectancy has a positive impact on Use Behavior in the utilization of digital banking. |
| 5 | H3 | Social Influence in utilizing digital banking services has a positive impact on Behavioral Intention. |
| 6 | H3a | Social influence has a positive impact on Use Behavior in digital banking usage. |
| 7 | H4 | Perceived Trust in utilizing digital banking services has a positive impact on Behavioral Intention. |
| 8 | H4a | Perceived Trust has a positive impact on Use Behavior in digital banking usage. |

| No | | Hypothesis |
|---|---|---|
| 9 | H5 | Fear Of Financial Lost in utilizing digital banking services has a positive impact on Security and Privacy. |
| 10 | H5a | Fear Of Financial Lost has a positive impact on Use Behavior in digital banking usage. |
| 11 | H6 | Perceived Online Identity Theft in utilizing digital banking services has a positive impact on Security and Privacy. |
| 12 | H6a | Perceived Online Identity Theft has a positive impact on Use Behavior in digital banking usage. |
| 13 | H7 | Security and Privacy Concern in utilizing digital banking services have a positive impact on Behavioral Intention. |
| 14 | H7a | Security and Privacy Concern have a positive impact on Use Behavior in digital banking usage. |
| 15 | H8 | Behavioral Intention has a positive impact on Use Behavior in digital banking usage. |

### 3.2. Measurement Variable

This study employs the following independent variables are Performance Expectancy, Effort Expectancy, Social Influence, Perceived Trust, Fear Of Financial Lost, and Perceived Identity Theft. It also utilizes moderating variables such as Behavioral Intention and Security & Privacy. The dependent variable employed is Use Behavior. Table 3 provides a detailed explanation of the indicators for each variable [24, 25]. These variables capture both acceptance factors and user risk concerns in digital banking adoption.

Table 3. Variable and Research Indicators

| No | Variable | Indicator | Source |
|---|---|---|---|
| 1 | Performance Expectancy | PE1: I use mobile banking services in my daily life. | [26] |
| | | PE2: Using mobile banking services increases my chances of completing important tasks. | |
| | | PE3: Mobile banking services allow me to complete tasks more quickly. | |
| | | PE4: I become more productive when using mobile banking services. | |
| 2 | Effort Expectancy | EE1: I find it easy to learn how to use mobile banking services. | [26] |
| | | EE2: My interaction with Mobile Banking Services is simple and easy to understand. | |
| | | EE3: Internet Mobile Banking is easy for me to use. | |
| | | EE4: I found it easy to learn how to use mobile banking. | |
| 3 | Social Influence | SI1: Key people in my life believe that I should use mobile banking services. | [26] |
| | | SI2: People who influence my behavior believe that I should use mobile banking. | |
| | | SI3: People whose opinions I respect prefer that I use mobile banking services. | |
| 4 | Perceived Trust | PT1: I believe that using mobile banking services to transfer money is always safe. | [26] |
| | | PT2: I am convinced that mobile banking is a safe way to transfer money. | |
| | | PT3: My bank gives me immediate notice if there is a problem with any of my transactions. | |
| | | PT4: Based on my experience, I believe that using mobile banking is safe. | |
| 5 | Fear of Financial Lost | FOL1: I'm worried that someone could steal my money when I transfer personal data online. | [27] |
| | | FOL2: I was afraid that a criminal could use my credit card account number to shop online in my name. | |
| | | FOL3: I was afraid that someone could do online shopping at my expense. | |
| | | FOL4: I am concerned that an unauthorized person may make an online purchase using my personal data. | |

| No | Variable | Indicator | Source |
|---|---|---|---|
| 6 | Perceived Online Identity Theft | POT1: I am worried that when I have to give my credit card number to shop online, it could be misused. | [27] |
| | | POT2: I am afraid that when I have to give my bank account number to shop online, it could be misused. | |
| | | POT3: I was afraid that my bank account could be hacked by someone unknown. | |
| 7 | Security and Privacy Concern | SP1: Electronic banking platforms have mechanisms to ensure the transmission of their users information is secure. | [28] |
| | | SP2: The electronic banking platform has sufficient technical capacity to ensure data security. | |
| | | SP3: Electronic financial transactions will not pose a financial risk. | |
| | | SP4: Secure for personal data confidentiality | |
| | | SP5: Electronic banking platforms comply with personal data protection laws to ensure data privacy. | |
| | | SP6: The electronic banking platform only collects the personal data of users that are necessary for its activities. | |
| | | SP7: The electronic banking platform does not disclose my personal information to others without their consent. | |
| | | I feel secure when sending personal information through the electronic banking platform. | |
| | | FOL4: I am concerned that an unauthorized person may make an online purchase using my personal data. | |
| 8 | Behavioral Intention | BI1: I intend to use mobile banking system if I have access to it. | [26] |
| | | BI2: For my banking needs, I will use mobile banking services. | |
| | | BI3: If I have access to the mobile banking system, I would like to make the most of it. | |
| 9 | Use Behavior | UB1: What is the actual frequency of your usage of the SADAD Internet banking service. | [29] |
| | | UB2: The frequency of each transaction. | |
| | | UB3: The frequency of using other features. | |

### 3.3. Sample

The study will sample 400 users from five digital banks (Jago, BNC, Jenius, Seabank, and blu) based on Google Play Store reviews, assuming the number of reviews represents the user count. A 5% margin of error was used to calculate the sample size via the Slovin formula. Participants will be selected using probability sampling, ensuring equal selection chances for all individuals. Data will be collected through a Google Form distributed via social media platforms like Telegram, Line, and WhatsApp. The questionnaire, based on indicator variables, will use a 5-point Likert scale for responses. Additionally, the data collection process will aim to reach a diverse range of users, ensuring the sample reflects the characteristics of digital bank users in Indonesia. The analysis of responses will help uncover trends and insights into user behavior and preferences regarding digital banking services [30, 31].

### 3.4. Analysis Method

The data analysis method for this research involves Partial Least Square Structural Equation Modeling (PLS-SEM) using SmartPLS 4 software. PLS-SEM encompasses both the measurement model (outer model) and the structural model (inner model) evaluations. For the measurement model, validity and reliability tests are conducted. Validity is assessed through convergent validity (using loading factor and average variance extract) and discriminant validity (using cross loading) [32, 33]. Reliability is evaluated using Cronbach's Alpha and Composite Reliability.

In the structural model, path coefficient and determination coefficient (R-Square) tests are performed to analyze the relationships between variables and the accuracy of predictions. Hypothesis testing includes T-Statistics and p-value tests to determine the significance of the relationships between latent variables.

## 4. RESULT AND DISCUSSION

### 4.1. Profile of Respondents

From the results of the questionnaire, 434 respondents were obtained, who can be categorized by gender, age, place of residence, and the digital banking application they use.

Table 4. Gender

| Gender | Amount | Percentage |
|---|---|---|
| Man | 203 | 46.8% |
| Woman | 231 | 53.2% |
| Total | 434 | 100% |

Based on the results of the questionnaire in Table 4, the number of male respondents is higher than that of female respondents. Out of 434 respondents, 46.8% are male, and 53.2% are female.

Table 5. Age

| Age | Amount | Percentage |
|---|---|---|
| 17-25 | 127 | 29.3% |
| 26-35 | 181 | 41.7% |
| 36-45 | 87 | 20.0% |
| 46-55 | 35 | 8.1% |
| 56 and above | 4 | 0.9% |
| Total | 434 | 100% |

Based on the questionnaire results shown in Table 5, the largest group of respondents falls within the 26-35 age range, accounting for 41.7%. Out of 434 respondents, 29.3% are aged 17-25, 41.7% are aged 26-35, 20% are aged 36-45, 8.1% are aged 46-55, and 0.9% are aged 56 and above.

Table 6. Place of Residence

| Place | Amount | Percentage |
|---|---|---|
| Jabodetabek | 312 | 71.9% |
| Outside Jabodetabek | 122 | 28.1% |
| Total | 434 | 100% |

Based on the questionnaire results in Table 6, the majority of respondents reside in the Greater Jakarta area (Jabodetabek). Of the 434 respondents, 71.9% live in Jabodetabek, while the remaining 28.1% live outside Jabodetabek.

Table 7. The Digital Banking Application

| Application | Amount | Percentage |
|---|---|---|
| Seabank | 116 | 26.7% |
| blu (BCA digital) | 90 | 20.7% |
| Jago | 55 | 12.7% |
| Jenius | 50 | 11.5% |
| BNC (bank neo commerce) | 35 | 8.1% |
| Allobank | 24 | 5.5% |
| TMRW by UOB | 14 | 3.2% |
| Bank Raya | 11 | 2.5% |
| DIGIBANK by DBS | 9 | 2.1% |
| Permata ME | 9 | 2.1% |
| BCA mobile | 7 | 1.6% |
| LINE Bank by Hana | 6 | 1.4% |
| Bank K | 3 | 0.7% |
| M bca | 3 | 0.7% |

| Application | Amount | Percentage |
|---|---|---|
| Octo Mobile | 2 | 0.5% |
| Bsi mobile, Lampung online | 1 | 0.2% |
| Dana | 1 | 0.2% |
| Gopay | 1 | 0.2% |
| Total | 434 | 100% |

The data in Table 7 shows Seabank leading the digital banking market with 26.7% of users, followed by Blu (BCA digital) at 20.7%. Jago and Jenius hold 12.7% and 11.5%, respectively. BNC (Bank Neo Commerce) and Allobank have 8.1% and 5.5%, while apps like TMRW by UOB, Bank Raya, and DIGIBANK by DBS each hold 2.1% to 3.2%. Other apps, including BCA mobile, LINE Bank, and others, capture less than 2%, reflecting a competitive yet concentrated market.

## 4.2. Analysis of Research Data

The research conducted PLS-SEM and bootstrapping tests to obtain results from the measurement model (outer model), the structural model (inner model), and hypothesis testing.

## 4.3. Convergent Validity Testing

The convergent validity test can be conducted by examining the loading factor (outer loading) and the Average Variance Extracted (AVE) values.

### 4.3.1. Outer Loading

Table 8. Outer Loading

| Indicator | Loading Factor | Result |
|---|---|---|
| Performance Expectancy | | |
| PE1 ← PE | 0.799 | Valid |
| PE2 ← PE | 0.727 | Valid |
| PE3 ← PE | 0.754 | Valid |
| PE4 ← PE | 0.760 | Valid |
| Effort Expectancy | | |
| EE1 ← EE | 0.735 | Valid |
| EE2 ← EE | 0.712 | Valid |
| EE3 ← EE | 0.722 | Valid |
| EE4 ← EE | 0.732 | Valid |
| Social Influence | | |
| SI1 ← SI | 0.882 | Valid |
| SI2 ← SI | 0.827 | Valid |
| SI3 ← SI | 0.876 | Valid |
| Perceived Trust | | |
| PT1 ← PT | 0.844 | Valid |
| PT2 ← PT | 0.786 | Valid |
| PT3 ← PT | 0.714 | Valid |
| PT4 ← PT | 0.766 | Valid |
| Fear Of Financial Lost | | |
| FOL1 ← FOL | 0.912 | Valid |
| FOL2 ← FOL | 0.848 | Valid |
| FOL3 ← FOL | 0.822 | Valid |
| Perceived Online Identity Theft | | |
| POT1 ← POT | 0.877 | Valid |
| POT2 ← POT | 0.838 | Valid |
| POT3 ← POT | 0.729 | Valid |

| Indicator | Loading Factor | Result |
|---|---|---|
| Security and Privacy | | |
| SP1 ← SP | 0.749 | Valid |
| SP2 ← SP | 0.791 | Valid |
| SP3 ← SP | 0.745 | Valid |
| SP4 ← SP | 0.740 | Valid |
| Behavioral Intention | | |
| BI1 ← BI | 0.787 | Valid |
| BI2 ← BI | 0.738 | Valid |
| BI3 ← BI | 0.735 | Valid |
| Use Behavior | | |
| UB1 ← UB | 0.851 | Valid |
| UB2 ← UB | 0.855 | Valid |
| UB3 ← UB | 0.861 | Valid |

The results of the loading factor testing for all indicators in Table 8 for each variable are considered valid because they have a value of $\geq 0.70$.

#### 4.3.2. Average Variance Extracted (AVE)

Table 9. Average Variance Extracted (AVE)

| Variable | AVE | Result |
|---|---|---|
| Performance Expectancy | 0.578 | Valid |
| Effort Expectancy | 0.526 | Valid |
| Social Influence | 0.742 | Valid |
| Perceived Trust | 0.606 | Valid |
| Fear Of Financial Lost | 0.742 | Valid |
| Perceived Online Identity Theft | 0.667 | Valid |
| Security and Privacy | 0.572 | Valid |
| Behavioral Intention | 0.568 | Valid |
| Use Behavior | 0.732 | Valid |

In the AVE testing conducted based on data from the digital bank user questionnaire, all variables are considered valid because they have a value of $\geq 0.50$, as shown in Table 9.

### 4.4. Discriminant Validity

To assess discriminant validity, cross-loading values are examined to determine how each variable correlates with its associated construct compared to other constructs [34, 35]. The analysis reveals that all variables exhibit a stronger correlation with their intended constructs than with others, affirming the constructs validity. This outcome ensures that each variable measures its unique dimension without significant overlap with other variables, which is essential for reliable data interpretation.

The details of this analysis can be reviewed in Table 10, where the cross-loading values illustrate the clear distinction between variables. By confirming that each variable aligns more closely with its designated construct, the study substantiates the measurement model's discriminant validity. This validation process strengthens confidence in the findings and confirms that each variable captures a unique aspect of the overall model.

Table 10. Cross Loading

| BI | EE | FOL | PE | POT | PT | SI | SP | UB | |
|---|---|---|---|---|---|---|---|---|---|
| BI1 | **0.787** | 0.396 | 0.289 | 0.447 | 0.269 | 0.501 | 0.467 | 0.488 | 0.420 |
| BI2 | **0.738** | 0.365 | 0.288 | 0.482 | 0.429 | 0.454 | 0.507 | 0.431 | 0.494 |
| BI3 | **0.735** | 0.239 | 0.384 | 0.423 | 0.425 | 0.393 | 0.386 | 0.399 | 0.389 |
| EE1 | 0.365 | **0.735** | 0.162 | 0.416 | 0.210 | 0.384 | 0.362 | 0.375 | 0.389 |

| BI | EE | FOL | PE | POT | PT | SI | SP | UB | |
|---|---|---|---|---|---|---|---|---|---|
| EE2 | 0.349 | **0.712** | 0.129 | 0.422 | 0.218 | 0.410 | 0.322 | 0.378 | 0.373 |
| EE3 | 0.358 | **0.722** | 0.129 | 0.424 | 0.198 | 0.362 | 0.317 | 0.343 | 0.371 |
| EE4 | 0.342 | **0.732** | 0.171 | 0.415 | 0.169 | 0.369 | 0.302 | 0.343 | 0.350 |
| FOL1 | 0.370 | 0.205 | **0.912** | 0.322 | 0.642 | 0.341 | 0.447 | 0.341 | 0.336 |
| FOL2 | 0.285 | 0.183 | **0.848** | 0.270 | 0.694 | 0.285 | 0.369 | 0.257 | 0.248 |
| FOL3 | 0.259 | 0.119 | **0.822** | 0.216 | 0.646 | 0.165 | 0.274 | 0.188 | 0.224 |
| PE1 | 0.503 | 0.467 | 0.241 | **0.799** | 0.259 | 0.510 | 0.502 | 0.496 | 0.575 |
| PE2 | 0.421 | 0.438 | 0.209 | **0.727** | 0.214 | 0.395 | 0.387 | 0.343 | 0.476 |
| PE3 | 0.401 | 0.456 | 0.269 | **0.754** | 0.232 | 0.338 | 0.407 | 0.327 | 0.477 |
| PE4 | 0.444 | 0.398 | 0.261 | **0.760** | 0.224 | 0.414 | 0.512 | 0.394 | 0.526 |
| POT1 | 0.350 | 0.230 | 0.657 | 0.292 | **0.877** | 0.316 | 0.354 | 0.312 | 0.269 |
| POT2 | 0.274 | 0.226 | 0.644 | 0.242 | **0.838** | 0.280 | 0.283 | 0.245 | 0.224 |
| POT3 | 0.217 | 0.225 | 0.555 | 0.204 | **0.729** | 0.170 | 0.221 | 0.179 | 0.154 |
| PT1 | 0.536 | 0.414 | 0.298 | 0.436 | 0.278 | **0.844** | 0.618 | 0.679 | 0.511 |
| PT2 | 0.471 | 0.419 | 0.205 | 0.462 | 0.221 | **0.786** | 0.564 | 0.598 | 0.397 |
| PT3 | 0.452 | 0.397 | 0.227 | 0.399 | 0.246 | **0.714** | 0.417 | 0.497 | 0.403 |
| PT4 | 0.440 | 0.409 | 0.269 | 0.421 | 0.265 | **0.766** | 0.511 | 0.561 | 0.377 |
| SI1 | 0.549 | 0.382 | 0.426 | 0.517 | 0.320 | 0.601 | **0.882** | 0.568 | 0.532 |
| SI2 | 0.477 | 0.373 | 0.355 | 0.488 | 0.270 | 0.537 | **0.827** | 0.496 | 0.481 |
| SI3 | 0.545 | 0.408 | 0.347 | 0.540 | 0.337 | 0.620 | **0.876** | 0.626 | 0.537 |
| SP1 | 0.475 | 0.386 | 0.259 | 0.406 | 0.211 | 0.567 | 0.529 | **0.749** | 0.472 |
| SP2 | 0.442 | 0.435 | 0.245 | 0.411 | 0.260 | 0.617 | 0.497 | **0.791** | 0.456 |
| SP3 | 0.387 | 0.307 | 0.228 | 0.361 | 0.244 | 0.548 | 0.454 | **0.745** | 0.316 |
| SP4 | 0.444 | 0.365 | 0.229 | 0.389 | 0.228 | 0.546 | 0.498 | **0.740** | 0.401 |
| UB1 | 0.472 | 0.415 | 0.260 | 0.571 | 0.202 | 0.436 | 0.470 | 0.459 | **0.851** |
| UB2 | 0.516 | 0.445 | 0.340 | 0.606 | 0.281 | 0.522 | 0.585 | 0.505 | **0.855** |
| UB3 | 0.509 | 0.452 | 0.226 | 0.564 | 0.214 | 0.440 | 0.483 | 0.443 | **0.861** |

### 4.5. Reliability Testing

Table 11. Cronbach's Alpha

| Variable | Cronbach's alpha | Result |
|---|---|---|
| Performance Expectancy | 0.757 | Reliable |
| Effort Expectancy | 0.700 | Reliable |
| Social Influence | 0.827 | Reliable |
| Perceived Trust | 0.782 | Reliable |
| Fear Of Financial Lost | 0.831 | Reliable |
| Perceived Online Identity Theft | 0.756 | Reliable |
| Security and Privacy | 0.751 | Reliable |
| Behavioral Intention | 0.817 | Reliable |
| Use Behavior | 0.621 | Reliable |

In the Cronbach's alpha test, the results show that all variables are considered reliable because they have a value $> 0.60$ [36], as shown in Table 11.

Table 12. Composite Reliability

| Variable | Composite Reliability (rho_a) | Composite Reliability (rho_c) | Result |
|---|---|---|---|
| Performance Expectancy | 0.763 | 0.846 | Reliable |
| Effort Expectancy | 0.700 | 0.816 | Reliable |
| Social Influence | 0.832 | 0.896 | Reliable |

| Variable | Composite Reliability (rho_a) | Composite Reliability (rho_c) | Result |
|---|---|---|---|
| Perceived Trust | 0.789 | 0.860 | Reliable |
| Fear Of Financial Lost | 0.896 | 0.896 | Reliable |
| Perceived Online Identity Theft | 0.807 | 0.857 | Reliable |
| Security and Privacy | 0.752 | 0.842 | Reliable |
| Behavioral Intention | 0.622 | 0.798 | Reliable |
| Use Behavior | 0.818 | 0.891 | Reliable |

In the composite reliability test, as shown in Table 12, the results indicate that all variables are considered reliable because they have a value $> 0.7$ [37–39].

### 4.6. Discussion of Hypotheses

Table 13. Hypotheses

| | Hypothesis | T statistics | P values | Result |
|---|---|---|---|---|
| H1 | Performance Expectancy → Behavioral Intention | 4.044 | 0.000 | Accepted |
| H2 | Effort Expectancy → Behavioral Intention | 1.406 | 0.160 | Rejected |
| H3 | Social Influence → Behavioral Intention | 2.759 | 0.006 | Accepted |
| H4 | Perceived Trust → Behavioral Intention | 2.770 | 0.006 | Accepted |
| H5 | Fear Of Financial Lost → Security and Privacy | 2.290 | 0.022 | Accepted |
| H6 | Perceived Online Identity Theft → Security and Privacy | 1.829 | 0.068 | Rejected |
| H7 | Security and Privacy → Behavioral Intention | 1.573 | 0.116 | Rejected |
| H8 | Behavioral Intention → Use Behavior | 13.898 | 0.000 | Accepted |

- **H1:** In the test results for Hypothesis H1 in Table 13, which examines the relationship between Performance Expectancy and Behavioral Intention, a P-value of less than 0.05 (specifically 0.000) and a T-statistic value of 4.044 (greater than or equal to 1.966) were obtained. This leads to the conclusion that the Performance Expectancy of the digital banking application has a positive impact on Behavioral Intention.
- **H2:** In the test results for Hypothesis H2 in Table 13, which examines the relationship between Effort Expectancy and Behavioral Intention, a P-value greater than or equal to 0.05 (specifically 0.160) and a T-statistic value of 1.406 (less than 1.966) were obtained. This leads to the conclusion that the Effort Expectancy of the digital banking application does not have a positive impact on Behavioral Intention.
- **H3:** In the test results for Hypothesis H3 in Table 13, which examines the relationship between Social Influence and Behavioral Intention, a P-value of less than 0.05 (specifically 0.006) and a T-statistic value of 2.759 (greater than or equal to 1.966) were obtained. This leads to the conclusion that the Social Influence of the digital banking application has a positive impact on Behavioral Intention.
- **H4:** In the test results for Hypothesis H4 in Table 13, which examines the relationship between Perceived Trust and Behavioral Intention, a P-value of less than 0.05 (specifically 0.006) and a T-statistic value of 2.770 (greater than or equal to 1.966) were obtained. This leads to the conclusion that Perceived Trust in the digital banking application has a positive impact on Behavioral Intention.
- **H5:** In the test results for Hypothesis H5 in Table 13, which examines the relationship between Fear Of Financial Lost and Security and Privacy, a P-value of less than 0.05 (specifically 0.022) and a T-statistic value of 2.290 (greater than or equal to 1.966) were obtained. This leads to the conclusion that Fear Of Financial Lost in the digital banking application has a positive impact on Security and Privacy.
- **H6:** In the test results for Hypothesis H6 in Table 13, which explores the connection between Perceived Online Identity Theft and Security and Privacy, a P-value of 0.068 (greater than or equal to 0.05) and a T-statistic of 1.829 (less than 1.966) were observed. This indicates that Perceived Online Identity Theft in the digital banking application does not positively influence Security and Privacy.

- **H7:** In the test results for Hypothesis H7 in Table 13, which investigates the link between Security and Privacy and Behavioral Intention, a P-value of 0.116 (greater than or equal to 0.05) and a T-statistic of 1.573 (below 1.966) were observed. This suggests that Security and Privacy within the digital banking application do not positively influence Behavioral Intention.

- **H8:** In the test results for Hypothesis H8 in Table 13, which explores the relationship between Behavioral Intention and Use Behavior, a P-value of 0.000 (less than 0.05) and a T-statistic of 13.898 (greater than or equal to 1.966) were found. This indicates that Behavioral Intention in the digital banking application positively affects Use Behavior.

### 4.7. Discussion of Diret Effect

Table 14. Direct Effect

| | Hypothesis | T statistics | P values | Result |
|---|---|---|---|---|
| H1A | Performance Expectancy → Use Behavior | 3.700 | 0.000 | Accepted |
| H2A | Effort Expectancy → Use Behavior | 1.391 | 0.164 | Rejected |
| H3A | Social Influence → Use Behavior | 2.640 | 0.008 | Accepted |
| H4A | Perceived Trust → Use Behavior | 2.741 | 0.006 | Accepted |
| H5A | Fear Of Financial Lost → Use Behavior | 1.220 | 0.223 | Rejected |
| H6A | Perceived Online Identity Theft → Use Behavior | 1.080 | 0.280 | Rejected |
| H7A | Security and Privacy → Use Behavior | 1.577 | 0.115 | Rejected |

In Table 14, the discussion focuses on the direct effect of independent variables without moderation variables. It can be seen that the P-values are less than 0.05 and the T-statistics are greater than or equal to 1.966 for the independent variables Performance Expectancy, Social Influence, and Perceived Trust, indicating that they have a significant impact on Use Behavior. This suggests that the performance of the digital banking application, Social Influence, and Perceived Trust in digital banking influence users to utilize digital banking. It was also found that Effort Expectancy, Fear Of Financial Lost, Perceived Online Identity Theft, and Security and Privacy do not influence users to use digital banking.

## 5. MANAGERIAL IMPLICATIONS

The author provides several recommendations to enhance the appeal and usage of digital banks in Indonesia. First, improving the performance of applications is essential to make them easier and more convenient to use, which can attract more users. Second, promotions should be evenly distributed across the Jabodetabek area and beyond to reach users in various regions [40, 41]. Third, the reliability and security of applications must be maintained to increase users sense of safety and trust in digital banking services. Lastly, managerial implications include enhancing digital banks marketing strategies by focusing on personalized services, improving the security measures to build trust, and continuously innovating features that meet customer needs [42, 43]. Digital banks should prioritize user-friendly interfaces, transparent privacy policies, and secure transaction protocols to increase adoption rates and customer loyalty. Industry practitioners should consider implementing more robust data privacy measures and tailored customer engagement strategies to increase adoption. By implementing these suggestions, it is hoped that user satisfaction and trust will increase, thereby encouraging the growth of digital banking users in Indonesia [44, 45].

## 6. CONCLUSION

This study finds that Performance Expectancy, Social Influence, and Perceived Trust have a positive impact on Behavioral Intention and Use Behavior. These findings align with previous research, which indicates that Performance Expectancy, Effort Expectancy, Facilitating Conditions, Social Influence, and Security positively influence Behavioral Intention. However, not all of these factors were found to be significantly related to Use Behavior. The factor of Behavioral Intention was found to have a positive effect on actual usage. Additionally, Performance Expectancy, Effort Expectancy, Social Influence, Perceived Risk, Perceived Trust, and Service Quality also have a significant positive impact on the intention to use an application. Furthermore,

Effort Expectancy does not have a positive effect on Behavioral Intention, in line with studies stating that Effort Expectancy, Price, and Habit are not significant factors influencing Behavioral Intention.

This study also shows differences from previous research regarding security and privacy, where Fear Of Financial Lost and Perceived Online Identity Theft did not impact Security & Privacy Concerns or Behavioral Intention, contrary to previous studies that showed these factors had an effect. In this context, it illustrates that users opt for digital banking due to convenience and their trust that digital banks properly protect customer data and will not misuse it.

It can be concluded that three main factors influence the user's Behavioral Intention in using a digital banking app. First, Performance Expectancy has a significant impact on Behavioral Intention and Use Behavior, suggesting that improving the app's performance in terms of usability and convenience can increase user productivity. Second, Social Influence also affects Behavioral Intention, where effective promotion can boost users interest in using a digital banking app. Additionally, Perceived Trust plays a crucial role in shaping Behavioral Intention, which ultimately affects Use Behavior. Users trust can be strengthened by ensuring the reliability and security guarantees of the digital banking app, so that users feel safe and confident in using the service. Overall, these three factors Performance Expectancy, Social Influence, and Perceived Trust are important in increasing the adoption of digital banking apps among users.

## 7. DECLARATIONS

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### 7.2. Author Contributions

Conceptualization: ES; Methodology: VU; Software: ES; Validation: VU and ES; Formal Analysis: ES; Investigation: VU; Resources: ES; Data Curation: VU; Writing Original Draft Preparation: ES; Writing Review and Editing: VU; Visualization: ES; All authors, ES, and VU, have read and agreed to the published version of the manuscript.

### 7.3. Data Availability Statement

The data presented in this study are available on request from the corresponding author.

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### 7.5. Declaration of Conflicting Interest

The authors declare that they have no conflicts of interest, known competing financial interests, or personal relationships that could have influenced the work reported in this paper.

## REFERENCES

[1] APJII, "Apjii in indonesia digital outlook 2022," 2022. [Online]. Available: https://apjii.or.id/berita/d/apjii-di-indonesia-digital-outlook-2022_857

[2] Kompas, "The euphoria of the quick election count only has a momentary effect on the jci," 2023. [Online]. Available: https://www.kompas.id/artikel/en-euforia-hitung-cepat-pemilu-hanya-berefek-sesaat-pada-ihsg

[3] The Asian Banker, "Digital banks target white spaces in the financial industry with niche strategies," 2023, accessed: 2025-08-22. [Online]. Available: https://www.theasianbanker.com/updates-and-articles/digital-banks-target-white-spaces-in-the-financial-industry-with-niche-strategies

[4] Seamoney, "App manager live front low code," 2024, accessed: 2025-08-22. [Online]. Available: https://appmanager.seabank.co.id/seamoney/bke/app-manager/live/front_low_code/20240430/444724647615442088.pdf

[5] BCA Digital, "Annual report 2022," 2022, accessed: 2025-08-22. [Online]. Available: https://bcadigital.co.id/documents/AnnualReport2022.pdf

[6] United Nations, "Sustainable development goals," 2023, accessed: 2024-02-07. [Online]. Available: https://sdgs.un.org/goals
[7] N. Anwar, A. M. Widodo, B. A. Sekti, M. B. Ulum, M. Rahaman, and H. D. Ariessanti, "Comparative analysis of nij and nist methods for microsd investigations: A technopreneur approach," *Aptisi Transactions on Technopreneurship (ATT)*, vol. 6, no. 2, pp. 169–181, 2024.
[8] Bank Neo, "Laporan keuangan tahunan (audited) 2022," 2022, accessed: 2025-08-22. [Online]. Available: https://www-cms.bankneo.co.id/storage/files/1/Laporan%20Keuangan/Laporan%20Keuangan%20Tahunan%20(audited)/LKT%202022.pdf
[9] Bank Jago, "Annual report bank jago 2022," 2022, accessed: 2023-05-12. [Online]. Available: https://assets.jago.com/web-assets/public/Annual_Report_Bank_Jago_2022-New.pdf
[10] Populix, "Consumer preference towards banking and e-wallet apps," 2023, accessed: 2024-08-16. [Online]. Available: https://info.populix.co/articles/en/report/consumer-preference-towards-banking-and-e-wallet-apps/
[11] N. A. Windasari, N. Kusumawati, N. Larasati, and R. P. Amelia, "Digital-only banking experience: Insights from gen y and gen z," *Journal of Innovation & Knowledge*, vol. 7, no. 2, p. 100170, 2022.
[12] E. A. Rheeder, *Lecturer Acceptance of Online Learning at Private HEI: A Unified Theory of Acceptance and Use of Technology (UTAUT3) Perspective*. University of Johannesburg (South Africa), 2024.
[13] T. Hariguna, B. B. Madon, and U. Rahardja, "User'intention to adopt blockchain certificate authentication technology towards education," in *AIP Conference Proceedings*, vol. 2808, no. 1. AIP Publishing, 2023.
[14] É. A. A. Cardozo, J. M. M. Christino, and A. C. P. d. Carvalho, "Digital bank accounts and digital credit cards: extending utaut2 to fintech's services in brazil," *International Journal of Services and Operations Management*, vol. 44, no. 2, pp. 238–269, 2023.
[15] R. Jena, "Factors impacting senior citizens' adoption of e-banking post covid-19 pandemic: an empirical study from india," *Journal of Risk and Financial Management*, vol. 16, no. 9, p. 380, 2023.
[16] M. Marikyan and P. Papagiannidis, "Unified theory of acceptance and use of technology," *TheoryHub book*, 2021.
[17] H. Gui, U. Rahardja, X. Yang, and Y. Yan, "Ability orientation or good character? moderated mediation mechanism to determine the impact of telepresence on consumer purchasing intention in cross-border e-commerce," *Frontiers in Psychology*, vol. 13, p. 883101, 2022.
[18] E. M. Abu-Taieh, I. Alhadid, S. Abu-Tayeh, R. Masa'deh, R. S. Alkhawaldeh, S. Khwaldeh, and A. Alrowwad, "Continued intention to use of m-banking in jordan by integrating utaut, tpb, tam and service quality with ml," *Journal of Open Innovation: Technology, Market, and Complexity*, vol. 8, no. 3, p. 120, 2022.
[19] K. Mazayo, S. Agustina, and R. Asri, "Application of digital technology risk management models in banking institutions reflecting the digital transformation of indonesian banking blueprint," *International Journal of Cyber and IT Service Management*, vol. 3, no. 2, pp. 130–143, 2023.
[20] R. Sultana and N. A. Faisal, "The role of digital banking features in bank selection an analysis of customer preferences for online and mobile banking," *Available at SSRN 5049165*, 2024.
[21] A. Pambudi, R. Widayanti, and P. Edastama, "Trust and acceptance of e-banking technology effect of mediation on customer relationship management performance," *ADI Journal on Recent Innovation*, vol. 3, no. 1, pp. 87–96, 2021.
[22] P. Bhatnagr, A. Rajesh, and R. Misra, "A study on driving factors for enhancing financial performance and customer-centricity through digital banking," *International Journal of Quality and Service Sciences*, vol. 16, no. 2, pp. 218–250, 2024.
[23] B. Kaur, S. Kiran, S. Grima, and R. Rupeika-Apoga, "Digital banking in northern india: The risks on customer satisfaction," *Risks*, vol. 9, no. 11, p. 209, 2021.
[24] V. Chauhan, R. Yadav, and V. Choudhary, "Adoption of electronic banking services in india: an extension of utaut2 model," *Journal of Financial Services Marketing*, vol. 27, no. 1, pp. 27–40, 2022.
[25] A. Irimia-Diéguez, G. Albort-Morant, M. D. Oliver-Alfonso, and S. Ullah, "Predicting the intention to use paytech services by islamic banking users," *International Journal of Islamic and Middle Eastern Finance and Management*, vol. 17, no. 1, pp. 1–15, 2024.
[26] P. Hille, G. Walsh, and M. Cleveland, "Consumer fear of online identity theft: Scale development and validation," *Journal of Interactive Marketing*, vol. 30, no. 1, pp. 1–19, 2015.
[27] A. B. Jibril, M. A. Kwarteng, R. K. Botchway, J. Bode, and M. Chovancova, "The impact of online

identity theft on customers' willingness to engage in e-banking transaction in ghana: A technology threat avoidance theory," *Cogent Business & Management*, vol. 7, no. 1, p. 1832825, 2020.

[28] F. A. Ogedengbe and Y. Y. Abdul-Talib, "Factors influencing electronic banking continuance usage intention in developing economies: A study of nigeria," *International Journal of Business Information Systems*, vol. 35, no. 1, pp. 63–87, 2020.

[29] Y. A. Soomro, "Understanding the adoption of sadad e-payments: Utaut combined with religiosity as moderator," *International Journal of E-Business Research (IJEBR)*, vol. 15, no. 1, pp. 55–74, 2019.

[30] A. U. Hasanah, Y. Shino, and S. Kosasih, "The role of information technology in improving the competitiveness of small and sme enterprises," *IAIC Transactions on Sustainable Digital Innovation (ITSDI)*, vol. 3, no. 2, pp. 168–174, 2022.

[31] Y. Hanif and H. S. Lallie, "Security factors on the intention to use mobile banking applications in the uk older generation (55+). a mixed-method study using modified utaut and mtam-with perceived cyber security, risk, and trust," *Technology in Society*, vol. 67, p. 101693, 2021.

[32] M. Bouteraa, R. R. I. Raja Hisham, and Z. Zainol, "Challenges affecting bank consumers' intention to adopt green banking technology in the uae: A utaut-based mixed-methods approach," *Journal of Islamic Marketing*, vol. 14, no. 10, pp. 2466–2501, 2023.

[33] E. Mogaji and N. P. Nguyen, "Managers' understanding of artificial intelligence in relation to marketing financial services: insights from a cross-country study," *International Journal of Bank Marketing*, vol. 40, no. 6, pp. 1272–1298, 2022.

[34] A. T. To and T. H. M. Trinh, "Understanding behavioral intention to use mobile wallets in vietnam: Extending the tam model with trust and enjoyment," *Cogent Business & Management*, vol. 8, no. 1, p. 1891661, 2021.

[35] T. Ahnert, K. Assenmacher-Wesche, P. Hoffmann, A. Leonello, C. Monnet, and D. Porcellacchia, *The economics of central bank digital currency*. ECB Working Paper, 2022, no. 2713.

[36] W. Ramadayanti and K. Kosasih, "The influence of financial performance on people's business credit in banking companies for the period 2010-2019," *APTISI Transactions on Management*, vol. 5, no. 1, pp. 73–78, 2021.

[37] A. Williams, R. Widayanti, T. Maryanti, and D. Julianingsih, "Effort to win the competition in digital business payment modeling," *Startupreneur Business Digital (SABDA Journal)*, vol. 1, no. 1, pp. 83–95, 2022.

[38] R. Sankaran and S. Chakraborty, "Factors impacting mobile banking in india: Empirical approach extending utaut2 with perceived value and trust," *IIM Kozhikode Society & Management Review*, vol. 11, no. 1, pp. 7–24, 2021.

[39] J. R. Mansa, S. A. Pratama, W. Wirdayanti, and D. S. Angreni, "Optimizing user interface of mbkm information system & academic services using design thinking method (case study: Tadulako university)," *IAIC Transactions on Sustainable Digital Innovation (ITSDI)*, vol. 6, no. 1, pp. 34–50, 2024.

[40] J. Hair and A. Alamer, "Partial least squares structural equation modeling (pls-sem) in second language and education research: Guidelines using an applied example," *Research Methods in Applied Linguistics*, vol. 1, no. 3, p. 100027, 2022.

[41] B. Lavanya and A. D. Rajkumar, "Adoption of digital innovations in rural banking of vellore district: Based on utaut model," *International Research Journal of Multidisciplinary Scope*, vol. 5, no. 1, pp. 263–271, 2024.

[42] V. Subrahmanyam, S. Kumar, S. Srivastava, A. S. Bist, B. Sah, N. K. Pani, and P. Bhambu, "Optimizing horizontal scalability in cloud computing using simulated annealing for internet of things," *Measurement: Sensors*, vol. 28, p. 100829, 2023.

[43] E. K. Penney, J. Agyei, E. K. Boadi, E. Abrokwah, and R. Ofori-Boafo, "Understanding factors that influence consumer intention to use mobile money services: An application of utaut2 with perceived risk and trust," *Sage Open*, vol. 11, no. 3, p. 21582440211023188, 2021.

[44] R. Salam, Q. Aini, B. A. A. Laksminingrum, B. N. Henry, U. Rahardja, and A. A. Putri, "Consumer adoption of artificial intelligence in air quality monitoring: A comprehensive utaut2 analysis," in *2023 Eighth International Conference on Informatics and Computing (ICIC)*. IEEE, 2023, pp. 1–6.

[45] E. DePoy, *Introduction to research-e-book: Understanding and applying multiple strategies*. Elsevier Health Sciences, 2024.