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Measurement of Digital Banking Acceptance: The case of BRI Mobile Banking (Brimo)

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Abstrak

Transformasi era digital telah dimulai, dan salah satu sektor yang terpengaruh adalah perbankan. Proses pengadopsian perbankan digital diharapkan dapat meningkatkan produktivitas, efektivitas, efisiensi, dan kesejahteraan sosial. Tujuannya adalah untuk memahami sejauh mana adopsi teknologi, khususnya perbankan digital, dipahami dan dimanfaatkan oleh masyarakat. Penelitian ini khususnya mengkaji adopsi Aplikasi Perbankan Mobile BRI (Brimo) oleh para nasabah. Pendekatan yang digunakan adalah Model Penerimaan Teknologi, yang menilai pengaruh kegunaan yang dirasakan, persepsi kemudahan penggunaan, budaya pelanggan, tingkat keamanan, dan media sosial terhadap penggunaan aktif Brimo oleh nasabah. Temuan utama dari penelitian ini menunjukkan bahwa kebiasaan menggunakan Brimo dan peningkatan penggunaan aktif dipengaruhi oleh kegunaan dan kemudahan penggunaan yang dirasakan. Variabel keamanan tidak berdampak signifikan pada persepsi kegunaan, dan variabel pengaruh sosial tidak berdampak signifikan pada persepsi kegunaan. Kata Kunci: *Adopsi, Bank Digital, Informasi dan Teknologi, Keuangan, Model Penerimaan Teknologi.*

Abstract

The transformation of the digital era has begun, and one of the affected sectors is banking. The process of adopting digital banking is expected to enhance productivity, effectiveness, efficiency, and social welfare. The aim is to understand the extent to which technology adoption, particularly digital banking, is comprehended and utilized by the public. This study specifically examines the adoption of the BRI Mobile Banking Application (Brimo) by customers. The approach used is the Technology Acceptance Model, which assesses the influence of perceived usefulness, perceived ease of use, customer culture, security level, and social media on customers' active use of Brimo. The primary finding of this research indicates that the habit of using Brimo and the increase in active use are influenced by the perceived utility and ease of use. The safety variable does not significantly impact perceived usability, and the social influence variable does not significantly affect perceived usefulness.

Keywords: Adoption, Digital Banking; Finance; Information and Technology; Technology Acceptance Model (TAM).

INTRODUCTION

The information technology revolution in the banking sector has transformed the financial services experience for its customers across the globe (Ahmed & Siddiqui, 2020; Chauhan et al., 2022; Liébana-Cabanillas & Lara-Rubio, 2017). Technology innovation in terms of automated teller machine (ATM), internet banking, mobile banking, digital banking kiosks, Unified Payments Interface (UPI) has introduced new mechanisms that can enhance the capabilities of banking sector to cater to the needs of their customers in a more effective and efficient way (Glavee-Geo et al., 2017). With the advent of the internet, the banking system has been incited to reconsider its informational technology strategies and is now faced with an increased challenge of conducting the marketing and promotion of its products using the internet as a platform (Al-Qeisi & Hegazy, 2015; Chau & Lai, 2003). Significant changes have also been seen in the delivery of services in the banking sector, particularly the growth of digital and mobile banking services (Alkhowaiter, 2020; Glavee-Geo et al., 2017; Hanafizadeh et al., 2014; Karjaluo et al., 2018). A recent report by McKinsey & Company (2021) indicates that emerging markets are growing rapidly in terms of digital banking innovation and adoption. This technological transformation of the banking sector has invited a lot of deliberation by researchers in recent times, and several studies have been conducted to study the significant growth of digital banking in recent years (Kaur et al., 2021; Ligon et al., 2019; Mhlanga, 2020). Several studies have been conducted to measure the acceptance of technology by its users. As with digital banking, a bank has also studied technology acceptance and active customer users.

Digital banking benefits the customers and enables the banks to undertake improved and speedy delivery of financial products and reduce transactional costs, thereby increasing their profitability, saving costs and providing better overall service to their customers (Dash et al., 2011). It allows the customers to avail banking services such as checking balances and carrying out transactions like transferring funds and stock trading (Nasri, 2011) from anywhere, without physically visiting the banks. A vast disparity is seen in the implementation and penetration of digital banking in different countries due to differences in national culture across regions and countries (Htay et al., 2013; Takeddine & Sun, 2015; Yousafzai & Yani-de-Soriano, 2012). According to (Ahdiat, 2023), throughout April 2023, the value of digital banking transactions in the country reached IDR 4,264.8 trillion, or almost IDR 4.3 quadrillion. However, if we look back five years, in April 2018, the value of digital banking transactions nationally had grown by 158% compared to April 2013.

Previous research has also been widely researched and published nationally or internationally—this research plans to use the Technology Acceptance Model (TAM) system. Among the above models, the Technology Acceptance Model (TAM) is most commonly and extensively used for predicting the adoption and usage of digital banking among customers and has been found to be valid and reliable in different situations and with varied samples (Davis, 1989). In addition, previous research has added several external factors, such as Trust, Demographics, etc.

Researchers use perceived ease of use to define the degree of comprehension of the consumers of the new, branchless banking network. The key factors affecting perceived facility of use are self-efficacy of the computer (the degree to which a person believes that he can perform a task using a computer), computer anxiety (the degree that a person is afraid to use a computer), playfulness (the degree of pleasure associated with the use of a computer) and perception of external control (the degree to which a person thinks the resources of an organization are available to carry out its work) (Moslehpour et al., 2018). In this study, other external factors will be added, such as customer culture, social media influence and security level. This research will convey how external factors affect the perceived usefulness and ease of use, ultimately affecting the intended behavior so that it involves the actual system use.

Several research projects have been conducted over the years to understand the factors that affect the adoption of digital banking among customers, using different behavioral models. The most popular models include the Theory of Reason Action (Hill et al., 1977), Technology Acceptance Model (Davis, 1989), Theory of Planned Behaviour (Ajzen,

1991), Extended Technology Acceptance Model (TAM2) (Venkatesh & Davis, 2000), and Unified Theory of Acceptance and Use of Technology (Venkatesh et al., 2003).

Technology Acceptance Model (TAM) is most commonly and extensively used for predicting the adoption and usage of digital banking among customers and has been found to be valid and reliable in different situations and with varied samples (Davis, 1989). According to Davis, the success of a technology adoption largely depends upon the attitude and perception of the user about it, which in turn depends upon the ease or difficulty faced by a user while using the technology in question.

In this study, we will focus on the Brimo application, a digital banking application produced by Bank BRI in Indonesia. It conducted the research by taking a sample of respondents from BRI bank customers who have used the Brimo application. The demographics recorded in the questionnaire are gender, level of education, type of work, and fixed/non-fixed income.

RESEARCH METHOD

1. Technology Acceptance Model (TAM)

The method used is the technology acceptance model. The Technology Acceptance Model (Davis, 1989), or TAM, posits that two factors determine whether a computer system will be accepted by its potential users: (1) perceived usefulness and (2) perceived ease of use. The key feature of this model is its emphasis on the perceptions of the potential user. The Technology Acceptance Model (TAM) was used for the theoretical framework.

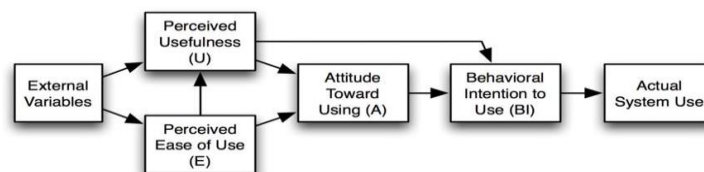


Figure. 1. Technology Acceptance Model (TAM).

Questions related to demographics will be asked at the beginning of filling out the questionnaire. The demographics added are gender, age, fixed/non-permanent income, occupation, and education. In addition, some questions describe external factors, perceived usefulness, perceived ease of use, attitude toward using, behavioral intention to use, and actual system use. Answers to the questions in the questionnaire using the Likert scale method

Table 1. Likert Scale

No	Remarks	Point	No
1	Strongly Disagree	1	1
2	Disagree	2	2
3	Agree	3	3
4	Strongly Agree	4	4

This questionnaire was made using a google form by the questions above. A baseline study was conducted for a targeted population of 100 respondents purposively selected. A sample size of 100 was determined with a 5% level of confidence, and 100 questionnaires were sent, with a 100% response rate from the intended respondents (Kademaunga & Phiri, 2019).

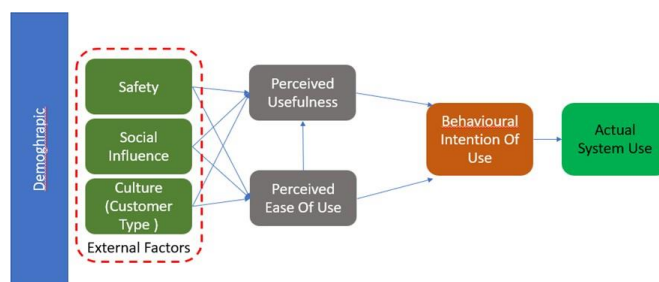


Figure 2. Technology Acceptance Model for digital banking (Brimo).

Social media, being part of the internet revolution has aroused interest among modern age marketers about its efficacy in online-purchase behavior. Recent studies have focused on the major influential factors of m- banking adoption by applying various prevalent adoption and diffusion (Jadil et al., 2021; Sohail & Al-Jabri, 2014; Yu, 2012). This study wants to show how significant the influence of social media on the use and adoption of digital banking by users is. Another factor that will become an external factor is the level of digital banking security and the customer's habit/culture of liking to transact in cash or digitally. This culture is also influenced by the state of the user's environment.

Based on the explanation above, the hypotheses of this study are as follows:

1. H1: Safety affect to Perceived Usefulness
2. H2: Safety affect to Perceived Ease of Use
3. H3: Social Influence affect to Perceived Usefulness
4. H4: Social Influence affect to Perceived Ease of Use
5. H5: Culture affect to Perceived Usefulness
6. H6: Culture affect to Perceived Ease of Use
7. H7: Perceived Ease of Use affect to Perceived Usefulness
8. H8: Perceived Usefulness affect to Behavioral Intention of Use

9. H9: Perceived Ease of Use affect to Behavioral Intention of Use

10. H10: Behavioral Intention of Use affect to Actual System Use

2. Data Analysis

The initial calculation of the analysis in this study will use validity and reliability analysis. A validity test is used to measure the validity or validity of a questionnaire, a questionnaire is said to be valid if the questions can reveal something that the questionnaire will measure (Ghozali, 2006). A flow diagram of validity, reliability, and inner testing is shown Figure 4. The validity test will calculate convergent and discriminant validity. Convergent validity will calculate the loading factor and average variance extracted (AVE), while discriminant validity will use the Fornell-Larcker criterion and cross loading techniques. Discriminant validity aims to test to what extent a true latent structure really differs from other structures. A high discriminant validity indicates that a structure is unique and explains the phenomenon measured. A valid construction is said to be by comparing the root value of the AVE (Fornell-Larcker Criterion) with the correlation value between latent variables. The AVE root value should be greater than the latent variable correlation (Henseler et al., 2015). A reliability test will be carried out with composite reliability and Cronbach's alpha. Then it will be continued with the inner model test, which consists of R-square analysis, path coefficients, T-statistics, relevant predictive variables, and model fit. All these calculations will use a computer application called Smart-PLS.

HASIL DAN PEMBAHASAN

1. Respondent Profile

Table 2 Respondent Profile Based on Gender, Education and Occupation

No	Respondent Profile	Total	Percentage
1	Gender		
	Male	66	65.35%
	Female	35	34.65%
2	Education		
	High School	44	43.56%
	Undergraduate	55	54.46%
	Post graduate	2	1.98%
3	Occupation		
	Employees	85	84.16%
	Entrepreneur	10	9.90%

No	Respondent Profile	Total	Percentage
	Student	4	3.96%
	Other	2	1.98%

Based on Table 2 can be seen that the number of men in the entire sample is 66, or 65.35% of the total sample, while the number of women is 35, or 34.65% of the total sample. It shows that the majority of BRImo Application users in the random sample are Male. The education level of the user may differ. It can be seen that the number of undergraduate respondents from the entire sample is 55, or 54.46% of the total sample, while the number of high school respondents is 44, or 43.56%, and the rest would be at postgraduate level. It shows that the majority of Brimo users are undergraduates. Occupation also impacts the use of BRImo. It can be seen that the number of Employees from the entire sample is 85 people, or 84.16% of the total sample; the number of entrepreneurs is 10 people, or 9,90% of the total sample; the number of students is 4 people, or 3.96%; and the number of other people is 2 people, or 1.98%. It shows that the majority of BRImo Application users in the random sample are employees.

2. Instrument Test

The result of reliability test using Smart-PLS is shown in Figure 5. Based on Table 4, loading factors for all the parameters are higher than 0.7, thus the parameters have met the criteria of good convergent validity. Average Variance Extracted of all the parameters are higher than 0.5, thus the parameters have met the criteria of good convergent validity. The composite reliability of all the parameters is higher than 0.7, which means that all the parameters have good reliability. Cronbach's alpha of all the parameters is higher than 0.7 except culture and safety, which means those parameters do not meet the good criteria of composite reliability measurement. The R-square of actual system use is a strong model, while the behavioral intention of use is moderate. Perceived ease of use and perceived usefulness are weak models.

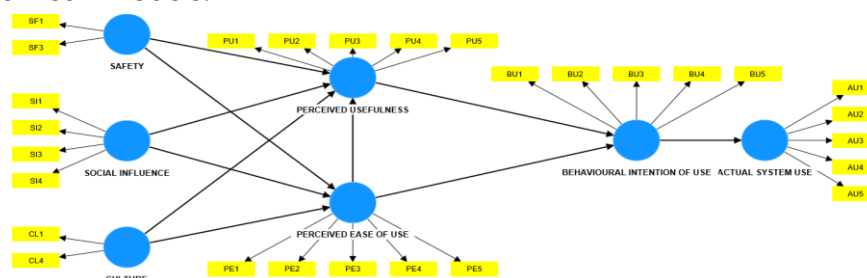


Figure 1. Results of analysis using Smart-PLS version 4

Table 3 Loading Factor, Average Variance Extracted (AVE), Composite reliability, Cronbach's alpha, R-Squarec

Parameter	Code	Loading Factor	AVE	Composite reliability	Cronbach's alpha	R-Square
ACTUAL SYSTEM USE	AU1	0.876	0.716	0.926	0.901	0.698
	AU2	0.917				
	AU3	0.782				
	AU4	0.838				
	AU5	0.811				
BEHAVIOURAL INTENTION OF USE	BU1	0.916	0.877	0.973	0.965	0.629
	BU2	0.931				
	BU3	0.955				
	BU4	0.957				
	BU5	0.923				
CULTURE	CL1	0.834	0.740	0.850	0.650	
	CL4	0.885				
PERCEIVED EASE OF USE	PE1	0.832	0.810	0.955	0.941	0.337
	PE2	0.890				
	PE3	0.946				
	PE4	0.917				
	PE5	0.911				
PERCEIVED USEFULNES S	PU1	0.827	0.724	0.929	0.903	0.737
	PU2	0.915				
	PU3	0.862				
	PU4	0.773				
	PU5	0.869				
SAFETY	SF1	0.863	0.727	0.842	0.625	
	SF3	0.842				
SOCIAL INFLUENCE	SI1	0.813	0.669	0.890	0.836	
	SI2	0.724				
	SI3	0.832				
	SI4	0.894				

3. Discriminant Validity

Based on the Table 4 then all roots of the AVE (Fornell-Larcker criterion) each construction is larger than its correlation with other variables, so the discriminatory validity condition on this model has been met, as listed in below Table 4.

Table 4 Fornell-Larcker criterion

	Actual System Use	Behavioral Intention Of Use	Culture	Perceived Ease Of Use	Perceived Usefulness	Safety	Social Influence
ACTUAL SYSTEM USE	0.846						
BEHAVIORAL INTENTION OF USE	0.836	0.936					
CULTURE	0.494	0.506	0.860				
PERCEIVED EASE OF USE	0.691	0.752	0.472	0.900			
PERCEIVED USEFULNESS	0.725	0.763	0.540	0.827	0.851		
SAFETY	0.327	0.285	0.327	0.311	0.437	0.853	
SOCIAL INFLUENCE	0.673	0.604	0.510	0.510	0.494	0.278	0.818

However, it should be noted that there is still another way to test the discrimination of the variables on the constructed construction, namely by using the HTMT ratio. The HTMT value must be less than 0.9 to ensure discriminatory validity between two reflective

structures (Henseler et al., 2015). Some studies reveal that this criterion is assessed more strictly than Fornell-Larcker and can be used as a discriminatory validity reference (Ab Hamid et al., 2017) based on

Table 5 of HTMT values resulting from calculations <0.9 , it can be stated that all constructions have been validated by discriminating validity based on calculations of HTMT.

Table 5 Heterotrait-monotrait ratio (HTMT)

	Heterotrait-monotrait ratio (HTMT)
BEHAVIOURAL INTENTION OF USE -> ACTUAL SYSTEM USE	0.885
CULTURE -> ACTUAL SYSTEM USE	0.631
CULTURE -> BEHAVIOURAL INTENTION OF USE	0.640
PERCEIVED EASE OF USE -> ACTUAL SYSTEM USE	0.740
PERCEIVED EASE OF USE -> BEHAVIOURAL INTENTION OF USE	0.788
PERCEIVED EASE OF USE -> CULTURE	0.596
PERCEIVED USEFULNESS -> ACTUAL SYSTEM USE	0.789
PERCEIVED USEFULNESS -> BEHAVIOURAL INTENTION OF USE	0.815
PERCEIVED USEFULNESS -> CULTURE	0.702
PERCEIVED USEFULNESS -> PERCEIVED EASE OF USE	0.896
SAFETY -> ACTUAL SYSTEM USE	0.431
SAFETY -> BEHAVIOURAL INTENTION OF USE	0.368
SAFETY -> CULTURE	0.522
SAFETY -> PERCEIVED EASE OF USE	0.406
SAFETY -> PERCEIVED USEFULNESS	0.582
SOCIAL INFLUENCE -> ACTUAL SYSTEM USE	0.756
SOCIAL INFLUENCE -> BEHAVIOURAL INTENTION OF USE	0.664
SOCIAL INFLUENCE -> CULTURE	0.687
SOCIAL INFLUENCE -> PERCEIVED EASE OF USE	0.546
SOCIAL INFLUENCE -> PERCEIVED USEFULNESS	0.553
SOCIAL INFLUENCE -> SAFETY	0.392

To assess discriminatory validity is with the Fornell Larcker Criterion, which is a traditional method that has been used for over 30 years, which compares the square root value of the Average Variance Extracted (AVE) of each structure with the correlation between other structures in the model(Henseler et al., 2015). If the AVE root value of each structure is greater than the correlation value between the structure and the other structure in the model, then the model is said to have a good discriminatory validity value (Fornell, C., & Larcker, 2016).

A discriminatory analysis based on the Fornell-Larcker Criterion, as shown in the table above, suggests that there is no less value of the Fernell- Larcker criterion or AVE against itself compared to other latent variables. For example, the Fornell-Larcker criterion is 0.936.

4. Path Coefficients (PC) and Significant test

Table 6 shows the T-statistics for the model. The structural equation model is a recursive model that has only 1 direction of causality (the latent variable has 1 direction of non-reciprocal relationship), the blue circle image is the latent variable, and the yellow box image is a reflexive indicator that will be assessed for convergent validity, validity discriminant, and reliability. The significance of the direction of the relationship is shown in the t-statistic value, where if the t-statistic value is > 1.96, then there is a significant relationship. The calculation results show that the t-statistics value is greater than 1.96, so it can be said that the relationship between variables is significant.

Table 6. Path coefficient and significant test between parameters

Parameter Result	PC	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Result
BEHAVIOURAL INTENTION OF USE -> ACTUAL SYSTEM USE	0.836	0.836	0.838	0.035	23.968	0.000	Positive, Significant
CULTURE -> PERCEIVED EASE OF USE	0.253	0.253	0.260	0.114	2.231	0.026	Positive, Significant
CULTURE -> PERCEIVED USEFULNESS	0.148	0.148	0.151	0.068	2.193	0.028	Positive, Significant

Parameter Result	PC	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Result
PERCEIVED EASE OF USE -> BEHAVIOURAL INTENTION OF USE	0.384	0.384	0.382	0.169	2.265	0.024	Positive, Significant
PERCEIVED EASE OF USE -> PERCEIVED USEFULNESS	0.696	0.696	0.700	0.067	10.383	0.000	Positive, Significant
PERCEIVED USEFULNESS -> BEHAVIOURAL INTENTION OF USE	0.446	0.446	0.449	0.159	2.806	0.005	Positive, Significant
SAFETY -> PERCEIVED EASE OF USE	0.133	0.133	0.132	0.078	1.696	0.090	Positive, Not Significant
SAFETY -> PERCEIVED USEFULNESS	0.167	0.167	0.164	0.061	2.713	0.007	Positive, Significant
SOCIAL INFLUENCE -> PERCEIVED EASE OF USE	0.344	0.344	0.348	0.120	2.862	0.004	Positive, Significant
SOCIAL INFLUENCE -> PERCEIVED USEFULNESS	0.017	0.017	0.011	0.074	0.231	0.817	Positive, Not Significant

Based on the results of the direct effects inner model analysis in the table above (Table 6), the path coefficient value is acceptable because it ranges from -1 to +1. The direct effect of Behavioral Intention Of Use on Actual System Use is 0.836, which means that if Behavioral Intention of Use increases, Actual System Use can increase by 83.6%. This influence is

positive. The direct influence of Culture on Perceived Ease of Use is 0.253, which means that if Culture increases, Perceived Ease of Use can increase by 25.3%. This influence is positive. The direct effect of Culture on Perceived Usefulness is 0.148, which means that if Culture increases, Perceived Usefulness can increase by 14.8%. This influence is positive. The direct effect of Perceived Ease of Use on Behavioral Intention of Use is 0.384, which means that if Perceived Ease of Use increases, Behavioral Intention of Use can increase by 38.4%. This influence is positive. The direct effect of Perceived Ease of Use on Perceived Usefulness is 0.696, which means that if Perceived Ease of Use increases, Perceived Usefulness can increase by 69.6%. This influence is positive. The direct effect of Perceived Usefulness on Behavioral Intention of Use is 0.446, which means that if Perceived Usefulness increases, Behavioral Intention of Use can increase by 44.6%. This influence is positive.

Based on Table 6, correlations between parameters are significant if the p values are lower than 0.05, so we can conclude that the correlation between behavioral intention of use and actual system use is positive and significant (p values<0.05). The correlation between culture and perceived ease of use is positive and significant (p values<0.05). The correlation between culture and perceived usefulness is positive and significant (p values<0.05). The correlation between perceived ease of use and behavioral intention of use is positive and significant (p values<0.05). The correlation between perceived ease of use and perceived usefulness is positive and significant (p values<0.05). The correlation between perceived usefulness and behavioral intention of use is positive and significant (p values<0.05). The correlation between safety and perceived ease of use is positive but not significant (p values>0.05). The correlation between safety and perceived usefulness positive and significant (p values<0.05). The correlation between social influence and perceived ease of use is positive and significant (p values<0.05). The correlation between social influence and perceived usefulness is positive but not significant (p values>0.05)

Table 7. Summary of the Results

No	Code	Hypothesis	Description	Result
1	H1	H01	Safety not affect to Perceived Usefulness	Rejected
		HA1	Safety affect to Perceived Usefulness	Accepted
2	H2	H02	Safety not affect to Perceived Ease of Use	Accepted
		HA2	Safety affect to Perceived Ease of Use	Rejected
3	H3	H03	Social Influence not affect to Perceived Usefulness	Accepted
		HA3	Social Influence affect to Perceived Usefulness	Rejected

No	Code	Hypothesis	Description	Result
4	H4	H04	Social Influence not affect to Perceived Ease of Use	Rejected
		HA4	Social Influence affect to Perceived Ease of Use	Accepted
5	H5	H05	Culture not affect to Perceived Usefulness	Rejected
		HA5	Culture affects to Perceived Usefulness	Accepted
6	H6	H06	Culture not affect to Perceived Ease of Use	Rejected
		HA6	Culture affects to Perceived Ease of Use	Accepted
7	H7	H07	Perceived Ease of Use not affect to Perceived Usefulness	Rejected
		HA7	Perceived Ease of Use affect to Perceived Usefulness	Accepted
8	H8	H08	Perceived Usefulness not affect to Behavioral Intention of Use	Rejected
		HA8	Perceived Usefulness affect to Behavioral Intention of Use	Accepted
9	H9	H09	Perceived Ease of Use not affect to Behavioral Intention of Use	Rejected
		HA9	Perceived Ease of Use affect to Behavioral Intention of Use	Accepted
10	H10	H010	Behavioral Intention of Use not affect to Actual System Use	Rejected
		HA10	Behavioral Intention of Use affect to Actual System Use	Accepted

Table 7 shows the summary of the results. First, safety affects perceived usefulness but does not affect perceived ease of use. Perceived usefulness has a positive and significant impact on security and privacy. This can be taken to mean that borrowers are seen as being more beneficial when data security and privacy are better protected (Putri et al., 2023). Social influence is not affected by perceived usefulness but by perceived ease of use. Culture is affected by perceive usefulness and ease of use. Hassan & Wood (2020) suggest that social influence has an effect on Americans and Egyptians residing in the United States' inclination to use mobile banking. This study's main finding is that nation culture, both primary and secondary, can affect how customers perceive using new, cutting-edge technical services. Perceived ease of use is affected by perceived usefulness and behavioral intention of use.

Perceived usefulness is also affected by behavioral intentions of use. Finally, behavioral intention of use affects the actual system's use. Based on the Artificial Intelligence evaluation in E-Commerce using TAM, support was also provided for the beneficial effects of perceived ease of use on perceived usefulness and attitude toward usage. The findings also indicate that perceived usefulness has a favorable effect on attitudes toward usage and behavioral intentions to use. The beneficial effects of attitude toward use and behavioral intention to use were not supported by this investigation. Finally, evidence was provided to show the beneficial effect of behavioral intention to use on actual usage (Wang et al., 2023).

CONCLUSION

The adoption of digital technology has transformed banking around the world, including at Bank BRI in Indonesia. The bank has transformed various aspects of its business, including human resources, IT technology, security, employee education, and improving customer service. Usage of the Brimo app has increased, and is expected to continue to increase with the addition of good features. However, it should be noted that all banks will improve digital transactions and customer service. The results show that perceived usefulness and ease of use have an effect on the habit of using Brimo and an increase in active use. However, external factors such as security and social influence were not shown to have a significant effect on the perceived ease of use and usefulness of the application. Future research should consider other external factors and use other methods to gain a better understanding of the use of this technology.

REFERENCES

- Ahdiat, A. (2023). Transaksi Digital Banking di Indonesia Tumbuh 158% dalam 5 Tahun Terakhir | Databoks. <https://databoks.katadata.co.id/datapublish/2023/07/05/transaksi-digital-banking-di-indonesia-tumbuh-158-dalam-5-tahun-terakhir>
- Ahmed, S. W., & Siddiqui, D. A. (2020). Human Resource Management, Total Quality Management and Competitive Advantages: Evidence from Pakistani Banking Industry. *Human Resource Research*, 4(1), 1. <https://doi.org/10.5296/hrr.v4i1.16410>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Alkhowaiter, W. A. (2020). Digital payment and banking adoption research in Gulf countries: A systematic literature review. *International Journal of Information Management*, 53(February), 102102. <https://doi.org/10.1016/j.ijinfomgt.2020.102102>

- Al-Qeisi, K., & Hegazy, A. (2015). Consumer Online Behaviour: A perspective on Internet Banking Usage in Three Non-western Countries. *Procedia Economics and Finance*, 23(October 2014), 386–390. [https://doi.org/10.1016/s2212-5671\(15\)00347-0](https://doi.org/10.1016/s2212-5671(15)00347-0)
- Chau, P. Y. K., & Lai, V. S. K. (2003). An empirical investigation of the determinants of user acceptance of Internet banking. *Journal of Organizational Computing and Electronic Commerce*, 13(2), 123–145. https://doi.org/10.1207/S15327744JOCE1302_3
- Chauhan, S., Akhtar, A., & Gupta, A. (2022). Customer experience in digital banking: a review and future research directions. *International Journal of Quality and Service Sciences*, 14(2), 311–348. <https://doi.org/10.1108/IJQSS-02-2021-0027>
- Dash, M., Mohanty, A. K., Pattnaik, S., Mohapatra, R. C., & Sahoo, D. S. (2011). Using the TAM model to explain how attitudes determine adoption of internet banking. *European Journal of Economics, Finance and Administrative Sciences*, 36, 50–59.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly: Management Information Systems*, 13(3), 319–339. <https://doi.org/10.2307/249008>
- Ghozali, I. (2006). *Aplikasi analisis multivariate dengan program SPSS*. Badan Penerbit Universitas Diponegoro.
- Glavee-Geo, R., Shaikh, A. A., & Karjaluoto, H. (2017). Mobile banking services adoption in Pakistan: are there gender differences? *International Journal of Bank Marketing*, 35(7), 1088–1112. <https://doi.org/10.1108/IJBM-09-2015-0142>
- Hanafizadeh, P., Keating, B. W., & Khedmatgozar, H. R. (2014). A systematic review of Internet banking adoption. *Telematics and Informatics*, 31(3), 492–510. <https://doi.org/10.1016/j.tele.2013.04.003>
- Hill, R. J., Fishbein, M., & Ajzen, I. (1977). Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research. *Contemporary Sociology*, 6(2), 244. <https://doi.org/10.2307/2065853>
- Htay, S. N. N., Salman, S. A., & Meera, A. K. M. (2013). Journal of Internet Banking and Commerce. *Journal of Internet Banking and Commerce*, 18(2–11), 10. <http://eprints.utm.my/8136/>
- Jadil, Y., Rana, N. P., & Dwivedi, Y. K. (2021). A meta-analysis of the UTAUT model in the mobile banking literature: The moderating role of sample size and culture. *Journal of Business Research*, 132, 354–372. <https://doi.org/10.1016/j.jbusres.2021.04.052>
- Kademaunga, C. K., & Phiri, J. (2019). Factors Affecting Successful Implementation of Electronic Procurement in Government Institutions Based on the Technology

- Acceptance Model. *Open Journal of Business and Management*, 07(04), 1705–1714.
<https://doi.org/10.4236/ojbm.2019.74118>
- Karjaluoto, H., Shaikh, A. A., Saarijärvi, H., & Saraniemi, S. (2018). How perceived value drives the use of mobile financial services apps Authors: Heikki Karjaluoto, Aijaz A. Shaikha, Hannu Saarijärvi & Saila Saraniemi. *International Journal of Information Management*, 47, 252–261.
- Kaur, S. J., Ali, L., Hassan, M. K., & Al-Emran, M. (2021). Adoption of digital banking channels in an emerging economy: exploring the role of in-branch efforts. *Journal of Financial Services Marketing*, 26(2), 107–121. <https://doi.org/10.1057/s41264-020-00082-w>
- Liébana-Cabanillas, F., & Lara-Rubio, J. (2017). Predictive and explanatory modeling regarding adoption of mobile payment systems. *Technological Forecasting and Social Change*, 120(April), 32–40. <https://doi.org/10.1016/j.techfore.2017.04.002>
- Ligon, E., Malick, B., Sheth, K., & Trachtman, C. (2019). What explains low adoption of digital payment technologies? Evidence from small-scale merchants in Jaipur, India. *PLoS ONE*, 14(7), 1–22. <https://doi.org/10.1371/journal.pone.0219450>
- Mhlanga, D. (2020). Industry 4.0 in finance: the impact of artificial intelligence (ai) on digital financial inclusion. *International Journal of Financial Studies*, 8(3), 1–14. <https://doi.org/10.3390/ijfs8030045>
- Moslehpour, M., Pham, V. K., Wong, W. K., & Bilgiçli, I. (2018). e-purchase intention of Taiwanese consumers: Sustainable mediation of perceived usefulness and perceived ease of use. *Sustainability (Switzerland)*, 10(1). <https://doi.org/10.3390/su10010234>
- Nasri, W. (2011). Factors Influencing the Adoption of Internet Banking in Tunisia. *International Journal of Business and Management*, 6(8), 143–160. <https://doi.org/10.5539/ijbm.v6n8p143>
- Sohail, M. S., & Al-Jabri, I. M. (2014). Attitudes towards mobile banking: Are there any differences between users and non-users? *Behaviour and Information Technology*, 33(4), 335–344. <https://doi.org/10.1080/0144929X.2013.763861>
- Takieddine, S., & Sun, J. (2015). Internet banking diffusion: A country-level analysis. *Electronic Commerce Research and Applications*, 14(5), 361–371. <https://doi.org/10.1016/j.elerap.2015.06.001>
- Venkatesh, V., & Davis, F. D. (2000). Theoretical extension of the Technology Acceptance Model: Four longitudinal field studies. *Management Science*, 46(2), 186–204. <https://doi.org/10.1287/mnsc.46.2.186.11926>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 425–478.

- Yousafzai, S., & Yani-de-Soriano, M. (2012). Understanding customer-specific factors underpinning internet banking adoption. *International Journal of Bank Marketing*, 30(1), 60–81. <https://doi.org/10.1108/02652321211195703>
- Yu, C. S. (2012). Factors affecting individuals to adopt mobile banking: Empirical evidence from the utaut model. *Journal of Electronic Commerce Research*, 13(2), 105–121.