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Analysis of Factors Determining the Interest of Elderly Priority Customers in Using M-banking (Case Study: BTN Prioritas Surabaya)

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ABSTRACT

Mobile banking (m-banking) has become an essential digital banking service that offers flexibility and efficiency in financial transactions. However, elderly customers, particularly senior priority banking clients, often confront obstacles in the implementation of digital banking as a result of inadequate digital literacy and a preference for personalized conventional services. Previous studies have primarily focused on younger or general banking customers, while research on elderly priority customers remains limited. Therefore, this study analyzes the factors influencing elderly priority customers' interest in using m-banking services at BTN Prioritas Surabaya.
This research implemented a quantitative methodology using Structural Equation Modelling–Partial Least Squares (SEM-PLS). The primary data was obtained by distributing questionnaires to 160 elderly priority consumers. The variables examined include perceived knowledge, convenience, benefits, comfort, and security toward customers' interest in using m-banking services.
The findings indicate that perceived knowledge, convenience, and comfort a substantial impact elderly customers' interest in using m-banking, with perceived knowledge emerging as the strongest determinant. Meanwhile, perceived benefits and security do not significantly affect customer interest. These results suggest that elderly customers prioritize familiarity, ease of understanding, and comfortable service experiences over technical considerations in adopting digital banking services.

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INTRODUCTION

The swift advancement of information technology during the fourth industrial revolution has profoundly changed customer transaction behavior and financial service systems. (Ade et al., 2023). Mobile banking (m-banking) is one of the most significant technological advancements in the banking sector. It allows consumers to conduct

financial transactions flexibly using smartphones and other mobile devices (Yakup et al., 2020). M-banking services offer various advantages, including real-time access, efficient transactions, flexibility of use, and 24-hour financial services (Almaiah et al., 2023). From a banking industry perspective, digital banking services also reduce operational costs, improve service efficiency, and expand financial inclusion by reaching customers across broader geographic areas (Romalia & Hasan, 2023).

Despite m-banking offering many benefits, not everyone is interested in using it. Mobile banking adoption remains uneven across demographic groups. Existing evidence indicates that mobile banking usage remains dominated by younger, digitally active generations. (Handayani and Anitasari, 2022) reported that approximately 71% of mobile banking users are in the productive age group of 21 to 39 years old, while elderly customers represent only a small proportion of users. This phenomenon suggests that elderly customers face greater barriers in adapting to digital banking technologies, including technological anxiety, limited digital literacy, preference for face-to-face interaction, and lower confidence in using financial technologies independently. Consequently, understanding elderly customers' behavioral patterns in digital banking adoption is increasingly important as banks accelerate digital transformation initiatives.

The importance of this issue is even greater in the context of elderly priority banking customers. Unlike ordinary banking customers, priority customers generally have higher financial assets, more intensive transaction activity, and a stronger dependence on personalized financial services. In many banking institutions, including BTN Prioritas Surabaya, the majority of priority customers are aged 45 or older. This condition occurs because financial wealth accumulation, investment ownership, and long-term financial planning tend to increase with age. Elderly priority customers, therefore, represent a strategically important customer segment because they contribute substantially to banking profitability while simultaneously facing greater adaptation challenges toward digital banking systems.

Previous studies on mobile banking adoption have extensively examined determinants such as perceived usefulness, convenience, trust, security, benefits, and knowledge using various theoretical frameworks and quantitative approaches (Mazayo et al., 2023; Mehdiabadi et al., 2020). Several SEM-PLS studies also reported inconsistent findings regarding the determinants influencing mobile banking adoption. Valentino et al. (2022) found that social influence and credibility significantly affect the intention to use digital banking, whereas perceived convenience and benefits did not. In contrast, Purba et al. (2022) reported that convenience, benefits, security, trust, and knowledge significantly influence customers' decisions to adopt m-banking services. Similarly, Febriandika et al. (2023) demonstrated that perceived usefulness, service awareness, internet quality, and bank reputation positively influence Islamic mobile banking adoption.

However, most previous studies focused primarily on younger generations, or general banking customers who are relatively familiar with digital environments and technological adaptation (Febriandika et al., 2023; Valentino et al., 2022). Studies specifically investigating elderly customers remain limited, while research involving elderly priority customers is still rarely explored in the digital banking literature, particularly within the Indonesian banking context. More importantly, previous studies generally treated elderly customers as a homogeneous demographic group, without distinguishing between elderly priority customers and ordinary elderly banking users.

Theoretically, elderly priority customers may exhibit substantially different behavioral patterns compared to ordinary elderly customers. Priority customers usually receive exclusive banking facilities, personalized assistance, relationship managers, and direct banking services that reduce their dependence on digital platforms (Alfanani, 2023). Unlike ordinary elderly customers who may adopt m-banking for transactional or accessibility reasons, elderly priority customers often continue to rely on conventional banking interactions because personalized offline services are already available and considered more comfortable. Consequently, factors that are commonly dominant in explaining mobile banking adoption among general users may behave differently within the elderly priority customer segment. For instance, perceived security and perceived usefulness may become less influential because priority customers already possess strong institutional trust toward banks and easier access to direct banking assistance. Instead, experiential factors such as comfort, familiarity, and perceived ease of interaction may become more dominant determinants of adoption intention. In light of these circumstances, this study explicitly examines senior priority customers' interest in adopting m-banking services at BTN Prioritas Surabaya to fill the current research gap. This study investigates the impact of perceived knowledge, convenience, benefits, comfort, and security on customers' interest in utilizing m-banking services using the Structural Equation Modeling–Partial Least Squares (SEM-PLS) approach. SEM-PLS is appropriate for complex interactions between constructs and latent variables in predictive behavioral analysis (Alfanani, 2023; Ilahiyah & Poniman, 2023).

This study's uniqueness comes from its emphasis on elderly priority customers, a segment that has rarely been explored in previous mobile banking adoption studies. Unlike most earlier studies that focused on digitally active users, this research highlights elderly customers who still rely heavily on personalized banking interactions and conventional banking services. Furthermore, this study provides empirical evidence that factors commonly considered dominant in previous mobile banking adoption studies may not have the same effects on elderly customers. Thus, by expanding the literature on mobile banking acceptance, our study adds to the theoretical literature on a relatively underexplored demographic and behavioral context. In addition, this study provides empirical evidence that determinants commonly found significant in previous digital banking adoption studies may not operate in the same way among elderly priority customers. In a practical sense, the results are expected to assist banking institutions in designing more adaptive, inclusive, and elderly-friendly digital banking strategies that accommodate the behavioral characteristics and service preferences of elderly priority customers.

LITERATURE REVIEW

Structural Equation Modeling (SEM-PLS) is an analysis that incorporates factor analysis, path analysis, and structural models. The SEM-PLS method is classified as a multivariate statistical analysis. Two analytical models are used in the SEM-PLS method: the measurement model, which includes validity and reliability tests, and the structural model, which includes path coefficients and determinant coefficients (Febryaningrum et al., 2024). Along with the dependent variable in this study, which is the interest (y) of elderly priority customers, the independent variables used in this study were knowledge (x_1) with five indicators, convenience (x_2) with four indicators, benefits (x_3) with four indicators, comfort (x_4) with five indicators, and security (x_5) with four indicators.

Interest means a very strong tendency of the heart towards a desire. Interest is a positive attitude characterized by happiness, joy, enthusiasm, and a strong determination to engage in an activity (Mardiana et al., 2021). Interest does not arise of its own; It is susceptible to a variety of factors, both internal and external to the individual in question. Knowledge has meaning when everything is known and related to multiple things. Knowledge is the act of recognizing or remembering information learned and taught by someone before (Martha et al., 2022). Customers' knowledge of m-banking is significant because they must understand its advantages and weaknesses to consider various factors before making decisions (Siti Khofsoh, 2020). Convenience is the belief that an individual will be free from effort and that it will not be difficult. Based on this elaboration, the concept of convenience is that if m-banking is used efficiently in operations, customers will tend to become competent users over time. However, if the customer finds m-banking challenging or does not understand it, they will stop using it (Haryono et al., 2022).

The degree to which an individual believes that utilizing m-banking will lead to positive outcomes, such as better performance, is known as the benefits (Pamungkas et al., 2019). The perception of convenience can affect how individuals perceive the benefits of m-banking; if m-banking offers many advantages but these benefits cannot be felt or still pose difficulties, then m-banking lacks convenience and will be difficult to use (Fauziah & Tenripada, 2021). Convenience is the degree to which consumers' confidence in m-banking meets all their transaction needs, fostering a sense of comfort in its operation (Yohani et al., 2024). Reviewing this knowledge makes it clear that customers will not hesitate to use mobile banking if they feel comfortable doing so. Security means a threat that can create a condition, circumstance, or event that can cause difficulty with modification, disclosure, denial-of-service attacks, waste, or fraud. From this review, m-banking poses a threat to transactions through unauthorized access, such as fake authentication and fraud (Pranoto & Gunawan Setianegara, 2020). The following is a statement of the interplay of variables in this investigation:

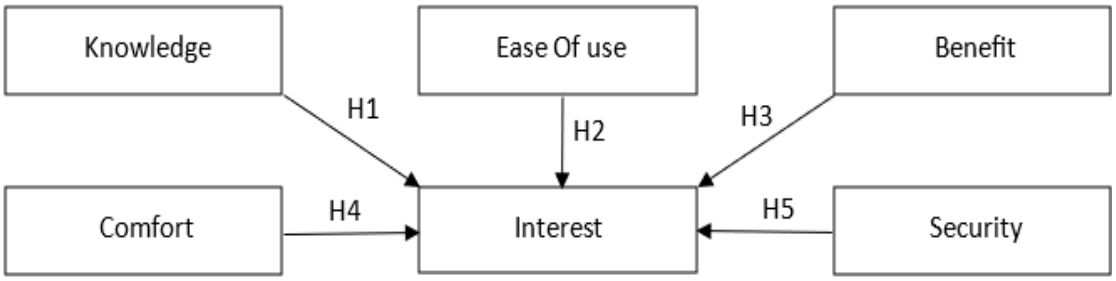

Figure 1. Hypothesis Flow

This study's hypothesis is based on Figure 1:

H_1: Knowledge perception significantly affects customer interest (Khan et al., 2024).

H_2: Perception of convenience significantly affects customer interest (Gupta et al., 2023a).

H_3: Perception of benefits significantly affects customer interest (Prawiramulia, 2020).

H_4: Perception of comfort significantly affects customer interest (Parera & Susanti, 2021).

H_5: Perception of security significantly affects customer interest (Lu, 2024).

RESEARCH METHODS

In this study, SEM-PLS was the main analytical approach to examine the factors influencing elderly priority customers' interest in using m-banking services. SEM-PLS was selected because this study emphasizes predictive and exploratory analysis rather than strict theory confirmation. Given the circumstances of behavioral and technology adoption research, SEM-PLS is considered appropriate for examining intricate relationships among multiple latent variables while simultaneously evaluating both measurement and structural models (Alfanani, 2023). In addition, SEM-PLS is suitable for this study's context, as it does not require stringent multivariate normality assumptions and can handle relatively modest to moderate sample sizes. (Febryaningrum et al., 2024).

SEM-PLS offers greater flexibility for exploratory research models than covariance-based SEM (CB-SEM), particularly when multiple constructs and reflective indicators are involved (Alfanani, 2023; Febryaningrum et al., 2024). The method is also widely applied in behavioral and technology adoption studies because of its strong predictive capability and its ability to estimate complex latent-variable relationships commonly found in social science research (Ilahiyah & Poniman, 2023). Therefore, SEM-PLS was considered the most appropriate approach for investigating elderly customers' behavioral tendencies toward digital banking adoption.

The use of SEM-PLS in this study also offers methodological advantages for comprehensively understanding elderly customers' adoption behavior. Unlike conventional regression techniques, SEM-PLS enables the examination of the relationships between latent variables and their indicators while evaluating the proposed research model's predictive power. Through this approach, the study can identify which factors are more dominant and which factors become less influential in shaping elderly priority customers' interest in using m-banking services.

The research paradigm proposed for the investigation is made up of one dependent variable, namely customers' interest in using m-banking services, and five independent variables: perceived knowledge, perceived convenience, perceived benefits, perceived comfort, and perceived security. Each latent construct was measured using several reflective indicators adopted from prior research and modified to the behavioral characteristics and service context of elderly priority banking customers.

In this investigation, the SEM-PLS analysis was carried out in several sequential stages, including preliminary data assessment, evaluation of the inner model (structural model), and evaluation of the outer model (measurement model). The purpose of the measurement model evaluation was to assess the reliability and validity of indicators representing the corresponding latent constructs. Average Variance Extracted (AVE) and outer loading values were used to assess convergent validity; outer loadings more than 0.70 and AVE values exceeding 0.50 indicate satisfactory validity (Taufiq et al., 2021). The objective was to guarantee that each construct was experimentally distinguished from the others, so discriminant validity was assessed using cross-loadings. Composite Reliability values possessing a minimum threshold of 0.70 were used for reliability testing (Ramdani et al., 2023). The structural model evaluation was conducted to investigate the links among latent variables and test the proposed hypotheses, once the measurement model met the required validity and reliability requirements. Path coefficients and the coefficient of determination (R^2) were used to examine structural linkages and assess how well the model predicted changes in consumers' interest in m-banking services.

Since SEM-PLS does not need multivariate normality and instead uses resampling techniques to estimate parameter stability and hypothesis significance, bootstrapping was used. The bootstrapping method was used to assess the importance of structural correlations in order to produce reliable estimates of path coefficients, t-statistics, and p-values (Farida et al., 2024). When the p-value was less than 0.05, the hypothesis was deemed statistically significant (Widayani et al., 2023). Beyond hypothesis testing, this study emphasizes the interpretation of behavioral tendencies among elderly priority customers. The SEM-PLS approach enables the identification of dominant and less influential factors within the elderly customer segment. Therefore, the methodological contribution of this study lies not only in testing structural relationships among variables but also in providing contextual and behavioral insights into digital banking adoption among elderly priority customers in Indonesia. The research stages above are shown in Figure 2.

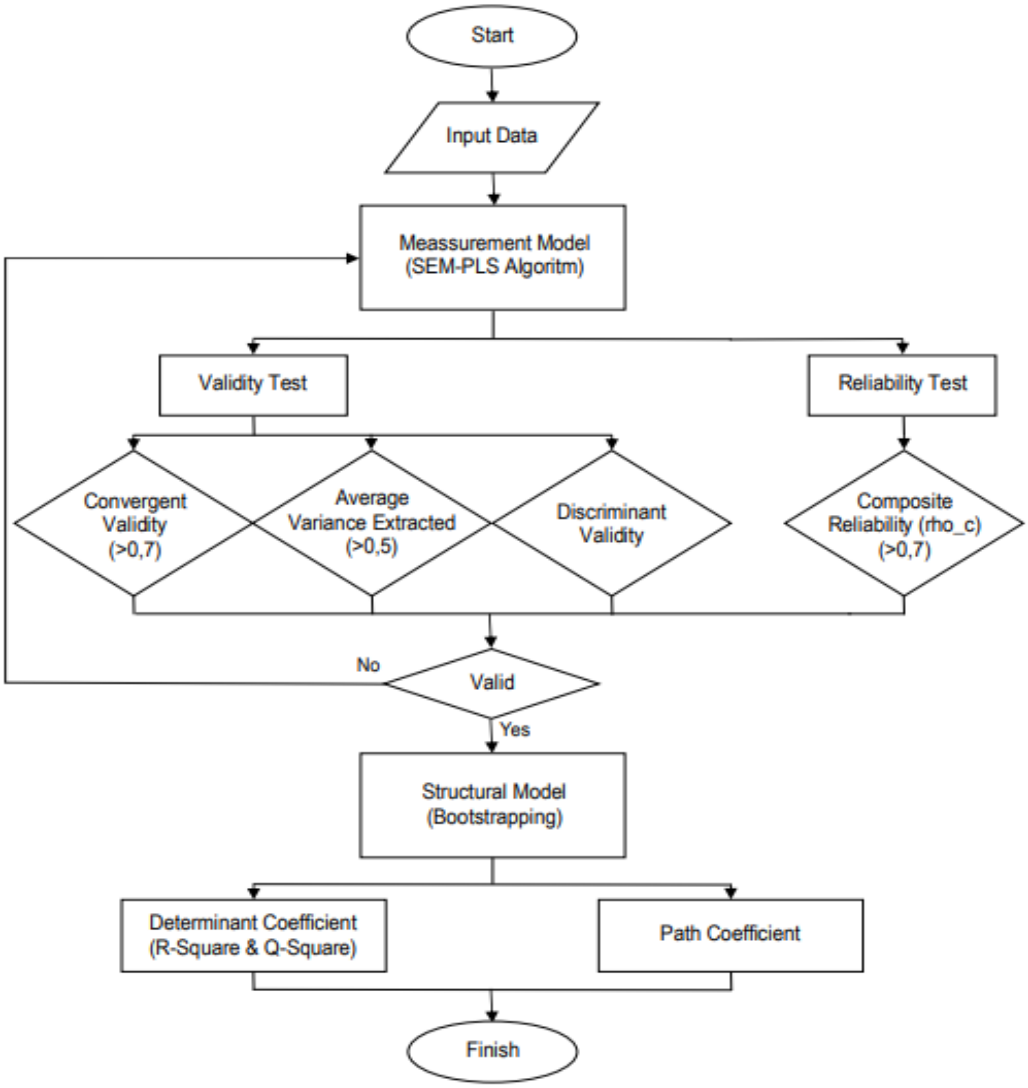

Figure 2. Flowchart

Data

The primary data for this investigation were collected through the distribution of questionnaires to elderly priority customers of BTN Prioritas Surabaya during May and June 2024. The elderly priority customer segment was selected because it exhibits distinct behavioral characteristics in digital banking adoption compared to general banking users. Elderly customers exhibit varying levels of technological adaptation, transaction preferences, and perceptions of digital financial services, making them an important segment for further investigation regarding m-banking adoption.

Older adults can be categorized into several age groups, namely Middle Age (45–54 years), Elderly (55–65 years), Young Elderly (66–74 years), and Old Elderly (75–90 years) (Hänninen et al., 2023). In this study, respondents were selected from elderly priority customers who actively interacted with BTN Prioritas Surabaya's banking services. Since the exact population size of priority customers changes dynamically over time and cannot be precisely determined, the population in this study was categorized as an open population. Therefore, the minimum sample size was determined using the population proportion estimation approach (Fauzanu et al., 2024), which is appropriate for studies involving large and dynamic populations. The sample size formula is expressed as follows:

$$n = \frac{z^2}{4(ME)^2} \quad (1)$$

Information:
n = number of samples
z = degree of confidence
ME= margin of error

The margin of error in this study was 10%, and the degree of confidence (z) was 90% ($z_{table} = 1.645$). For this reason, Equation (1) can be used to calculate the required the minimum quantity of samples required for this investigation is as follows:

$$n = \frac{1.645^2}{4(0.10)^2} = 67.65$$

Based on this calculation, an n value of 67.65 is obtained; therefore, at least 68 valid respondents must be included in the sample. Based on the questionnaire distribution, 160 m-banking users responded, exceeding the minimum requirement and therefore considered adequate for statistical analysis.

In this study, the principal data collection instrument was a standardized questionnaire. Based on pertinent theories and earlier empirical research, the questionnaire items were created to ensure the validity and relevance of each construct. Furthermore, each item was designed to record respondents' perspectives and experiences of m-banking services. Table 1 illustrates the research instruments implemented in this investigation.

Table 1. Questionnaire for Research Instrument

Array	Item	Item Statement
Interest	MNT1	I have always used m-banking services.
	MNT2	I have made the right decision to use the BTN m-banking application.
	MNT3	I would like to use reusing BTN m-banking for transactions and will use it regularly.
	MNT4	I would like to use the BTN m-banking application to make transactions anytime because its features help me.
	MNT5	When weighed against alternative financial services like ATMs, online banking, and counters. My primary method of obtaining financial services will be through the m-banking application.
	MNT6	I would advise family members and friends to utilize the m-banking app.
Knowledge	PEN1	I have a lot of knowledge about m-banking service products.
	PEN2	Based on my experience, it is possible to use BTN m-banking in the long term.
	PEN3	The BTN m-banking application is simple to comprehend and use.
	PEN4	I often read the news about m-banking.
	PEN5	My ability to benefit from m-banking increases with my level of understanding about it.
Convenience	KMD1	Overall, the BTN m-banking application is easy to access and use.
	KMD2	The features of m-banking BTN are easy to understand.
	KMD3	The BTN m-banking application is flexible because it can be used anytime and anywhere.
	KMD4	I feel that using BTN m-banking is very practical.
Benefit	MFT1	Using the BTN m-banking application accelerates banking services.
	MFT2	Using BTN m-banking helps with transactions.
	MFT3	Transactions made using BTN m-banking are very effective, fast, and accurate.
	MFT4	M-banking helps manage finances without having the physical presence of the bank.
Comfort	KNY1	The speed and convenience of accessing the m-banking application provide comfort.
	KNY2	I'm happy with my experience with the BTN mobile banking app since the features and goods are what I expected.
	KNY3	I feel comfortable with the service I receive when using BTN m-banking.
	KNY4	I consider the m-banking application system to be reasonably dependable and stable.
	KNY5	The appearance and placement of m-banking features are very comfortable to see when you want to make a transaction.
Security	KMN1	BTN's m-banking strongly maintains customer data security.
	KMN2	BTN's m-banking system has a reliable security system and accurate data.
	KMN3	The BTN m-banking application can be trusted to transact.
	KMN4	In my opinion, the m-banking application is not prone to errors or crashes.

RESULTS AND DISCUSSION

Results

The demographic features of the respondents were examined descriptively to provide a more comprehensive picture of the study participants. The demographic analysis includes several categories relevant to this study's objectives, particularly the age distribution of m-banking users. Understanding respondent characteristics is important for interpreting the research findings and identifying the dominant user groups involved in the study. Table 2 displays the respondents' comprehensive demographic data.

Table 2. Demographic Data of Respondent (n = 160)

Variable	Item	Frequency	Percentage
Age	Middle Age (45-54 Years Old)	43	26.88%
	Age of Older People (55-65 Years Old)	83	51.88%
	Young Elderly Age (66-74 Years Old)	28	17.50%
	After the Elderly (75-90 Years Old)	6	3.75%

Measurement Model

The measurement model connects indicator variables and latent variables. Measurement models can assess how closely an indicator variable aligns with the latent variable, reflect the construct of the latent variable, identify the factors underlying observational measurements, and assess measurement accuracy (Gunawan & Kasih, 2024).

The Convergent Validity Test, Average Variance Extracted Test, Discriminant Validity Test, and Composite Reliability Test can all be used to explain this measurement model in this study.

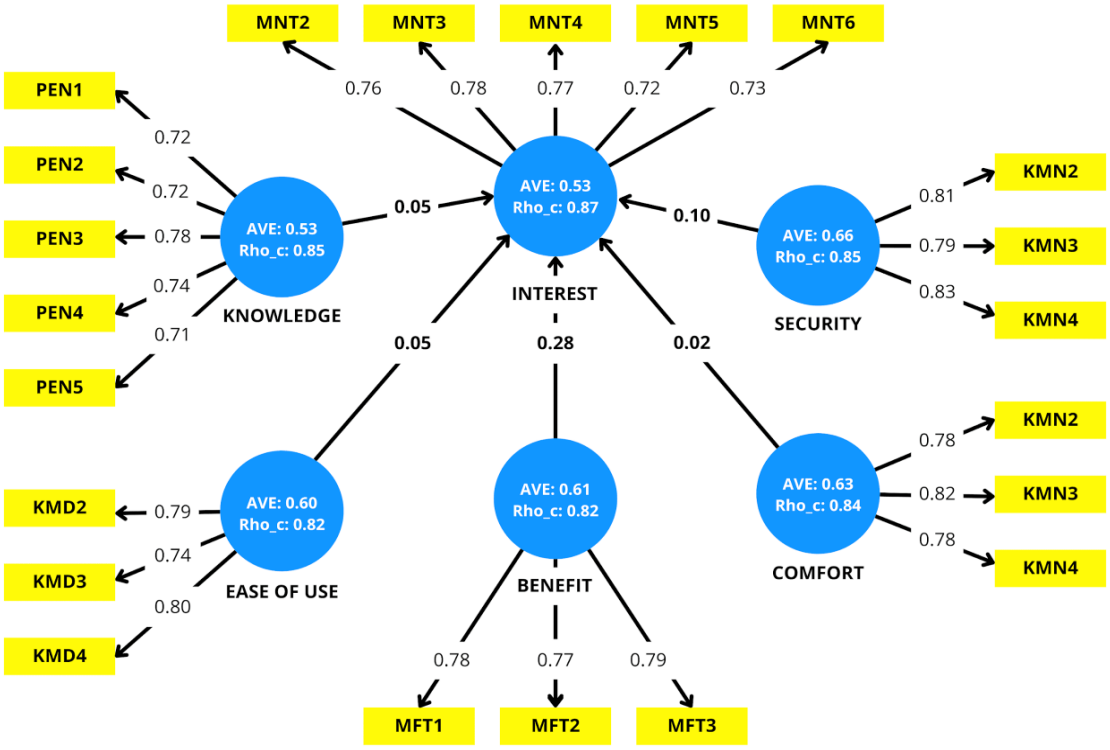

Figure 3. Measurement Model

Convergent Validity

The Convergent Validity value is correlated with the outer loadings of the latent and indicator variables, indicating that a convergent validity value is deemed vital if it is > 0.70 and weak if it is < 0.70 (Anastasiah & Pandia, 2024). In Figure 3. The above shows that four indicators are eliminated from the analysis: KMD1, KMN1, KNY1, KNY4, MFT4, and MNT1, as their outer loadings are ≤ 0.70, indicating weak factors. In line with research (Lu, 2024). Eliminating indicator items can improve the consistency of questionnaires during reliability and validity testing. The research results in the following table show that all indicators' outer loadings are more than 0.70; hence, convergent validity can be accepted.

Average Variance Extracted (AVE)

The average variance extracted (AVE) measures how well a factor's indicators account for the factor's variance. AVE reliability of at least > 0.50 for convergent validity (Taufiq et al., 2021). Every variable in the AVE study is deemed valid by the permitted assessment criteria, as shown in Figure 3, where each variable's AVE values are more than 0.50.

Discriminant Validity

Discriminant Validity determines how distinct the latent construct is from other latent variables. The criteria for determining discriminant validity are that the latent construct value > the value of other latent variables. The latent construct is said to exhibit valid discriminant validity (Andreas, 2024). Figure 3 shows that all cross-loading values in latent construct variables are more significant than those of other variables, so the discriminant validity using cross-loading is valid.

Composite Reliability

One technique for determining a dependency's value is Composite Reality. The Composite Reliability score ought to be at least 0.70 (Ramdani et al., 2023). The composite reliability value is deemed reliable if it is greater than 0.70. As shown in Figure 3 above, each variable's composite dependability exceeds the 0.70 threshold. Because each variable follows the applicable assessment criteria, all variables in the Composite Reliability study are declared reliable.

Structural Model

The associations between latent variables suggested in the study framework are investigated using the Structural Model in the SEM-PLS technique. This approach enables assessment of how exogenous and endogenous constructs directly affect one another, as specified by the study's hypotheses (Radha & Tri, 2022). In this research, five hypotheses were formulated to examine the influence of benefits, security, convenience, comfort, and knowledge on users' interest in using m-banking services. Table 3 displays the proposed hypotheses.

Table 3. Results of the Hypotheses Test

Hypotheses	Original Sample	Results
H_1: Knowledge Perception significantly affects Customer Interest (Khan et al., 2024).	p-values = 0.00	Accepted
H_2: Perception of Convenience significantly affects Customer Interest (Gupta et al., 2023a).	p-values = 0.05	Accepted
H_3: Perception of Benefits significantly affects Customer Interest (Prawiramulia, 2024).	p-values = 0.28	Rejected
H_4: Perception of Comfort significantly affects Customer Interest (Parera & Susanti, 2021).	p-values = 0.02	Accepted
H_5: Security Perception significantly affects Customer Interest (Lu, 2024).	p-values = 0.10	Rejected

Path Coefficient

A path coefficient is a test that approximates the change in a dependent variable when an independent variable changes by one unit, provided that the other variables remain constant (Auda, 2016). The path coefficient test criteria stated that the value was between -1 and 1. If the p-value < level of significance (0.05 or 5%), it indicates a significant influence (Widayani et al., 2023). Table 4 illustrates the result of the path coefficient analysis.

Table 4. Path Coefficient Test Result

	Estimates	P-Values	Result
Benefit -> Interest	0.05	0.28	Not Significant
Security -> Interest	0.13	0.10	Not Significant
Convenience -> Interest	0.17	0.05	Significant
Comfort -> Interest	0.23	0.02	Significant
Knowledge -> Interest	0.31	0.00	Significant

Considering the outcomes displayed in Table 4, the relationships among the independent variables and interest in using m-banking services can be identified through the path coefficient estimates and p-values, which are described as follows:

Knowledge to Interest

Following the path coefficient, it can be inferred that consumer interest in m-banking is significantly influenced by their familiarity with the program, with a p-value for the link between knowledge and interest of 0.00 and an estimate of 0.31. The outcome aligns with earlier studies by Khan and colleagues, suggesting that customers' perceptions of interest in utilizing m-banking are positively correlated with their level of knowledge about the m-banking application (Khan et al., 2024).

Convenience to Interest

It can be inferred that the impression of convenience regarding the m-banking application significantly influences a willingness to employ m-banking, as the association between knowledge and interest is significant (p-value = 0.05) and the estimate is 0.17. This result is consistent with a previous study by Gupta et al., which found that customers are more inclined to use mobile banking when they believe the app is convenient (Gupta et al., 2023b).

Benefits to Interest

The path coefficient shows that the p-value for the relationship between benefit perception and Interest is 0.28, with an estimate of 0.05; thus, it can be concluded that customer knowledge of the willingness to utilize m-banking is not much influenced by the m-banking app. This result aligns with a prior study (Prawiramulia, 2024), which found that customers who consider the application's benefits do not necessarily decide to use m-banking.

Comfort to Interest

The relationship between comfort and interest, which had a p-value of 0.02 and an estimate of 0.23, shows that comfort with the m-banking application significantly influences interest in m-banking. This outcome aligns with an earlier study by Parera et al. (2021), which found that consumers who feel more comfortable using the app are more inclined to utilize m-banking.

Security to Interest

The path coefficient shows that the p-value for the relationship between benefit perception and Interest is 0.10, with an estimate of 0.13; thus, it may be stated that a customer's desire to use mobile banking is not strongly influenced by their knowledge of the application. This outcome is in accordance with prior investigations by Lu (2024), who found that customers who consider this application safe do not necessarily choose to use m-banking.

Determinant Coefficient (R-Square)

The Determinant Coefficient (R-Square) indicates whether a test's goal is to determine how independent variables affect dependent variables. The R-Square value ranges from 0 to 1, with higher values indicating greater model explanatory power. In PLS-SEM, R-Square values of 0.75, 0.50, and 0.25 are generally interpreted as substantial (strong), moderate, and weak explanatory power, respectively (Risdiyanto et al., 2024).

Table 5. Determinant Coefficient (R-Square)

	R-Square	R-Square Adjusted
Interest	0.61	0.60

Using the Determinant Coefficient (R-Square) method, Table 5 above demonstrates that 61% of the factors influencing the Interest variable are related to knowledge perception, convenience perception, benefit perception, comfort perception, and security perception. The remaining 39% are related to factors outside the study.

Discussion and Implication

This study's results suggest that elderly priority customers' interest in utilizing m-banking services is substantially influenced by their perceived knowledge, convenience, and comfort. In contrast, perceived benefits and perceived security do not. Among all variables, perceived knowledge emerged as the strongest determinant of adoption intention. These results suggest that elderly customers' willingness to adopt digital banking services is strongly shaped by their level of understanding, familiarity, and confidence in operating m-banking applications.

The strong influence of perceived knowledge reflects the unique behavioral characteristics of elderly priority customers. Unlike younger generations, who are generally more adaptable to technological change, elderly customers often experience greater technological anxiety, lower digital literacy, and a fear of transaction errors when interacting with smartphone-based financial applications. Consequently, adequate knowledge of transaction procedures, application features, and service functions is an important source of psychological assurance for elderly customers before they decide to adopt m-banking services. The results of this investigation suggest that elderly customers require not only access to technology but also adaptive learning experiences that increase their confidence and reduce uncertainty during digital interactions. The result aligns with prior research emphasizing the important role of knowledge and digital literacy in shaping technology acceptance among older adults (Purba et al., 2022; Khan et al., 2024).

The significant effects of convenience and comfort further demonstrate that elderly customers tend to prioritize simplicity, familiarity, and ease of interaction when using digital banking services. Elderly users generally prefer that the application be emotionally comfortable, easy to understand, and practical to use. In the context of elderly priority customers, convenience is not merely about technical efficiency but also about how easily the application can be learned and operated independently. Similarly, comfort reflects customers' perceptions regarding interface clarity, service experience, and psychological ease during transactions. These findings support the argument that elderly customers' digital adoption behavior is highly associated with experiential and emotional considerations rather than purely technological sophistication (Hänninen et al., 2023).

Interestingly, perceived benefits and perceived security had no substantial impact on elderly customers' desire to utilize m-banking services. The insignificant effect of

perceived benefits suggests that elderly priority customers may not primarily evaluate m-banking adoption based on productivity or transactional efficiency. Since priority customers already receive personalized banking services and direct assistance from relationship managers, the practical advantages of m-banking may no longer become the main consideration influencing adoption decisions. Instead, customers appear to focus more on whether the service feels understandable, comfortable, and easy to integrate into their regular financial transactions. A similar pattern is also observed in the insignificant effect of perceived security, which contrasts with much of the previous digital banking research that highlighted security as a significant factor in the decision to implement (Almaiah et al., 2023; Lu, 2024). One potential explanation is that elderly priority customers already have a comparatively high level of institutional trust toward established banking institutions such as BTN Prioritas. Long-term banking relationships, personalized financial services, and frequent interactions with banking personnel may reduce customers' direct concern regarding technical security systems. In other words, elderly priority customers may perceive security as an inherent responsibility of the bank rather than a separate factor influencing their adoption decisions. This condition indicates that psychological trust and interpersonal assurance may play a more dominant role than technical security perception itself.

Overall, these findings demonstrate that elderly priority customers exhibit distinct digital adoption behavior compared to younger or digitally active customer groups. Technology adoption among elderly customers cannot be fully generalized using conventional digital adoption frameworks developed primarily for younger users. Elderly customers tend to emphasize psychological readiness, familiarity, emotional comfort, and interpersonal interaction more strongly than technical system evaluation. Therefore, this study enhances the digital banking literature by emphasizing the significance of demographic and behavioral contexts in understanding technology adoption behavior among elderly users.

In terms of management, the results suggest that institutions should not focus solely on technological sophistication or security enhancements when promoting m-banking services to elderly customers. Instead, banks should prioritize elderly-friendly digital strategies through personalized assistance, adaptive education, and simplified application design. Educational programs such as direct mentoring, face-to-face tutorials, and continuous customer guidance may help elderly consumers build greater confidence and familiarity with digital banking systems (Khan et al., 2024). In addition, interface adjustments such as larger fonts, clearer transaction instructions, simpler navigation, and responsive customer support may significantly increase elderly customers' readiness to utilize m-banking services. Banking institutions may also consider integrating hybrid service approaches that combine digital banking with personalized human interaction to better accommodate the behavioral preferences of elderly priority customers (Hänninen et al., 2023; Mazayo et al., 2023).

CONCLUSION

The SEM-PLS approach was carried out to investigate the factors influencing elderly priority consumers' interest in using m-banking services at BTN Prioritas Surabaya. The results suggest that perceived knowledge, convenience, benefits, and comfort positively influence customers' intention to adopt m-banking services, while perceived security does not show a significant effect. Among all variables, perceived knowledge emerged

as the most influential factor, indicating that elderly customers' understanding, familiarity, and confidence in operating digital banking systems play a crucial role in shaping adoption behavior. The results of these studies indicate that digital banking adoption among elderly priority customers is strongly associated with psychological readiness, technological familiarity, and adaptive learning processes rather than purely technical system considerations.

This study also provides important theoretical and managerial contributions to digital banking literature and banking practice. Theoretically, this research extends mobile banking adoption studies into the relatively underexplored context of elderly priority customers, a segment characterized by high financial capacity, personalized banking relationships, and distinct behavioral tendencies toward technology adoption. The findings demonstrate that determinants commonly found significant in previous digital banking studies may operate differently within elderly customer groups. From a managerial perspective, the results imply that banks should not focus solely on improving technological infrastructure and security systems, but also prioritize educational support, personalized assistance, and elderly-friendly digital service strategies. Providing direct mentoring, simplified application interfaces, and adaptive customer guidance may help increase elderly customers' confidence and enthusiastic widespread utilization of digital banking services.

Although this investigation has made significant contributions, it is not without limitations. The investigation was conducted at a solitary banking branch that was accorded priority and focused on a specific customer segment, potentially limiting the generalizability of the results. In addition, this study primarily examined behavioral intention without exploring actual usage behavior or long-term digital adaptation processes. Therefore, future studies are recommended to involve broader demographic and geographical coverage, compare elderly priority customers with non-priority elderly customers, and incorporate additional psychological variables such as technological anxiety, self-efficacy, digital trust, and resistance to change. Subsequent research may implement longitudinal methodologies to investigate modifications in elderly customers' m-banking adoption behavior over time, particularly following digital assistance or financial literacy interventions.

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