

Analysis of User Readiness and Acceptance of SeaBank Indonesia Using the Technology Readiness and Acceptance Model (TRAM) Approach

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ABSTRACT

The financial sector has been significantly impacted by information technology, with digital banks emerging to provide services through digital platforms. SeaBank Indonesia, a digital bank, offers conveniences like online account opening, free interbank transfers, and various digital payment options. However, some users have reported issues with the application, such as login problems and slow processing times. Additionally, some conventional customers remain hesitant to adopt digital banking due to inexperience and security concerns. This study aims to explore factors influencing users' adoption of SeaBank Indonesia by applying the Technology Readiness and Acceptance Model (TRAM). Using a quantitative approach with purposive sampling, the research collected 421 valid responses from SeaBank Indonesia users through online questionnaires. Data analysis employed partial least squares structural equation modeling (PLS-SEM). The results accepted 8 out of 12 hypotheses, revealing that intention to use is directly influenced by perceived usefulness, perceived ease of use, and perceived security. Perceived usefulness is directly affected by optimism, innovativeness, and perceived ease of use, while perceived ease of use is directly influenced by optimism and innovativeness. These findings provide insights into the factors driving digital banking adoption in Indonesia, highlighting the importance of user-friendly interfaces, perceived security, and technological readiness in shaping users' intentions to use digital banking applications like SeaBank Indonesia.

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1. INTRODUCTION

With the development of technology and information, companies compete to take advantage of this development to add value to their business processes. The financial sector is one of several other sectors that are affected and utilize information technology. Banking applications have empowered customers to engage in digital technology transactions and simplified banking protocols, making it easier for banks to defecate online than traditional methods (Reihandho & Fajarwati, 2023). Digital banks are an innovation of digital finance. Digital banks are banks that use digital technology to provide various types of banking services to customers. Customers have the freedom to access and carry out all regular banking activities anytime and anywhere through digital banking without having to go directly to a physical bank branch (Windasari et al., 2022).

SeaBank Indonesia is a digital banking service based on a mobile application. SeaBank is a digital banking application that facilitates financial management from deposits to transactions anywhere and anytime (Mala et al., 2023). SeaBank provides banking services to customers through digital channels. SeaBank also offers conveniences such as online account opening, interbank transfers free of admin fees, deposit savings, e-wallet top-ups, and QRIS payments. With the convenience offered, SeaBank won an award as the best digital bank with excellent service from BSEM in 2023 and has the highest total assets among digital banks.

However, some users still complain about obstacles in the login system, transactions, and applications that are heavy and slow in processing. From these problems, it is a challenge for companies to make improvements to retain users and reduce costs caused by platform development and maintenance (Caldeira et al., 2021). In addition, for some conventional customers, there is still reluctance and concern to use digital banking applications due to a lack of experience and security (Mufarih et al., 2020).

Companies need to implement smart tactics to increase the number of users. The combination of the Technology Acceptance Model (TAM) and Technology Readiness Index (TRI) known as the Technology Readiness and Acceptance Model (TRAM) explains how personality dimensions affect the interaction and use of new technologies (Godoe & Johansen, 2012). The TRAM model links personal opinions with how technology works in user adoption (Lin et al., 2007). TRAM connects from the perspective of personal opinion with how technology works in adoption in the lives of its users (Lin et al., 2007). Consumers have the intention to use technology consisting of practical and theoretical foundations, where they will understand the readiness of the technology and then consider the ease of use and its usefulness (Lin et al., 2007).

In addition, user trust is a factor that indicates that users feel safe in using the service without having to worry about risks or other problems. Perceived security refers to the level of confidence and trust placed in the system's ability to share and protect sensitive information safely (Sharma & Sharma, 2019). In the study of Siagian et al. (2022) users who trust the security procedures, services, and information in the digital transaction process will be attracted to the application. The security perceived by users is seen from the technical protection which includes three factors, namely the existence of a mechanism in the payment system that becomes privacy, integrity, and data confidentiality (Handoko et al., 2022). The safer a technology is, the easier it is for users to feel its benefits in everyday life.

2. RESEARCH FRAMEWORK

This study uses the TAM model combined with the TRI model or what is known as the Technology Readiness and Acceptance Model (TRAM). The TRAM method combines the general dimensions of TRI with the system-specific dimensions of TAM to explain how it can affect individual interactions, experiences, and the use of new technologies (Lin et al., 2007). The TRAM model is used to determine the effect of the level of readiness of information systems or information technology on the acceptance of information systems or technology (Andayani & Ono, 2020).

2.1 Research Model

This study uses the TRAM model and adds one construct, namely perceived security to identify the influence of the level of readiness of information systems or information technology on the acceptance of information systems or technology. Figure 1 shows an overview of the framework.

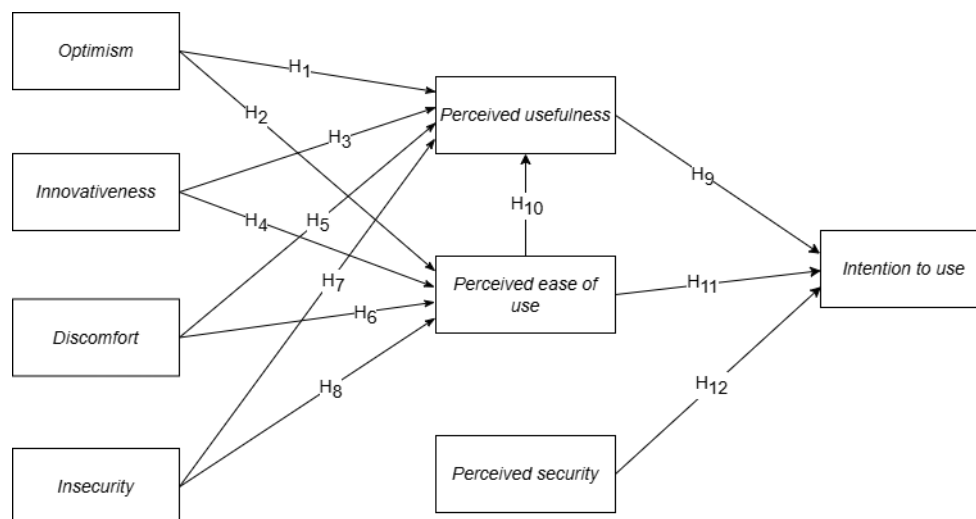


Figure 1. Research Framework

2.2 Research Hypothesis

The role of a positive attitude towards technology can create a perception that digital banking technology is useful in work and daily life (Musyaffi et al., 2022). Several previous studies have found that optimism has a positive effect on perceptions of ease and usefulness (Martens et al., 2017; Pradana & Sagoro, 2021; Sivathanu, 2019). According to Martens et al. (2017), individuals with an optimistic attitude consider systems to be more useful and easier to use compared to less optimistic individuals. Based on this theoretical foundation, the following hypothesis is formulated.

H1: Optimism has a positive effect on perceived usefulness in the use of SeaBank Indonesia digital banking

H2: Optimism has a positive effect on perceived ease of use in the use of SeaBank Indonesia digital banking

People with high levels of personal innovativeness are expected to be early adopters of technology, assuming they have technical proficiency, because they face fewer barriers to mastering new technologies (Auliandri & Arimbi, 2021). With fewer barriers, they can more easily use and derive greater benefits from these technologies. Musyaffi et al. (2022) found that innovativeness is a major factor influencing the perceived ease of use and usefulness of digital banking. Additionally, Pradana and Sagoro (2021) demonstrated that innovativeness impacts the perceived ease of use and usefulness of technology. Based on these findings, the researcher formulates the following hypothesis.

H3: Innovativeness has a positive effect on perceived usefulness in the use of SeaBank Indonesia digital banking

H4: Innovativeness has a positive effect on perceived ease of use in the use of SeaBank Indonesia digital banking

Discomfort generally causes concern and anxiety about using new technology. Parasuraman (2000) defines discomfort as users feeling overwhelmed and lacking control when using technology. This discomfort is associated with negative attitudes towards technology, where individuals experiencing it are more reluctant to accept and use new technologies. Research by Khadka and Kohsuwan (2018) and Musyaffi et al. (2022) indicates that discomfort has a negative and significant effect on the perceived ease of use and usefulness of technology. The lower a person's level of discomfort, the higher their perception of a technology's ease of use and usefulness. Based on these findings, the researcher formulates the following hypothesis.

H5: Discomfort has a negative effect on perceived usefulness in the use of SeaBank Indonesia digital banking

H6: Discomfort has a negative effect on perceived ease of use in the use of SeaBank Indonesia digital banking

Insecurity refers to an individual's lack of trust in the integrity and security of technology, which causes doubts about using it (Andayani & Ono, 2020). The lower a person's level of insecurity, the higher their perception of a technology's ease of use and usefulness. Prospective users seek guarantees of security and privacy to receive benefits from technology use. The absence of such guarantees can hinder user adoption of new technologies (Auliandri & Arimbi, 2021). Several previous studies have shown that insecurity has a negative effect on perceived ease of use and perceived usefulness (Musyaffi et al., 2022; Pradana & Sagoro, 2021).

H7: Insecurity has a negative effect on perceived usefulness in the use of SeaBank Indonesia digital banking

H8: Insecurity has a negative effect on perceived ease of use in the use of SeaBank Indonesia digital banking

Perceived usefulness is an individual's belief that using technology can improve their work performance (Andayani & Ono, 2020). Davis (1989) identified perceived usefulness as the primary contributor to new technology adoption. (Musyaffi et al., 2022) argue that if a technology does not provide benefits to its users, it is unlikely to be prioritized for use. Consequently, most people adopt new technologies based on their functionality. Previous research has consistently shown that perceived usefulness influences users' intentions to adopt a technology (Godoe & Johansen, 2012; Martens et al., 2017; Musyaffi et al., 2022).

H9: Perceived usefulness has a positive effect on the intention to use SeaBank Indonesia digital banking

Perceived ease of use refers to an individual's perception of how effortlessly they can use new technology. Users' confidence in improved work performance often depends on the technology's ease of use. Previous studies have demonstrated that perceived ease of use increases the intention to adopt technology (Martens et al., 2017; Pradana & Sagoro, 2021). Davis (1989) noted that enhancing a system's ease of use contributes to increased usability by reducing required effort. Musyaffi et al. (2022) found that as users experience the ease and benefits of technology, their tendency to adopt it increases. Several studies have consistently shown that perceived ease of use positively affects perceived usefulness (Khadka & Kohsuwan, 2018; Pradana & Sagoro, 2021; Sivathanu, 2019).

H10: Perceived ease of use has a positive effect on perceived usefulness in the use of digital banking SeaBank Indonesia

H11: Perceived ease of use has a positive effect on intention to use digital banking SeaBank Indonesia

Perceived security refers to an individual's level of confidence and trust in a technology's ability to safely handle sensitive information (Molthathong & Piphatanangkun, 2023). In the context of digital banking, security involves ensuring that users' funds and personal data are protected from loss or theft during transactions. Users are more likely to conduct financial transactions online when they feel their confidential data is secure (Lisana, 2024). Security issues such as personal and financial data leaks, cyber threats, and identity theft are major concerns that can negatively impact users' intentions to use fintech services (Osman et al., 2021). Several studies have consistently demonstrated that perceived security positively affects users' intentions to adopt a technology (Chawla & Joshi, 2023; Handoko et al., 2022; Kholid & Soemarso, 2018).

H12: Perceived security has a positive effect on intention to use digital banking SeaBank Indonesia

3. RESEARCH METHODS

This research employs a quantitative approach, utilizing numerical data analyzed through statistical methods to test the formulated hypotheses. Data were collected via online questionnaires distributed across several social media platforms. The sampling technique uses purposive sampling, namely a non-probability sampling strategy. This study focuses on the SeaBank application.

Respondent data were collected using a questionnaire given via Google Forms to each SeaBank application user. The survey method was used in this study to obtain data from certain natural places, researchers collected data by distributing questionnaires (Sugiyono, 2013). Demographic information collected includes telephone number, gender, age, education level, and domicile. This study attempts to describe, measure, and evaluate certain phenomena or factors related to the adoption of technological innovation by consumers.

3.1 Sampling

The sampling technique in this study is the purposive sampling method where the determination of the sample is based on special criteria or considerations (Sugiyono, 2013). The criteria set as a sample in this study are users of the SeaBank Indonesia application. This criterion is set because someone can assess the SeaBank Indonesia application only if that person has used the application. The Slovin formula sets a minimum sample size of 400 respondents. However, this number was added to a sample of 20 obtained from the results of the sample calculation and an error rate of 5% to anticipate invalid data so that the data can be used accurately and get consistent results. So this study requires a total sample of 420 respondents.

3.2 Measurement

These questionnaires incorporated variables from the Technology Readiness and Acceptance Model (TRAM), using a 5-point Likert scale. The study employs partial least squares–structural equation modelling (PLS-SEM) for data analysis. PLS-SEM was chosen to examine relationships and influences between constructs, making it particularly suitable for this study's aim of predicting factors influencing technology adoption. The PLS-SEM technique involves two stages: evaluation of the measurement model (outer model) and analysis of the structural model (inner model). The analysis was conducted using SmartPLS version 3 software.

4. RESULTS AND DISCUSSION

4.1 Demographic Analysis

Analysis of data from 421 respondents reveals that SeaBank Indonesia users are predominantly female, comprising 84.1% (354 individuals) of the sample, while male users account for 15.9% (67 individuals). This gender disparity may be attributed to women's tendency to more actively adopt and use digital financial services, driven by needs for current information, knowledge acquisition, task completion, and communication.

Regarding age distribution, the majority of respondents (over 90%) fall within the 17–30 year age range. This demographic primarily consists of students who have completed secondary education and possess a good understanding of digital services, familiarity with social media, and experience using digital platforms for communication and transactions (Wen et al., 2014). These respondents belong to Generation Z, a cohort frequently targeted in large-scale internet surveys due to their proficiency with computers and the internet (Abumalloh et al., 2020). Table 1 presents a comprehensive demographic profile of the respondents.

Table 1. Demographic Result of Respondents

| <i>Category</i> | <i>Frequency</i> | <i>Percentage</i> |
|--------------------------|-------------------------|--------------------------|
| <i>Gender</i> | | |
| <i>Female</i> | 354 | 84.1% |
| <i>Male</i> | 67 | 15.9% |
| <i>Age</i> | | |
| <i>17-25</i> | 385 | 91.4% |
| <i>26-30</i> | 31 | 7.4% |
| <i>31-35</i> | 3 | 0.7% |
| <i>36-40</i> | 1 | 0.2% |
| <i>41-55</i> | 1 | 0.2% |
| <i>Education</i> | | |
| <i>Junior Highschool</i> | 3 | 0.7% |

| <i>Category</i> | <i>Frequency</i> | <i>Percentage</i> |
|---|------------------|-------------------|
| <i>Senior Highschool Associate's Degree</i> | 285 | 67.7% |
| <i>Bachelor's Degree</i> | 99 | 23,5% |
| <i>Master's Degree</i> | 3 | 0,7% |

4.2 Measurement Model Test Result (Outer Model)

The outer model test is also called the measurement model. The first test is convergent validity. An indicator is considered valid if the outer loading of each indicator has a minimum threshold of 0.7 (Hair et al., 2021). Table 2 displays the calculation results for convergent validity across all indicators/items. All 29 indicators examined in this study are valid, with outer loading values above 0.7.

Table 2. Outer Loading

| Indicator | Outer Loading | Information | Indicator | Outer Loading | Information |
|------------------|----------------------|--------------------|------------------|----------------------|--------------------|
| OPM1 | 0.714 | Valid | PUF4 | 0.831 | Valid |
| OPM2 | 0.792 | Valid | PEU1 | 0.843 | Valid |
| OPM3 | 0.762 | Valid | PEU2 | 0.847 | Valid |
| OPM4 | 0.710 | Valid | PEU3 | 0.787 | Valid |
| INV1 | 0.779 | Valid | PEU4 | 0.786 | Valid |
| INV2 | 0.883 | Valid | PEU5 | 0.827 | Valid |
| DSC1 | 0.761 | Valid | PSC1 | 0.737 | Valid |
| DSC2 | 0.724 | Valid | PSC2 | 0.821 | Valid |
| DSC3 | 0.755 | Valid | PSC3 | 0.848 | Valid |
| DSC4 | 0.720 | Valid | PSC4 | 0.833 | Valid |
| INS1 | 0.890 | Valid | PSC5 | 0.784 | Valid |
| INS2 | 0.817 | Valid | INT1 | 0.897 | Valid |
| PUF1 | 0.840 | Valid | INT2 | 0.906 | Valid |
| PUF2 | 0.760 | Valid | INT3 | 0.827 | Valid |
| PUF3 | 0.813 | Valid | | | |

Convergent validity can be assessed not only through individual indicator loadings but also using the Average Variance Extracted (AVE) value for each construct in the study model. A minimum AVE value of 0.5 for each variable is considered acceptable for validity (Hair et al., 2021). All 10 variables included in this study have AVE values above this criterion, demonstrating that the measurement model has excellent convergent validity. Discriminant validity evaluates the extent to which constructs in the research model differ from one another. The subsequent test involves assessing discriminant validity using the Fornell-Larcker criterion, which states that the square root of the AVE for each variable should be greater than its highest correlation with any other variable.

Table 3 demonstrates that all variables meet this criterion, with the square root value of their AVE exceeding their correlations with other variables, thus confirming their discriminant validity.

Table 3. Discriminant validity Fornell-Larcker Value

| | OPM | INV | DSC | INS | PUF | PEU | PSC | INT |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| OPM | 0.745 | | | | | | | |
| INV | 0.331 | 0.833 | | | | | | |
| DSC | 0.213 | 0.113 | 0.740 | | | | | |
| INS | 0.128 | 0.129 | 0.366 | 0.855 | | | | |
| PUF | 0.517 | 0.346 | 0.210 | 0.212 | 0.812 | | | |
| PEU | 0.517 | 0.325 | 0.310 | 0.183 | 0.737 | 0.818 | | |
| PSC | 0.392 | 0.312 | 0.199 | 0.166 | 0.516 | 0.559 | 0.806 | |
| INT | 0.400 | 0.228 | 0.147 | 0.400 | 0.543 | 0.605 | 0.544 | 0.877 |

This study also assesses reliability to determine the consistency and dependability of the indicators used to measure each construct or variable. Reliability is evaluated using two criteria: Cronbach's alpha and composite reliability. The Cronbach's alpha value should be greater than or equal to 0.40 (Ekolu & Quainoo, 2019), while the composite reliability value should be greater than or equal to 0.70 (Hair et al., 2021). As shown in Table 4, all variables in this study demonstrate reliability by meeting these criteria. Specifically, each variable has a Cronbach's alpha value of 0.40 or higher (Ekolu & Quainoo, 2019) and a composite reliability value of 0.70 or higher (Hair et al., 2021).

Table 4. Reliability Value

| Variable | Cronbach's Alpha | Composite Reliability | Information |
|------------------------------------|-------------------------|------------------------------|--------------------|
| Optimism (OPM) | 0,732 | 0,833 | Reliable |
| Innovativeness (INV) | 0,565 | 0,818 | Reliable |
| Discomfort (DSC) | 0,726 | 0,829 | Reliable |
| Insecurity (INS) | 0,635 | 0,844 | Reliable |
| Perceived usefulness (PUF) | 0,827 | 0,885 | Reliable |
| Perceived ease of use (PEU) | 0,876 | 0,910 | Reliable |
| Perceived security (PSC) | 0,864 | 0,902 | Reliable |
| Intention to use (INT) | 0,849 | 0,909 | Reliable |

Model fit testing is conducted to evaluate the suitability of the research model, reduce or prevent specification errors, and ensure compatibility with sample data. The model fit testing criteria in this study include standardized root mean square residual (SRMR), root mean square residual covariance (RMSttheta), and normed fit index (NFI). The threshold values for each criterion are as follows: SRMR < 0.08 (Gupta et al., 2024),

$RMSt_{\theta} \geq 0.05$ (Henseler et al., 2014), and $NFI > 0.9$ (Bentler & Bonett, 1980). The results of the model fit test indicate that the research model is considered satisfactory because it meets the specified criteria, as described in Table 5.

Table 5. Model Fit Value

| Criterion | Value | Information |
|----------------------------|-------|--------------|
| SRMR | 0,062 | Good fit |
| RMS_{theta} | 0,119 | Good fit |
| NFI | 0,763 | Marginal fit |

The coefficient of determination test evaluates the accuracy of predicting the impact of independent variables on dependent variables. The R^2 value ranges from 0 to 1, with higher values indicating better predictive accuracy. According to Hair et al. (2021), R^2 values are categorized as follows: < 0.25 indicates weak predictive power, $0.25 - 0.75$ indicates moderate predictive power, and > 0.75 indicates strong predictive power. Considering that this study relates to consumer behaviour, an R^2 value of 0.20 is considered quite high. The results of the coefficient of determination test are presented in Table 6.

Table 6. R-square Value

| Variable | Value | Information |
|------------------------------------|-------|-------------|
| Perceived ease of use (PEU) | 0,334 | Weak |
| Perceived usefulness (PUF) | 0,583 | Moderate |
| Intention to use (INT) | 0,437 | Weak |

Next, a path coefficient test is conducted to show the strength of the relationship and direction of the correlation between variables in the research model. To test the significance and relevance of coefficients, bootstrapping is performed by simultaneously checking the t-value and p-value for hypothesis testing. This study uses a two-sided test with a critical value of 1.96 (significance level = 5%). The bootstrapping procedure determines the significance of the coefficient (t-value) and the strength of the relationship (p-value). If the t-value exceeds the critical value, the coefficient is considered significant, and if the p-value is less than 0.05, the hypothesis can be accepted. The direction of the correlation is determined from the original sample value: if it is greater than or equal to 0, it indicates a positive direction, while less than 0 indicates a negative direction. The detailed results of the path coefficient test are presented in Table 7.

Table 7. Path Coefficient Value

| Hypothesis | Relationship | Original Sample (O) | T Statistics | P Values | Information |
|------------|-----------------------|---------------------|--------------|----------|-------------|
| H1 | OPM \rightarrow PUF | 0,168 | 4,201 | 0,000 | Accepted |
| H2 | OPM \rightarrow PEU | 0,418 | 7,400 | 0,000 | Accepted |
| H3 | INV \rightarrow PUF | 0,082 | 2,518 | 0,012 | Accepted |

| Hypothesis | Relationship | Original Sample (O) | T Statistics | P Values | Information |
|------------|--------------|---------------------|--------------|----------|-------------|
| H4 | INV → PEU | 0,160 | 2,444 | 0,015 | Accepted |
| H5 | DSC → PUF | -0,061 | 1,843 | 0,066 | Rejected |
| H6 | DSC → PEU | 0,187 | 4,377 | 0,000 | Rejected |
| H7 | INS → PUF | 0,086 | 2,319 | 0,021 | Rejected |
| H8 | INS → PEU | 0,043 | 1,010 | 0,323 | Rejected |
| H9 | PUF → INT | 0,151 | 2,466 | 0,014 | Accepted |
| H10 | PEU → PUF | 0,627 | 14,665 | 0,000 | Accepted |
| H11 | PEU → INT | 0,339 | 5,597 | 0,000 | Accepted |
| H12 | PSC → INT | 0,277 | 6,247 | 0,000 | Accepted |

The calculation results of the relationship between optimism (OPM) and perceived usefulness (PUF) have an original sample value of 0.168 ($O \geq 0$), a t-statistic of 4.201 ($t \geq 1.96$), and a p value of 0.000 ($p \leq 0.05$). From these results, it can be interpreted that optimism (OPM) has a positive effect on perceived usefulness in using SeaBank Indonesia (H1 accepted). The results of this study are in line with research conducted by previous researchers which showed that optimism has a positive effect on perceived usefulness (Musyaffi et al., 2022; Pradana & Sagoro, 2021). In the second hypothesis, the original sample value is 0.418 ($O \geq 0$), t-statistic is 7.400 ($t \geq 1.96$), p value is 0.000 ($p \leq 0.05$), indicating that optimism positively influences the ease perceived by users in using SeaBank Indonesia (H2 accepted). By accepting both hypotheses, it can be interpreted that SeaBank Indonesia users feel that the system or service will be more useful (perceived usefulness) in meeting their needs and users will find it easier to understand and use the system or service (perceived ease of use) if users have an optimistic view that the use of technology can provide increased control, flexibility, and efficiency in their daily lives. According to Martens et al. (2017), individuals who have an optimistic attitude, these individuals will consider the system to be used to be more useful and easier to use when compared to individuals who are less optimistic.

The calculation results of the relationship between innovativeness (OPM) and perceived usefulness (PUF) show an original sample value of 0.082 ($O \geq 0$), a t-statistic of 2.518 ($t \geq 1.96$), and a p-value of 0.012 ($p \leq 0.05$). This indicates that innovativeness has a positive role in influencing perceived benefits (perceived usefulness) in using SeaBank Indonesia (H3 accepted). The results of this study align with previous studies demonstrating that innovativeness has a positive influence on perceived usefulness (Pradana & Sagoro, 2021; Sivathanu, 2019). The calculation results of the relationship between innovativeness (OPM) and perceived ease of use (PEU) show an original sample value of 0.160 ($O \geq 0$), a t-statistic of 2.444 ($t \geq 1.96$), and a p-value of 0.015 ($p \leq 0.05$). These results indicate that innovativeness has a positive role and influences the perceived ease of use in using SeaBank Indonesia, thus H4 is accepted. This finding is consistent with previous studies showing that innovativeness positively affects perceived ease of use (Musyaffi et al., 2022). More innovative user thinking contributes positively to shaping user perceptions of the level of usefulness and ease of technology. The more interested a person is in technology, the more likely they are ready to use new

technology, thereby enhancing user perceptions of its ease and usefulness. This suggests that users with higher levels of innovativeness tend to view technology as a tool that provides convenience and benefits to increase productivity, which in turn encourages high adoption rates. Users who quickly understand the ease of use are likely to perceive higher value benefits, making them more willing to exchange information with other users about SeaBank Indonesia to gain additional benefits.

In H5, the hypothesized relationship between discomfort (DSC) and perceived usefulness (PUF) is rejected. The path coefficient calculation results show that discomfort (DSC) does not significantly affect perceived usefulness (PUF) (t-statistic = 1.843; p-value = 0.066). Although the direction of the relationship is negative (original sample = -0.061), it does not align with the formulated hypothesis, which stated that discomfort (DSC) would have a negative effect on perceived usefulness (PUF). The analysis results in this study are consistent with previous research findings, which indicate that discomfort (DSC) has no significant effect on perceived usefulness (PUF) (Mahmood et al., 2023; Pradana & Sagoro, 2021). Users who feel uncomfortable using technology may perceive that they do not derive benefits from its use. This personal perception suggests that feelings of discomfort can raise doubts about the implemented system, leading users to question the value of the benefits obtainable from using the system.

The sixth hypothesis where the relationship between discomfort (DSC) and perceived ease of use (PEU) is rejected because it has a positive direction (original sample = 0.187) even though it has an influence (t-statistics = 4.377; p values = 0.000), where based on the formulated hypothesis discomfort (DSC) has a negative influence on perceived ease of use (PEU). Even though users feel uncomfortable with the technology, users tend to perceive that using SeaBank Indonesia is easy. The results of this study are in line with previous studies which showed that discomfort has a positive and significant effect on perceived ease of use (Ahmad et al., 2020; Panday, 2018). The possibility of high user assessment of discomfort is due to being burdened with the use of applications and systems due to the complexity of the user interface, lack of responsive technical assistance when there are technical problems and limited and less relevant features. Users who feel uncomfortable are more motivated to spend a lot of time to learn the system better, which ultimately leads to a better understanding and feels that the system is easier.

Next, H7 hypothesized that insecurity (INS) has a negative effect on perceived usefulness (PUF). However, based on the results of the path coefficient calculation, insecurity (INS) shows a positive effect (t-statistics = 2.319; p-values = 0.021; original sample = 0.086), leading to the rejection of H7. The results of this study are in line with previous studies which show that insecurity has a positive influence on perceived usefulness (Ahmad et al., 2020). Similarly, H8, which hypothesized that insecurity (INS) negatively affects perceived ease of use (PEU), is also rejected. In this case, insecurity (INS) has a positive direction (original sample = 0.043) and shows no significant effect (t-statistics = 1.010; p-values = 0.323) on perceived ease of use (PEU). The results of the analysis in this study are in line with the results of previous studies which stated that

insecurity (INS) has no role in perceived ease of use (PEU) (Aisyah et al., 2014; Rifai et al., 2019). Users who feel insecure about technology tend to perceive SeaBank Indonesia as both easy to use and beneficial. This heightened awareness prompts users to be more proactive in maintaining and protecting their data, fostering a sense of vigilance. Consequently, these users are motivated to learn the system more thoroughly, which ultimately enhances their familiarity and perception of ease in using the system. Feelings of insecurity can drive users to learn the system more quickly and intensively. Responsive support and feedback further facilitate this learning process, leading to an improved perception of ease and benefits associated with using SeaBank Indonesia. Generally, individuals who have never used digital banking technology and are unfamiliar with its workflow may struggle to determine whether the technology is safe. Therefore, while respondents in this study reported feelings of insecurity regarding technology, these feelings do not necessarily translate into lower perceptions of ease and usefulness. Other factors may play a more dominant role in shaping these perceptions.

The calculation result of the relationship between perceived usefulness (PUF) and intention to use (INT) has an original sample value of 0.151 ($O \geq 0$), a t-statistic of 2.466 ($t \geq 1.96$), and a p value of 0.014 ($p \leq 0.05$). This means that it can be identified that perceived usefulness (PUF) has a positive role in intention to use (INT) in using SeaBank Indonesia, so H9 accepted. These results are in line with research by Musyaffi et al. (2022) which shows that perceived usefulness (PUF) can increase interest in using digital banking because its function is to increase work productivity. This means that the higher the usefulness value obtained by the user, the higher the interest in using SeaBank Indonesia.

The next hypothesis in this study posits that perceived ease of use (PEU) positively and significantly influences perceived usefulness (PUF) in the context of SeaBank Indonesia digital banking. The results of the analysis indicate that the relationship between perceived ease of use (PEU) and perceived usefulness (PUF) has an original sample value of 0.627 ($O \geq 0$), a t-statistic of 14.665 ($t \geq 1.96$), and a p-value of 0.000 ($p \leq 0.05$). These findings demonstrate that perceived ease of use (PEU) positively affects perceived usefulness (PUF) in the use of SeaBank Indonesia, so H10 accepted. These results are in line with previous research which shows that perceived ease of use (PEU) has a positive influence on perceived usefulness (Siagian et al., 2022). This ease of use suggests that users of SeaBank Indonesia perceive the application as not requiring significant effort to understand and navigate. When users find the application easy to use, they are more likely to believe in the benefits it provides.

The eleventh hypothesis posits that perceived ease of use (PEU) positively and significantly affects intention to use (INT) in the context of SeaBank Indonesia digital banking. However, the results of the analysis reveal that the relationship between perceived ease of use (PEU) and intention to use (INT) has an original sample value of 0.168 ($O \geq 0$), a t-statistic of 3.203 ($t \geq 1.96$), and a p-value of 0.001 ($p \leq 0.05$). This indicates that perceived ease of use (PEU) actually has a positive effect on intention to use (INT) in the use of SeaBank Indonesia, so H11 accepted. These findings are consistent with

previous research, which also demonstrates that perceived ease of use (PEU) positively influences intention to use (INT) (Pradana & Sagoro, 2021). A low level of difficulty or complexity can enhance user interest in utilizing the SeaBank Indonesia application. Consequently, the various conveniences experienced by users are likely to promote greater usage of SeaBank Indonesia, facilitating smoother transaction processes. Features such as easy registration, seamless transactions, and quick fund transfers provide significant benefits, allowing customers to save time by avoiding trips to the bank for fund transfers.

The last hypothesis, H12, has an original sample value of 0.425 ($O \geq 0$), t-statistic of 9.095 ($t \geq 1.96$), p value of 0.000 ($p \leq 0.05$). This means that it can be identified that perceived security (PSC) positively influences intention to use (INT) in using SeaBank Indonesia and H112 accepted. The results of testing the hypothesis indicate that there is an influence of the perception of security felt by users on the interest in using SeaBank Indonesia. In the digital world, trust in security is very important compared to conventional banking because transactions in digital banking contain sensitive information, and parties participating in financial transactions have access to important files and information via the internet (Afghani & Yulianti, 2017). User data breaches can lead to negative perceptions which then hinder the adoption of SeaBank Indonesia services. The sense of security felt by users will positively influence the user's behavioural intention.

5. CONCLUSION

This study aims to determine what factors influence user interest in using the SeaBank Indonesia application with the Technology Readiness and Acceptance Model (TRAM) and the variable perceived security and to test how much influence these factors have. Of the 12 hypotheses that have been proposed, eight hypotheses have been accepted, leading to the conclusion that the factors influencing users' interest in using the SeaBank Indonesia application are perceived usefulness, which consists of optimism and innovativeness.

In addition to perceived usefulness, another factor affecting user interest is perceived ease of use, which also comprises optimism and innovativeness. Furthermore, perceived security also influences the intention to use the SeaBank Indonesia application. Notably, perceived security has the most significant impact on perceived security, which shows that the sense of security felt by users will positively influence the user's behavioural intention in using SeaBank Indonesia.

6. REFERENCES

Abumalloh, R. A., Ibrahim, O., & Nilash, M. (2020). Loyalty of young female Arabic customers towards recommendation agents: A new model for B2C E-

- commerce. Technology in Society, 61, 101253. <https://doi.org/10.1016/j.techsoc.2020.101253>
- Afghani, M. F., & Yulianti, E. (2017). Pengaruh Kepercayaan, Keamanan, Persepsi Risiko, Serta Kesadaran Nasabah terhadap Adopsi E-banking di Bank Bri Surabaya. *Perbanas Journal of Business and Banking*, 6(1), 113-128. <https://doi.org/10.14414/jbb.v6i1.898>
- Ahmad, H., Butt, A., Khan, A., Shafique, M., & Nawaz, Z. (2020). Reluctance to acceptance: Factors affecting e-payment adoption in Pakistan (The integration of TRI and TAM). *SMART Journal of Business Management Studies*, 16(2), 49-59. <https://doi.org/10.5958/2321-2012.2020.00016.0>
- Aisyah, M. N., Nugroho, M. A., & Sagoro, E. M. (2014). Pengaruh technology readiness terhadap penerimaan teknologi komputer pada UMKM di Yogyakarta. *Jurnal Economia*, 10(2), 105-119. <https://doi.org/10.21831/economia.v10i2.7537>
- Andayani, S., & Ono, R. S. (2020). Analisis Kesiapan Penerimaan Pengguna Terhadap E-Learning Menggunakan Model TRAM. *JURNAL SISTEM & TEKNOLOGI INFORMASI KOMUNIKASI*, 3(1), 32-39. <https://doi.org/10.32524/jusitik.v3i2.498>
- Auliandri, T. A., & Arimbi, R. D. (2021). Pengaruh technology readiness index terhadap keinginan untuk menggunakan internet banking pada PT Bank Mandiri KCP Pondok Chandra Surabaya. *Jurnal Aplikasi Manajemen dan Inovasi Bisnis (JAMIN)*, 3(2). <https://doi.org/10.47201/jamin.v3i2.79>
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588-606. <https://doi.org/10.1037/0033-2909.88.3.588>
- Caldeira, T. A., Ferreira, J. B., Freitas, A., & Falcão, R. P. d. Q. (2021). Adoption of Mobile Payments in Brazil: Technology Readiness, Trust and Perceived Quality. *Brazilian Business Review*, 18(4), 415-432. <https://doi.org/10.15728/bbr.2021.18.4.4>
- Chawla, D., & Joshi, H. (2023). Role of Mediator in Examining the Influence of Antecedents of Mobile Wallet Adoption on Attitude and Intention. *Global Business Review*, 24(4), 609-625. <https://doi.org/10.1177/0972150920924506>
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319-340. <https://doi.org/10.2307/249008>
- Ekolu, S. O., & Quainoo, H. (2019). Reliability of assessments in engineering education using Cronbach's alpha, KR and split-half methods. *Global Journal of Engineering Education*, 21(1), 24-29.
- Godoe, P., & Johansen, T. S. (2012). Understanding adoption of new technologies: Technology readiness and technology acceptance as an integrated concept. *Journal of European Psychology Students*, 3(1), 38-52. <https://doi.org/10.5334/jeps.aq>
- Gupta, K., Wajid, A., & Gaur, D. (2024). Determinants of continuous intention to use FinTech services: the moderating role of COVID-19. *Journal of Financial Services Marketing*, 29(2), 536-552. <https://doi.org/10.1057/s41264-023-00221-z>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R. Springer. <https://link.springer.com/book/10.1007/978-3-030-80519-7>

- Handoko, B. L., Siswono, G. N., & Azani, J. M. (2022). Analysis of Perceived Risk, Perceived Trust, Perceived Security Factors on Consumer Intention using E-Payment Proceedings of the 2022 International Conference on E-business and Mobile Commerce, Seoul, Republic of Korea. <https://doi.org/10.1145/3543106.3543109>
- Henseler, J., Dijkstra, T. K., Sarstedt, M., Ringle, C. M., Diamantopoulos, A., Straub, D. W., ... Calantone, R. J. (2014). Common Beliefs and Reality About PLS: Comments on Rönkkö and Evermann (2013). *Organizational Research Methods*, 17(2), 182-209. <https://doi.org/10.1177/1094428114526928>
- Khadka, R., & Kohsuwan, P. (2018). Understanding Consumers' Mobile Banking Adoption in Germany: An Integrated Technology Readiness and Acceptance Model (TRAM) Perspective. *Catalyst*, 18(1), 56-67.
- Kholid, F. I., & Soemarso, E. D. (2018). Analisis pengaruh keamanan, kemudahan penggunaan, kepercayaan nasabah dan kebermanfaatan terhadap minat menggunakan e-banking pada PT Bank BNI Syariah KCP Magelang. *Jurnal Sains Ekonomi dan Perbankan Syariah*, 8(2), 49-57.
- Lin, C.-H., Shih, H.-Y., & Sher, P. J. (2007). Integrating technology readiness into technology acceptance: The TRAM model. 24(7), 641-657. <https://doi.org/10.1002/mar.20177>
- Lisana, L. (2024). Understanding the key drivers in using mobile payment among Generation Z. *Journal of Science and Technology Policy Management*, 15(1), 122-141. <https://doi.org/10.1108/JSTPM-08-2021-0118>
- Mahmood, A., Imran, M., & Adil, K. (2023). Modeling Individual Beliefs to Transfigure Technology Readiness into Technology Acceptance in Financial Institutions. *Sage Open*, 13(1). <https://doi.org/10.1177/21582440221149718>
- Mala, I. K., Pratikto, H., Churiyah, M., Winarno, A., Sudarmiatin, Soetjipto, B. E., & Rahma, A. (2023). A The Rise Strategy Marketing Msmes: Transformation Digital Seabank as Branchless Banking in Indonesia. *International Journal of Professional Business Review*, 8(4), 1-23. <https://doi.org/10.26668/businessreview/2023.v8i4.1553>
- Martens, M., Roll, O., & Elliott, R. (2017). Testing the Technology Readiness and Acceptance Model for Mobile Payments Across Germany and South Africa. *International Journal of Innovation and Technology Management*, 14(06), 1750033-1750052. <https://doi.org/10.1142/s021987701750033x>
- Molthathong, S., & Piphatanangkun, C. (2023). Is Bangkok Ready for Open Banking? A Research Note on Exploring the Variables that Affect Innovation Adoption. *Journal of Business and Management Studies*, 5(6), 1-12. <https://doi.org/10.32996/jbms.2023.5.6.1>
- Mufarih, M., Jayadi, R., & Sugandi, Y. (2020). Factors Influencing Customers to Use Digital Banking Application in Yogyakarta, Indonesia. *The Journal of Asian Finance, Economics and Business*, 7(8), 897-907. <https://doi.org/10.13106/JAFEB.2020.VOL7.NO10.897>
- Musyaffi, A., Johari, R., Rozak, I., K Respati, D., Wolor, C., & Yusuf, M. (2022). Understanding Digital Banking Adoption During Post-Coronavirus Pandemic: An Integration of Technology Readiness and Technology Acceptance Model. *TEM Journal*, 11(2), 683-694. <https://doi.org/10.18421/TEM112-23>

- Osman, Z., Razli, I. A., & Ing, P. (2021). Does Security Concern, Perceived Enjoyment and Government Support Affect Fintech Adoption? Focused on Bank Users Journal of Marketing Advances and Practices, 3(1), 61-78.
- Panday, R. (2018). The Effect of Technology Readiness on Technology Acceptance in Using Services Delivery of Academic Information System 12th Ubaya International Annual Symposium on Management. <https://osf.io/8wx4y/download>
- Parasuraman, A. (2000). Technology Readiness Index (Tri):A Multiple-Item Scale to Measure Readiness to Embrace New Technologies. Journal of Service Research, 2(4), 307-320. <https://doi.org/10.1177/109467050024001>
- Pradana, K. A., & Sagoro, E. M. (2021). Analisis faktor-faktor minat penggunaan mobile payment pada usaha kecil dan mikro (UKM) di Yogyakarta. Jurnal Profita: Kajian Ilmu Akuntansi, 8(3), 17-30.
- Reihandho, M. I., & Fajarwati, D. (2023). Faktor-Faktor yang Mempengaruhi Niat Penggunaan Perbankan Digital di Indonesia: indonesia. ADI Bisnis Digital Interdisiplin Jurnal, 4(2), 70-80. <https://doi.org/10.34306/abdi.v4i2.961>
- Rifai, S., Asakdiyah, S., & Setyawan, R. R. (2019). Analisis Penerimaan Core Banking System Berbasis Technology Readiness an Acceptance Model pada BPRS Bangun Drajat Warga di DIY. Perisai: Islamic Banking and Finance Journal, 3(1), 57-74. <https://doi.org/10.21070/perisai.v3i1.2102>
- Sharma, S. K., & Sharma, M. (2019). Examining the role of trust and quality dimensions in the actual usage of mobile banking services: An empirical investigation. International Journal of Information Management, 44, 65-75. <https://doi.org/10.1016/j.ijinfomgt.2018.09.013>
- Siagian, H., Tarigan, Z. J. H., Basana, S. R., & Basuki, R. (2022). The effect of perceived security, perceived ease of use, and perceived usefulness on consumer behavioral intention through trust in digital payment platform. International Journal of Data and Network Science, 6(3), 861-874. <https://doi.org/10.5267/j.ijdns.2022.2.010>
- Sivathanu, B. (2019). An Empirical Study on the Intention to Use Open Banking in India. Information Resources Management Journal (IRMJ), 32(3), 27-47. <https://doi.org/10.4018/IRMJ.2019070102>
- Sugiyono. (2013). Metode penelitian kuantitatif, kualitatif dan R&D. Alfabeta Bandung. https://www.researchgate.net/profile/Hery-Purnomo/publication/377469385_METODE_PENELITIAN_KUANTITATIF_KUALITATIF_DAN_RD/links/65a89006bf5b00662e196dde/METODE-PENELITIAN-KUANTITATIF-KUALITATIF-DAN-R-D.pdf
- Wen, C., R. Prybutok, V., Blankson, C., & Fang, J. (2014). The role of E-quality within the consumer decision making process. International Journal of Operations & Production Management, 34(12), 1506-1536. <https://doi.org/10.1108/IJOPM-07-2013-0352>
- Windasari, N. A., Kusumawati, N., Larasati, N., & Amelia, R. P. (2022). Digital-only banking experience: Insights from gen Y and gen Z. Journal of Innovation & Knowledge, 7(2), 100170. <https://doi.org/10.1016/j.jik.2022.100170>