



Factors Influencing E-Banking Adoption in Rural Communities: A Case Study of Batang Kuis

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Article Information

History of article:

Received January 2025

Approved March 2025

Published March 2025

ABSTRACT

This study aims to identify the factors influencing the increased adoption of e-banking in rural communities, specifically in the Batang Kuis region. Data were analyzed using multiple linear regression methods with the aid of SPSS software. The results of the data analysis indicate that the perception of benefits and security are the dominant factors driving e-banking adoption among rural communities in Batang Kuis. This study contributes to the existing literature by aligning with the Utility Theory, which states that perceived and actual benefits are the main drivers of individual technology adoption. Based on these findings, this study recommends enhancing security measures, improving financial literacy through educational programs, and upgrading infrastructure in rural areas to encourage greater e-banking adoption. This requires collaboration between financial institutions and government agencies. However, this study has limitations, including a limited sample size and scope of variables. Future research could expand the sample and include a wider range of variables for a more comprehensive understanding of e-banking adoption in rural areas.

Keywords: E-banking, Rural Communities, Financial Literacy, Infrastructure, Security, Benefits, Financial Policies

JEL Classification Code: A13, C12, C30, D91, G21

INTRODUCTION

Financial inclusion is a central issue in Indonesia's economic development, especially in rural areas. Accelerating financial inclusion will not only improve people's welfare but also encourage more equitable economic growth. However, the reality on the ground shows a high gap between urban and rural areas. In rural areas such as Batang Kuis, access to digital financial services, such as e-banking or mobile banking, is still very limited. Mobile banking, with its ability to facilitate quick, easy, and cost-effective transactions, offers a promising solution to bridge this gap (Prayudi et al., 2022). Although the government has launched various programs to expand access to finance, the adoption of these services among rural communities is still relatively low, even though the overall number of users continues to increase every year (APJII, 2024). The rapid development of the digital economy brings various new opportunities. However, on the other hand, we also face challenges in forming a stable and sustainable digital economic ecosystem. Many aspects of the digital economy are still evolving and not yet fully defined, both at the national and global levels (Andriyaningtyas et al., 2022).

of a survey from APJII BRI's mobile banking penetration percentage is only 15.3%. This difference indicates that other factors besides bank characteristics influence the level of mobile banking adoption (Jatmiko, 2020).

Batang Kuis, chosen as the case study in this research, is a subdistrict in Deli Serdang Regency, North Sumatra, Indonesia, with unique geographical and demographic characteristics. The majority of residents in this area work as farmers and small traders. Despite its relatively close location to the city center of Medan, the adoption of digital finance, especially e-banking, still faces significant challenges, particularly among the elderly. In fact, the use of banking services is quite common in the community, but the utilization of e-banking services has not been optimal. The adequate infrastructure conditions, in terms of both internet access and device availability, raise the question of why e-banking adoption in this region is still low.

This condition is exacerbated by several of socio-economic factors, one of which is the low level of digital literacy. This is a significant obstacle to the adoption of e-banking in society. Rural communities are often less familiar with digital technology

Table 1.
Number of Customers and Mobile Banking Users in 4 Selected Banks

Information	BRI	BNI	BCA	BSI
Number of customers	160 million	64 million	37 million	29,4 million
Mobile Banking Users	33,5 million	16,9 million	30,8 million	6,7 million

Source: Arlina Laras (APJII, 2024), (Data processed, 2024)

Based on the data above, there is a significant difference between the number of mobile banking users and the total number of customers at each bank. Although BRI has a fairly large number of mobile banking users, namely 33.5 million users, this figure is still far below the total population of Indonesian internet users, where the survey results reached 221.5 million people in 2024 based on the results

and are worried about the difficulty in operating banking applications. In addition, the lack of financial education is also an obstacle. According to OJK The latest data from 2022 shows that the knowledge of the Indonesian people regarding financial products and services, both conventional and sharia, is still very low (Otoritas Jasa Keuangan, 2022). The conventional financial literacy rate of only 49.68% and

the much lower Sharia financial literacy at 9.14% is evidence that the government and related institutions still need to work harder to ensure that all people, especially in rural areas, can better understand financial products and services. Goyal & Kumar explain that financial literacy is very crucial to empower individuals to manage their finances effectively, such as setting aside emergency funds, saving for education, and preparing for retirement (Goyal & Kumar, 2021). In line with the findings of OJK increasing Sharia financial literacy is also very important. Individuals with adequate financial literacy can objectively assess the benefits and risks of financial products so that they can make better financial decisions and believe that financial products can improve their quality of life (Otoritas Jasa Keuangan, 2022). Menkhoff emphasized that increasing financial literacy not only benefits individuals but also contributes to wider financial inclusion and economic development (Grohmann & Menkhoff, 2020). Therefore, financial literacy has an important role in increasing financial inclusion and financial behavior. Unfortunately, research results show that the level of financial literacy in Indonesia, even in developed countries, is still relatively low (Ahmad, 2022).

In addition to the long distance from the financial service center, transaction costs that are considered expensive are also an additional obstacle to people's access to formal financial services. This shows that there are still many people, especially in rural areas, who are not yet connected to the modern financial system. For financial inclusion to be achieved evenly, both in urban and rural areas, people need to follow technological developments, especially e-banking. The rapid advancement of technology has transformed the order of people's lives towards a more modern era, marked by the use of information technology, telecommunications, and the internet.

Several complex factors contribute

to the low adoption of e-banking in rural areas, including limited digital infrastructure. The lack of internet networks, cellular signals, and digital devices such as smartphones are major obstacles for rural communities in accessing digital banking services. In addition, the lack of trust in the security of digital financial services is also a significant factor. Incidents of online fraud and loss of personal data have made people increasingly skeptical of digital transactions. This is the same as the findings of Nasution & Suprayitno who highlighted the importance of the trust factor in the adoption of e-banking because incidents of online fraud and loss of personal data have made people more skeptical of the security of digital transactions (Madaniah & Suprayitno, 2022).

However, the results of previous studies on factors influencing e-banking adoption are quite diverse, sometimes even contradictory. This indicates a gap in our understanding of the key factors that encourage or inhibit the use of e-banking. Financial Literacy: Research by (Munajim, 2022) and (Budyastuti, 2021) shows that high financial literacy can increase customer trust and encourage the use of e-banking. However, the findings of (Madaniah & Suprayitno, 2022) are different, increasing financial literacy does not always guarantee increased customer trust in digital banking services. Availability of Infrastructure: (Marthauli et al., 2021), and (Alfina & Batara, 2022) argue that the existence of financial technology, facilitation and features is not enough to attract someone's interest in using digital financial services such as e-banking. However, the results of research (Adi & Ismi, 2023), (Budyastuti, 2021) and (Sahdan & Sardju, 2023) show that the existence of financial technology and supporting facilities and adequate features can attract someone's interest in using digital financial services such as e-banking. Security Perception: three studies conducted by (Purwati et al., 2020),

(Aditya & Mahyuni, 2022) and (Sari et al., 2021) The results of the research show that the level of customer concern about risk greatly influences their interest in using banking services via cell phone. User Experience: (Muthi'ah & Indrarini, 2023), (Adha, 2024) and (Febrima & Siti, 2022) in their research found that perceived ease of use can increase interest in using mobile banking. However, research conducted by (Eudora et al., 2021), (Muthi'ah & Indrarini, 2023) and (Eudora et al., 2021) shows different results, where perceived ease of use, level of usability, and user attitude do not always have a significant effect on customers' intentions to use internet banking. Advantages and Benefits: (Farid & Laksmi, 2023), (Effendy, 2021) and (Nursiah et al., 2022) research concluded that advantages and benefits can increase a person's interest in using a product or service. However, the results of research by (Himawati, 2018) and (Fernos & Alfadino, 2021) showed that perceived benefits were not always a determining factor in the use of mobile banking.

The low financial literacy of rural communities in Batang Kuis is one of the main challenges in encouraging e-banking adoption. Lack of understanding of digital financial products and services makes people hesitant to use them. In addition, limited access to supporting infrastructure such as a stable internet network and adequate devices, as well as concerns about transaction security, further complicate e-banking adoption efforts. Research on e-banking adoption in rural areas often produces mixed and even contradictory findings, indicating a gap in understanding the factors that influence adoption. This suggests the need for further research that specifically examines rural contexts such as Batang Kuis. The unique characteristics of rural communities, such as low levels of digital and financial literacy, trust in technology, and limited infrastructure, need to be considered in depth in an effort to un-

derstand the dynamics of e-banking adoption. Thus, contextual research will provide a more comprehensive understanding of the factors that influence e-banking adoption in rural areas.

This study aims to explore the factors that influence the adoption of e-banking in the Batang Kuis community. In addition, this study will also formulate effective strategies to increase the adoption of e-banking in the region. By understanding the local context and specific needs of the Batang Kuis community, it is hoped that relevant and sustainable educational programs can be designed. This strategy will be adjusted to the unique characteristics of the Batang Kuis community. The community needs to be invited to feel the direct benefits of using e-banking in everyday life, as explained by the OJK the benefits of digital banking services are balance information, account mutations, fund transfers, payments (credit cards, top-up credit, PLN, telephone, internet quota, insurance, electricity), and many more.

METHODOLOGY

This study applies to a quantitative method with purposive sampling to obtain data from the Batang Kuis community population who actively use e-banking. The number of samples set was 60 respondents, referring to the Roscoe (1975) guidelines which suggest a sample size of 10 times the number of variables. Primary data were collected through a questionnaire using a 5-point Likert scale. This scale has five answer options: Strongly Disagree (STS), Disagree (TS), Less Agree (KS), Agree (S), and Strongly Agree (SS). The research variables consist of one variable dependent variable, namely Interest in Using E-banking (Y), and five independent variables, namely Financial Literacy (X1), Infrastructure (X2), Security (X3), User Experience (X4), and Benefits and Advantages (X5). Table 2 shows the indicators of each variable.

Table 2.
Research Indicators

Variable	Definisi Operasional	Indicator
Interest in Using E-Banking(Y)	This includes perceptions about the ease of using e-banking, security in transactions, perceived benefits, and strong motivation to use this service. This interest is measured to determine how much an individual is motivated to adopt e-banking in their daily lives.	Perception of ease of using e-banking. Perception of security in transactions via e-banking. Perception of benefits felt from e-banking. How big is the motivation to use e-banking.
Financial Literacy (X1)	This involves knowledge of financial products and services, understanding of financial risks, knowledge of consumer rights and obligations, and skills in personal financial management. A high level of financial literacy is expected to encourage the adoption of e-banking because individuals are better able to understand the benefits and risks involved.	Knowledge of financial products and services. Understanding financial risk. Knowledge of consumer rights and obligations. Skills regarding personal financial management.
Infrastructure (X2)	This includes ease of access to the internet network, availability of the necessary devices (such as smartphones or computers), quality of telecommunications services, and availability of supporting facilities such as bank branches or ATMs. Adequate infrastructure is essential to ensure accessibility and smooth use of e-banking.	Easy of accessing the internet network. Availability of the required devices. Quality of telecommunications services. Availability of supporting facilities (KC Bank).
Security (X3)	This includes perceptions of personal data security in e-banking, perceptions of security during transactions, trust in the bank's security system, and experiences with fraud cases. Trust in the security of e-banking is an important factor in the adoption of this service.	Perception of personal data security in e-banking. Perception of security when transacting in e-banking. Trust in the bank's security system. Experience with fraud cases.
User Experience (X4)	This involves the frequency of service use, quality of service provided, satisfaction when using the service, and the likelihood of recommending e-banking to others. A positive user experience can increase interest and loyalty towards e-banking.	How regularly do you use e-banking services. How good is the quality of service provided. Satisfaction when using e-banking services. Possibility to recommend e-banking.
Advantages And Benefits (X5)	This includes time efficiency, accessibility, perception of costs incurred, and additional benefits such as promotions, prizes, or attractive features. A good perception of the advantages and benefits of e-banking can be a strong driver for adoption.	Time efficient when using e-banking. Accessibility using e-banking services. Perception of the costs incurred. Additional benefits (Promos, Gifts, Features).

Source: Author's Processed Results (2024)

The unit of analysis in this study is the individual, with each respondent representing a single observation unit. Given that the data were collected at a specific point in time from various individuals, this research is cross-sectional. Therefore, the econo-

metric model used includes the subscript 'i' to denote the individual unit, reflecting the nature of the data collected. Multiple linear regression analysis was used to examine the relationship between independent variables (financial literacy, infrastructure, security, user experience, benefits) and the dependent variable (interest in using e-banking). This model was selected for its ability to measure the influence of multiple independent variables on a single dependent variable simultaneously. The regression equation used is as follows:

$$IUE_i = \alpha + \beta_1 FL_i + \beta_2 In_i + \beta_3 Se_i + \beta_4 UE_i + \beta_5 AB_i + \varepsilon_i$$

where IUE_i is interested in using e-banking, α is a constant, FL_i is a financial literacy variable, In_i is an infrastructure variable, Se_i is a security variable, UE_i is a user experience variable, AB_i is a variable of profit and benefit, β_1 -5 are the regression coefficients and ε_i is the error term.

Prior to regression analysis, validity and reliability tests were conducted to ensure that the research instrument (questionnaire) accurately measured the constructs

under study and provided consistent results. Validity was assessed using Pearson correlation, and reliability was assessed using Cronbach's Alpha. Subsequently, a series of classical assumption tests were performed to ensure that the assumptions underlying the regression model were met. These tests included normality tests (using the Kolmogorov-Smirnov test and graphical analysis such as histograms and normal probability plots), multicollinearity tests (using the Variance Inflation Factor or VIF), and heteroscedasticity tests (using scatterplot plots). Data analysis was conducted using SPSS software, with a significance level of 0.05 used in hypothesis testing.

RESULTS AND DISCUSSION

This study focuses on understanding the factors that influence the adoption of e-banking services among rural communities. Based on the results of a survey of 60 active users of e-banking services, several interesting findings were found which will be explained further in the following table 3.

Table 3.
Identity of E-banking User Respondents

Characteristics	Indicator	Number of respondents	Percentage (%)
Gender	Man	23	38,3%
	Women	37	61,7%
Age	17-24 years	51	85%
	25-30 years	4	6,7%
	31-35 years	3	5%
	36-40 years	2	3,3%
Work	Not yet/Not working	7	11,7%
	State apparatus/officials	1	1,7%
	Teaching energy	2	3,3%
	Farmer/rancher	1	1,7%
	Student/college student	43	71,7%
	Self-employed	8	13,3%
Types of e-banking	Mobile banking	56	93,3%
	Internet banking	4	6,7%

Source: Data Processing Results (2024)

Referring to the table 3, analysis of 60 respondents in Batang Kuis reveals interesting demographic characteristics. In terms of gender, women dominate, namely 37 people with a percentage of 61.7% indicating that women in this area are more

active in adopting digital banking services. The age of respondents is concentrated in the 17-24 year group with a percentage of 85%, indicating that the younger generation in Batang Kuis has a higher level of e-banking adoption. Most respondents

Table 4.
Descriptive Statistics

Description	Mean	Median	Max	Min	Stdev	Respondents
X1	17.3333	17	20	12	1.7095	60
X2	17.0333	17	20	9	2.3450	60
X3	17.2333	17	20	9	2.5714	60
X4	17.5333	18	20	11	2.1868	60
X5	17.7333	18	20	11	2.1045	60
Y	17.81667	19	20	10	2.2985	60

Source: Data Processing Results (2024)

Table 5.
Validity Test Results

Variabel	Indicator	R count	R table	Sig. (2-tailed)	Description
Financial Literacy(X1)	1	0,783	>0,254	0,000	Valid
	2	0,658			
	3	0,720			
	4	0,653			
Infrastructure(X2)	1	0,752	>0,254	0,000	Valid
	2	0,746			
	3	0,758			
	4	0,735			
Security(X3)	1	0,866	>0,254	0,000	Valid
	2	0,885			
	3	0,762			
	4	0,843			
User Experience(X4)	1	0,807	>0,254	0,000	Valid
	2	0,822			
	3	0,859			
	4	0,767			
Advantages and Benefits (X5)	1	0,804	>0,254	0,000	Valid
	2	0,824			
	3	0,692			
	4	0,771			
Interest in Using E-Banking(Y)	1	0,819	>0,254	0,000	Valid
	2	0,799			
	3	0,840			
	4	0,818			

Source: Data Processing Results (2024)

consist of students or students, namely 43 individuals with a percentage of 71.7%, which is in line with the pattern of digital technology utilization among the younger generation. The preference for using e-banking is more inclined towards mobile banking, namely 56 with a percentage of 93.3%, indicating that mobile application-based banking services are more popular among respondents. The data in the identity table shows significant variation among respondents. This shows that individual characteristics are very diverse and need to be considered in further analysis.

Based on Table 4, it can be seen that of the 60 respondents in the quiz area studied, there were variations in the values for the research variables. For the financial literacy variable (X1), the values ranged from 12 to 20 with a median of 17. For the financial literacy variable (*18. and finally, for the financial literacy variable (y), the value ranges from 10 to 20 with a median of 19. Meanwhile, the standard Devian of 19. Meanwhile, the standard Devian value for all variables ranges from 1.709 to 2.571, indicating a very good value because the standard value is smaller than with a mean value ranging from 17.033 to 17.816.

Validity test results

Validity testing is explained by Ghozali as a measure of the extent to which a research instrument, in this case a questionnaire, can accurately measure the construct or variable that is to be measured. The validity criteria for an item question is whether the correlation value (r count) is

greater than the critical value (r table) that has been set (Ghozali & Imam, 2012).

Based on Table 5 validity test, the coefficient value (r count) of each indicator ranges from 0.658 to 0.818. The r table value with $df = n2 (60 - 2)58$ at a significant level of 5% (0.05) is 0.254. Because all indicators have a calculated r value greater than the r table value and at the sig. Value (2-tailed value) each variable has a value of 0.000 0.05. Therefore, it can be concluded that all indicators show very good validity. This shows that the research tool used has succeeded in measuring the constructs to be measured, namely financial literacy, infrastructure, security, user experience, advantages and benefits, and interest in using e-banking.

Reliability Test Results

Reliability testing aims to ensure that the measuring instrument used is reliable and provides consistent results. Sugiyono stated that a research instrument is considered reliable if its Cronbach Alpha value is at least 0.6 (Sugiyono, 2018).

The results of the reliability test show that all research variables have very good Cronbach's Alpha values, which are more than 0.60. The Cronbach's Alpha value can vary between 0.653 and 0.836. This indicates that the questions in the research tool can measure the desired constructs with consistency. Therefore, the information obtained from this study can be considered reliable and can be used for further analysis with a high degree of confidence.

Table 6.
Reliability Test Results

Variable	Cronbach's Alpha value	Critical point	Description
Financial Literacy	0.653	>0.60	Reliabel
Infrastructure	0.736		
Security	0.857		
User Experience	0.824		
Advantages and Benefits	0.763		
Interest in Using E-Banking	0.836		

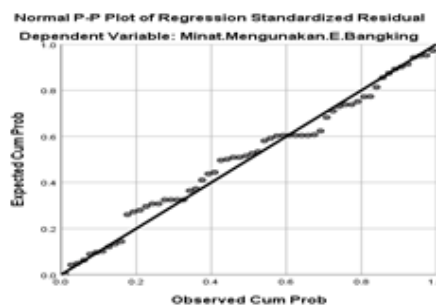
Source: Data Processing Results (2024)

Classic Assumption Test

To ensure that the assumption of normality is met in data analysis, normality testing is carried out. The methods used include visualization of data distribution through scatterplots and one-sample Kolmogorov-Smirnov statistical tests. Visual analysis helps in identifying general data distribution patterns, while the Kolmogorov-Smirnov test provides more formal results regarding the suitability of the data to a normal distribution.

The results of the Kolmogorov-Smirnov normality test in Table 7 show that the research data is normally distributed, with a significance value of 0.200. This is because the significance value exceeds the established significance level (0.05).

To ensure that there are no multicollinearity problems that can interfere with the estimation of the regression coefficient, a test is carried out by looking at the VIF value which is less than 10, indicating that the independent variables in the model do not have a multicollinearity problem.



Source: Data Processing Results (2024)

Figure 1.

Export Trade of RCEP Region Countries in 2012-2022

Table 7.
Kolmogorov-Smirnov Test Results

N	60	
Normal Parameters ^a , b	Mean	0.0000000
	Std. Deviation	1.62569489
Most Extreme Differences	Absolute	0.084
	Positive	0.072
	Negative	-0.084
Test Statistic	.084	
Asymp. Sig. (2-tailed)	.200 ^{c, d}	

Source: Data Processing Results (2024)

Based on the visualization in Figure 1, the plot shows a data distribution pattern that tends to be linear. This indicates the possibility of a linear relationship between the independent and dependent variables. In addition, the relatively even data distribution pattern along the regression line supports the assumption that both variables are normally distributed.

Analysis of Table 8 shows that all variables in the table are free from multicollinearity problems, as seen from the VIF values which are below the specified limit. The value of the independent variables (Financial Literacy, Infrastructure, Security, User Experience, and Security) ranged from 2.157 to 1.773 which is less than 10. Thus, it can be concluded that the test in

the study shows that there is no multicollinearity.

This test is used to test the assumption of homoscedasticity in the regression model, namely the assumption that the error or residual variance is the same for all values of the independent variable. If the image does not form a particular pattern or the pattern is gathered in one area, then there is no heteroscedasticity.

In Figure 2, it can be seen that the points do not form a particular pattern or gather in one area, but rather spread out in all directions, so it can be concluded that no heteroscedasticity occurs.

The t-test analysis in this study aims to assess how significant the influence

of each independent variable is on the dependent variable individually. This test uses a significance level of 5% with the assumption. If the significance value exceeds 0.05 and the calculated t value is higher than the t table value, then the hypothesis is accepted. Conversely, if the significance value is below 0.05 and the calculated t value is smaller than the t table value, then the hypothesis is rejected.

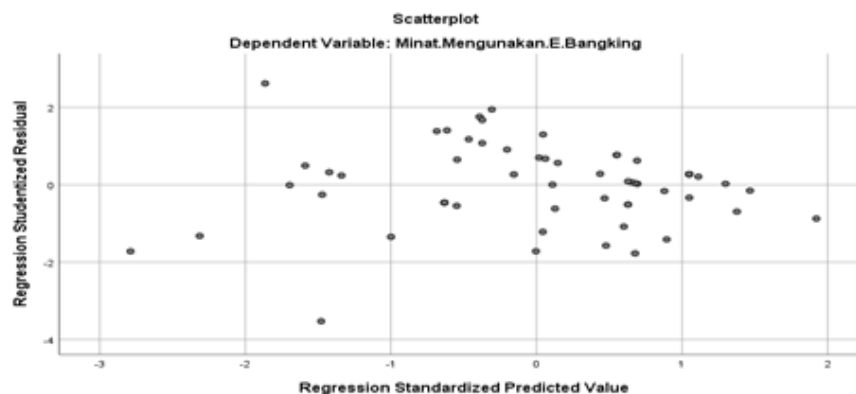
H1 Financial Literacy (X1)

According to the results of the t-test, the Financial Literacy variable (X1) shows a calculated t value of -0.546 and a t table of 2.005. This indicates that the calculated t is smaller than the t table ($-0.546 < 2.005$) and the significance value of 0.587 is greater

Table 8.
Multicollinearity Test Results Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics	
	B	Std. Error	Beta	T		Tolerance	VIF
(Constant)	5.663	2.410		2.349	0.022		
Financial Literacy	-0.103	0.188	-0.077	-0.546	0.587	0.464	2.157
Infrastructure	-0.139	0.134	-0.142	-1.032	0.307	0.484	2.065
Security	0.654	0.137	0.731	4.777	0.000	0.389	2.573
User Experience	-0.146	0.151	-0.139	-0.962	0.340	0.440	2.274
Advantages and Benefits	0.428	0.139	0.392	3.084	0.003	0.564	1.773

Source: Data Processing Results (2024)



Source: Data Processing Results (2024)

Figure 2.
Scatterplot Normality Test

than 0.05. Therefore, the results of the analysis show that people's interest in using e-banking is not significantly influenced by their level of financial literacy.

H2 Infrastructure Variable (X2)

Based on the test results above, the Infrastructure Variable (X2) shows a t-count value of -1.032 and a t-table value of 2.005. Thus, the value of 1 count 1 table ($-1.032 < 2.005$) and a significance value of 0.307 0.05. It can be concluded that the "Infrastructure" variable does not play a significant role in encouraging people to use e-banking.

H3 Security Variable (X3)

Based on the results of the t-test above, the Security variable (X3) shows a value count is 4.777 and a t table value is 2.005, so the t count is greater than the t table ($4.777 > 2.005$) and the significance value of 0.000 is less than 0.05. The results of the analysis prove that the "Security" factor has a very significant effect on a person's interest in using e-banking services.

H4 User Experience (X4)

Based on the results of the t-test above, the User Experience variable (X4) produces a t-count value of 0.962 and a t-table value of 2.005, so that the t-table ($-0.962 < 2.005$) and the significance value of 0.340 > 0.05 . This data analysis shows that there is no significant relationship between User Experience and individual interest in using banking services.

H5 Advantages and Benefits (X5)

Based on the test results above, the variable Advantages and Benefits (X5) has a t-value of 3.084 and a t-table value of 2.005, so that the t-value of t-table ($3.084 > 2.005$) and its significance value is 0.003 < 0.05 . Data analysis indicates that the variable "Advantages and Benefits" with a high level of significance plays a role in individual interest in using e-banking services.

F-test analysis is conducted to test whether all independent variables entered into the regression model together or simultaneously provide a significant contribution

Table 9.
T Test Results

Model	Coefficients ^a		Standardized Coefficients	T	Sig.
	Unstandardized Coefficients	Std. Error			
(Constant)	5.663	2.410		2.349	0.022
Financial Literacy	-0.103	0.188	-0.077	-0.546	0.587
Infrastructure	-0.139	0.134	-0.142	-1.032	0.307
Security	0.654	0.137	0.731	4.777	0.000
User Experience	-0.146	0.151	-0.139	-0.962	0.340
Advantages and Benefits	0.428	0.139	0.392	3.084	0.003

Source: Data Processing Results (2024)

Table 10.
F-Test Results

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	161.053	5	32.211	11.155	0.000b
Residual	155.930	54	2.888		
Total	316.983	59			

Source: Data Processing Results (2024)

in explaining changes in the dependent variable. The criterion for accepting the hypothesis is if the calculated F value is greater than the F table value at a significance level of 5%.

From Table 10, it can be seen that the calculated F value is $11.164 > f$ table 2.389 and the significance value is $0.000 < 0.05$. This means that the independent variables entered (profit, security, infrastructure, user experience, and financial literacy) together provide a significant contribution to explaining why someone is interested in using e-banking.

By using multiple correlation tests, we can find out the percentage contribution of each independent variable together to the change of the dependent variable. The results of this calculation are presented in the following table 11.

Table 11.
Coefficient of Determination Test Results

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.713a	0.508	0.463	1.69929

Source: Data Processing Results (2024)

Based on table 11, the coefficient of determination (R^2) value of 50.8% indicates that about half of the total variation in interest e-banking usage can be explained by independent variables in the study. However, there is still about 49.2% unexplained variation, which may be influenced by other factors outside the study that are not included in this study.

Multiple linear regression analysis is a useful statistical tool for testing hypotheses about the influence of independent variables, either partially (one by one) or simultaneously (together), on changes in dependent variables.

Based on the results of the multiple linear regression analysis contained in Table 8, Unstandardized Coefficients column, section B, the relationship between the research variables can be expressed through the following regression equation:

$$IUE_i = \alpha + \beta_1 FI_i + \beta_2 In_i + \beta_3 Se_i + \beta_4 Ue_i + \beta_5 Ab_i + \varepsilon_i$$

Based on the results of multiple linear regression analysis, it can be concluded that:

Constant 5.663: The constant value (α) of 5.663 shows that if all independent variables (Financial Literacy, Infrastructure, Security, User Experience, Benefits and Advantages) are considered constant or do not change, then the Interest in Using E-banking is 5.663 units.

Financial Literacy Coefficient -0.103: This coefficient indicates that a one-unit increase in the financial literacy variable will cause a decrease of 0.103 units in the interest in using the e-banking variable, assuming that other independent variables remain constant.

Infrastructure Coefficient -0.139: This coefficient shows that every one-unit

increase in the infrastructure variable results in a decrease of 0.139 units in the interest in using the e-banking variable, assuming other independent variables are constant.

Security Coefficient 0.654: This coefficient shows that every one-unit increase in the Security variable results in an increase of 0.654 units in the interest variable to use e-banking, assuming that the other independent variables remain constant.

User Experience Coefficient 0.146: This coefficient shows that every one unit increase in the User Experience variable results in a decrease of 0.146 units in the interest in using the e-banking variable, assuming other independent variables are constant.

Coefficient of Advantages and Benefits 0.428: This coefficient shows that ev-

ery one unit increase in the Advantages and Benefits variable leads to a 0.428 unit increase in the interest variable in using e-banking, assuming other independent variables are constant.

The influence of financial literacy among rural communities on interest in using e-banking

The findings of this study related to the impact of financial literacy on the interest in using e-banking are quite interesting to be studied further. The results of this study found that a person's level of financial literacy is not a factor that influences a person's decision to use electronic banking services. In line with the findings of (Madaniah & Suprayitno, 2022), but in contrast to previous studies such as (Munajim, 2022) and (Budyastuti, 2021). These findings can also be explained by the perception of rural communities that the use of digital financial technology, especially e-banking, is simple and easy to use. Thanks to the intuitive interface design and simplified transaction processes by banks, people feel that a deep understanding of financial literacy is no longer a major prerequisite. As long as they understand the basics of operating a smartphone and e-banking applications, they feel quite capable of conducting digital financial transactions. This indicates that the ease of access and use of technology can compensate for a lack of theoretical understanding of complex financial concepts. In this context, educational programs that focus more on practical training in the use of e-banking applications and demonstrations of their direct benefits may be more effective than financial literacy programs that emphasize theoretical knowledge.

The Influence of technological infrastructure in villages on people's interest in using e-banking

This finding shows that the variable 'Infrastructure' does not affect people's interest in using e-banking. This finding is quite surprising considering the general

assumption that the availability of information technology infrastructure is a major prerequisite for the adoption of digital financial services. The results of this study indicate that while infrastructure is an important supporting factor, it is not a determining factor. Other factors such as security and perceived benefits may play a greater role in driving e-banking adoption among rural communities. This finding is in line with (Adi & Ismi, 2023), (Budyastuti, 2021) and (Sahdan & Sardju, 2023) which highlights that economic development is not always influenced by the adoption of the digital economy such as e-banking. The difference in the results of this study with previous studies that emphasize the important role of infrastructure, such as research (Marthauli et al., 2021), This finding can also be understood within the context of infrastructure development that has become quite adequate in areas like Batang Kuis. In recent years, internet access and smartphone penetration have significantly increased, even before the surge in e-banking usage as it is today. This has allowed the community to access e-banking services without significant infrastructure barriers. Thus, infrastructure is no longer a major limiting factor in the adoption of e-banking in Batang Kuis. However, it is important to note that this finding may not apply to other rural areas that still face significant infrastructure limitations. Further research in these areas is needed to understand how infrastructure affects e-banking adoption in different contexts.

The influence of security perceptions related to e-banking on the interest of rural communities in using e-banking

The findings of this study indicate that the variable 'Security has a very significant impact on people's interest in using e-banking. In other words, the higher a person's view of security in utilizing e-banking services, the greater their opportunity to use the service. This result is in line with the research of (Purwati et al.,

2020), (Aditya & Mahyuni, 2022) and (Sari et al., 2021) which showed that views on risk and security are the main factors in the acceptance of e-banking services. This indicates that a strong perception of security also contributes to customer satisfaction and loyalty towards e-banking services. Customers who feel confident that their data and funds are well protected tend to be more satisfied with their experience and are more likely to continue using the service. Conversely, negative experiences related to security, such as theft or fraud, whether in digital or traditional financial transactions, can significantly affect the preference of rural communities towards e-banking. In this context, e-banking is often considered a safer alternative compared to cash transactions or traditional banking services, where the risk of physical theft or loss of cash is higher. This perception is reinforced by the security features offered by e-banking services, such as two-factor authentication, data encryption, and real-time transaction notifications, which provide an additional sense of security for users.

The influence of positive experiences gained on people's interest in using e-banking

The results of this study indicate that the variable 'User Experience' does not significantly influence people's interest in using e-banking. This finding is quite surprising considering the general assumption that positive experiences will encourage repeat use. This finding is partly the same as Laksana's research (Eudora et al., 2021), (Muthi'ah & Indrarini, 2023) and (Eudora et al., 2021) which indicates that views on ease of use can increase interest in using mobile banking. However, the findings of this study are contrary to the research of (Muthi'ah & Indrarini, 2023), (Maulidini Adha, 2024) and (Febrima & Siti, 2022) which showed different results, where perceptions of ease of use, level of usefulness, and user attitudes do not always have a significant effect on customer

intentions to use internet banking. Additionally, the demographic characteristics of the research sample can also influence the findings. The majority of respondents are students or pupils who are not yet employed, who tend to have limited funds in their bank accounts. Consequently, even though they have positive experiences with e-banking, their usage frequency may remain low due to financial resource constraints. In this context, user experience may play a greater role in retaining existing users rather than encouraging an increase in e-banking usage intensity. In other words, positive experiences can strengthen existing user loyalty, but do not automatically increase transaction frequency or adoption by new users.

The influence of perceived advantages and benefits on the interest of rural communities in using e-banking

The findings of this researcher show that the variables of Advantages and Benefits have a significant influence on people's interest in using e-banking. This means that the higher the individual's perception of the advantages and benefits obtained from using e-banking, the greater the likelihood that the individual will use e-banking services. This finding supports the utility theory, which is an economic theory that explains how individuals make choices to maximize the benefits, advantages, or pleasures they get. The higher the satisfaction that obtained, the higher the utility value. Conversely, the lower the satisfaction is obtained, the lower the utility value (Jeremy Bentham, 1748-1832). And this result is in line with (Farid & Laksmi, 2023), (Effendy, 2021) and (Nursiah et al., 2022). However, the results of (Fernos & Alfadino, 2021) showed that the perception of benefits is not always a determining factor in the use of mobile banking. E-banking offers transaction convenience that is not bound by time and place, allowing customers to conduct various banking activities anytime and anywhere without having to

visit a bank branch. The practicality and speed in conducting transactions, ease of investment, and the ability to open new accounts online are some of the benefits perceived by users. The ease of e-banking usage, defined as an individual's level of belief that the use of this information technology is easy and does not require excessive effort, becomes an important factor in encouraging the interest of rural communities to utilize these services. Thus, providing intuitive and easy-to-understand e-banking services is key to increasing adoption among rural communities.

CONCLUSIONS

This study aims to identify factors that influence the adoption of e-banking in rural communities, especially in the Batang Kuis area. The results of the study indicate that the perception of benefits and security are the dominant factors that encourage people to use e-banking services. Although financial literacy and infrastructure also play a role, their influence is not as large as the two main factors. This finding indicates that to increase the adoption of e-banking, financial institutions need to focus more on efforts to build public trust and communicate the real benefits of digital services. In addition, the government needs to play an active role in providing adequate infrastructure and creating a conducive environment for the growth of digital financial services. The results also show that user experience does not have a significant influence on the initial decision to use e-banking, but may play a greater role in retaining existing users. Further research is recommended to explore more deeply the role of cultural, social, and economic factors that may influence the interest in using e-banking. It should be noted that this study has limitations, namely the relatively limited sample size and focus on the Batang Kuis area only. This can limit the generalization of the research results to other rural areas with different charac-

teristics.

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