
RESEARCH ARTICLE

Analysis of Factors Affecting the Intention of Applying for Digital-Based Loans Based on the Technology Acceptance Model

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ABSTRACT

This study focuses on analyzing the factors that influence the intention of applying for digital-based loans, using the Technology Acceptance Model (TAM). In the midst of the advancement of the digital economy that drives transformation in the financial sector, especially financial technology, this study examines how digital innovation affects consumer behavior in applying for loans. Through literature studies and empirical surveys, this study analyzes the role of Data Security & Privacy, Quality Administrative Service, Perceived Risk, Perceived Value, and Financial Literacy in influencing Perceived Usefulness, Perceived Ease of Use, Perceived Trust, and the intention of using digital loan applications. This study also examines the role of Perceived Usefulness, Perceived Ease of Use and Perceived Trust as mediating variables. The findings of this research are expected to provide valuable insights for the financial industry and consumers in understanding the factors that play a role in the adoption of financial technology, especially in the context of applying for digital loans.

KEYWORDS

Digital Loans, Technology Acceptance Model, Perceived Risk, Perceived Value, Financial Literacy, Perceived Trust, Intention to Use

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1. Introduction

In the last decade, advances in information and communication technology have changed the paradigm of the financial sector globally. The digital economy, which serves as the "new driving force" behind global economic progress, has created new industries and strengthened traditional sectors.

The rapid development of technology has stimulated various innovation efforts in the financial sector, one of which is through financial technology. Data from KMPG (2023) shows that in the last decade, investment in fintech companies around the world tends to increase. This encourages significant changes in consumer behavior, one of which is consumer behavior in applying for loans. In its evolution, financial technology has brought transformation to business operations that were once carried out conventionally into digital services. (Gulamhuseinwala et al., 2015; Raharja et al., 2020).

In Indonesia, the practice of using online loan applications has an increasing trend. An article from Databoks Katadata.co.id (2023) reports that online lending in Indonesia will increase in August 2023. Based on the latest data, it can be seen that the majority of online loan users are the younger generation, especially Gen Z and Millennials. They were recorded as the largest contributor to loan recipients, reaching Rp26.87 trillion. (Goodstats, 2023).

The Buy Now Pay Later (BNPL) payment method, also known as PayLater in Indonesia, provides flexibility to consumers to buy products or services and pay off within a certain period of time through installments by adding additional fees or interest. Research

conducted by Populix entitled "Unveiling Indonesia's Financial Evolution: Fintech Lending and Paylater Adoption" shows that 55% of respondents use paylater services for various purposes including purchasing internet data, electricity (48%), clothing (48%), electronics and accessories (21%), gadgets (19%), vacation (10%) (Populix, 2023).

Factors that influence their choice of PayLater services include connectedness with the marketplace (71%), compliance with regulations from the Financial Services Authority (67%), ease of payment (57%), uncomplicated registration process (52%), and competitive interest rates (50%). The ease of paying off payments and simple registration procedures are the main reasons for the increasing use of PayLater services as a practical payment solution for various transactions (Propulix, 2023). Even with the facilities offered, there are issues and stigmas attached to these online loans. In the period from January to May 2023, the Financial Services Authority (OJK) recorded 3,903 public complaints related to illegal online loans (Katadata, 2023). Not only related to data security, the level of financial literacy of the Indonesian people also affects the intention to use digital-based loan applications. Similar conditions are reflected in data released by Statista in March 2023. In addition to cut off debt and high costs, respondents are also worried about misunderstanding the PayLater guidelines (18.3%) and the spreading or misusing of their personal data (10.3%) (Statista, 2023).

Research on this phenomenon was conducted by Putri et al (2023) who discussed the analysis of financial technology acceptance from peer to peer lending (P2P lending) using the Extended Technology Acceptance Model (TAM). The results showed that many people are reluctant to use P2P lending with the main reason being concerns over data security and privacy. Regarding quality administration services (QAS), it does not affect the intention to use the P2P lending platform. Similar research with different objects has been examined by Abdennebi (2023), where the study aims to explore the elements that influence the acceptance of M-banking from the point of view of developing countries (with a case study in Tunisia) by expanding the Technology Acceptance Model (TAM) framework. The results showed that views on ease of use and functional value played an important role in shaping the intention to adopt M-banking, while perceptions of security, satisfaction, and trust levels did not have a statistically significant relationship with the intention to adopt M-banking. In the empirical analysis of the study, the mediating aspects of trust and satisfaction levels were analyzed. The findings of this study revealed that trust has a role in part in mediating the relationship between perceptions of safety and satisfaction levels.

Researchers found similarities between the models of previous studies with online loan applications, so it was felt that the model was appropriate for use in research. However, from the study, several limitations were found where there was no risk perception and level of financial literacy studied from the model. So, the researchers adopted the results of the study of Dao Ha et al (2023) which discussed the role of financial literacy and risks to the use of e-money. From this research, it is known that financial literacy has a positive impact on the use of e-money although not significantly.

Thus, the formulation of this research question is; 1) Does Data Security & Privacy and Quality Administrative Service affect Perceived Usefulness, Perceived Ease of Use and Intention in using digital mobile financing? 2) Does Perceived Risk, Perceived Value and Financial Literacy affect Perceived Trust and Intention in using digital mobile financing? 3) Does Perceived Usefulness and Perceived Trust mediate the effect of Perceived Ease of Use on the intention in using digital mobile financing?

This research aims to; 1) Analyze the effect of Data Security & Privacy and Quality Administrative Service on Perceived Usefulness, Perceived Ease of Use and Intention to use digital mobile financing. 2) Analyze the effect of Perceived Risk, Perceived Value and Financial Literacy on Perceived Trust and Intention to use digital mobile financing. 3) Analyze the role of Perceived Usefulness and Perceived Trust as mediators in the effect of Perceived Ease of Use on the intention to use digital-based loan applications Intention to use digital mobile financing).

The benefit of this research is that it can provide new knowledge about the factors that drive consumer intentions and behavior in using digital-based modes to apply for loans, using the Technology Acceptance Model developed. Practically, for the banking and fintech industry, this research can provide an overview of the factors that drive consumer intentions and behavior in using digital-based modes to apply for loans. Based on the description of the research background above, the title in this study is "Analysis of Factors Affecting the Intention of Digital-Based Loan Applications Based on the Technology Acceptance Model".

2. Research Methods

This study was conducted to determine how the influence of digital finance platforms on the behavior of intention to make loans. Data collection is then carried out using the survey method through a questionnaire link that is distributed to respondents who are interested or will apply for online loans. Further, this study analyzes the factors that influence the intention of using digital platforms in applying for loans with two previous studies as the starting point. Here are the research models used by adopting both models:

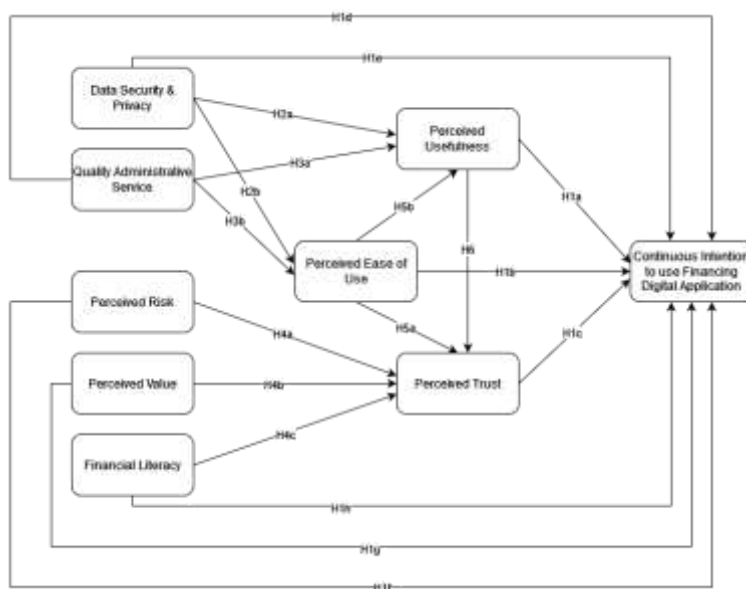


Figure 1. Research Model

Source: Research of Putri *et al.* (2023) and Dao Ha *et al.* (2023) reprocessed by researchers

The hypothesis of this study is as follows:

- H1a: Perceived Usefulness has positive influence on the intention to use digital-based loan applications
- H1b: Perceived Ease of Use has positive influence on the intention to use digital-based loan applications
- H1c: Perceived Trust has positive influence on the intention to use digital-based loan applications
- H1d: Quality Administrative Service has positive influence on the intention to use digital-based loan applications
- H1e: Data Security & Privacy has positive influence on the intention to use digital-based loan applications
- H1f: Perceived Risk negatively affect the Intention to Use Digital-Based Loan Applications
- H1g: Perceived Value has positive influence on the intention to use digital-based loan applications
- H1h: Financial Literacy has positive influence on the intention to use digital-based loan applications
- H2a: Data Security & Privacy has positive effect on Perceived Usefulness
- H2b: Data Security & Privacy has positive effect on Perceived Ease of Use
- H3a: Quality Administrative Service has positive effect on Perceived Usefulness
- H3b: Quality Administrative Service has positive effect on Perceived Ease of Use
- H4a: Perceived Risk negatively affect Perceived Trust
- H4b: Perceived Value has positive effect on Perceived Trust
- H4c: Financial Literacy has positive effect on Perceived Trust
- H5a: Perceived Trust become a mediator in influence Perceived Ease of Use on the Intention of Using Digital-Based Loan Applications
- H5b: Perceived Usefulness become a mediator in influence Perceived Ease of Use on the Intention of Using Digital-Based Loan Applications
- H6: Perceived Usefulness has positive effect on Perceived Trust

This primary data was obtained through questionnaires filled out by respondents through Google Form. The population used in this study is Indonesian citizens, productive age who can apply for loans around 18 – 55 years old and have used digital loan applications in the last 6 months. For this study, the minimum sample selected was 205 respondents in order to adequately represent the population. The data collection technique is questionnaires that distributed to respondents by using Google Form. The data were analyzed to understand respondents' views related to the phenomenon studied and the results were interpreted as information. Data analysis was carried out through two stages, namely PRE test, Main Test, and Partial Least Squares - Structural Equation Modeling (PLS-SEM).

3. Results and Discussion

3.1 Pre-test

Data collection in this study was carried out through the distribution of questionnaires using the Google Form platform. Before the questionnaire was widely distributed, a wording test was conducted involving five individuals to obtain initial feedback regarding the clarity and ease of understanding of question items.

Validity tests on 30 respondents at the pre-test stage showed that all indicators had KMO, Anti-Image Correlation, and Component Matrix values above 0.5. Based on these results, it can be concluded that all indicators in the study are valid and qualified to be used in the main testing phase.

Reliability tests show that all variables have Cronbach's Alpha value above 0.6, with the highest score reaching 0.883. This indicates that the measurement instrument in this study is reliable, so it can be used to proceed to the main test stage.

3.2 Main Test

This study involved 342 respondents who met the criteria, with the majority of respondents being female (81.29%) and coming from Generation Z (78.07%). Most respondents live in Java Island (77.19%) and have the latest high school education (60.53%). The most common job among respondents was student (44.74%), with most living expenses less than Rp 5.5 million per month (70.47%). The main motivation for using digital loan applications is applying for loans (28.95%), and most respondents have used loan applications in the last 3-6 months (42.69%).

The normality test shows abnormalities in the distribution of variables such as Data Security and Privacy, Perceived Usefulness, Perceived Risks, and Perceived Value. This led to the use of the PLS-SEM analysis method with SmartPLS according to the recommendations of Hair et al. (2019). Descriptive analysis showed that the Data Security & Privacy variable had an average of 4.54, indicating that the majority of respondents strongly agreed with statements related to data security and privacy. Other variables such as Perceived Risk (3.94) and Perceived Value (4.44) also showed that respondents strongly agreed with related statements. Respondents agreed with the ease of use of the application (Perceived Ease of Use: 4.10) and the benefits obtained (Perceived Usefulness: 4.25). Meanwhile, variables such as Perceived Trust (3.74) and Behavioural Intention (3.46) showed respondents agreed with statements related to trust and intention to use digital loan applications. This data provides a solid foundation for further analysis in understanding the factors influencing the adoption of digital loan applications.

3.3 Measurement Model Analysis (Outer Model)

1. Measurement Model Validity Test

The following are the results obtained from the validity test.

Table 1. Outer Loading and AVE Test Results

Variable Construct	Indicator	Outer Loading	BIRD	Information
Intention to use Financing Digital Application	BI1	0.914	0.828	Valid
	BI2	0.941		Valid
	BI3	0.853		Valid
	BI4	0.928		Valid
Data Security & Privacy	PSD1	0.846	0.697	Valid
	PSD2	0.842		Valid
	PSD3	0.832		Valid
	PSD4	0.811		Valid
	PSD5	0.843		Valid
Financial Literacy	FL1	0.735	0.511	Valid
	FL2	0.623*		Valid
	FL3	0.790		Valid
	FL4	0.702		Valid
Perceived Ease of Use	PEU1	0.876	0.682	Valid
	PEU2	0.749		Valid
	PEU3	0.882		Valid
	PEU4	0.788		Valid
Perceived Risk	PR1	0.818	0.746	Valid
	PR2	0.733		Valid
	PR3	0.950		Valid
	PR4	0.866		Valid

	PR5	0.935		Valid
Perceived Trust	PT1	0.802	0.692	Valid
	PT2	0.865		Valid
	PT3	0.867		Valid
	PT4	0.751		Valid
	PT5	0.868		Valid
Perceived Usefulness	PU1	0.842	0.755	Valid
	PU2	0.874		Valid
	PU3	0.877		Valid
	PU4	0.878		Valid
	PU5	0.874		Valid
Perceived Value	PV1	0.755	0.608	Valid
	PV2	0.784		Valid
	PV3	0.838		Valid
	PV4	0.738		Valid
Quality Administrative Service	QAS1	0.936	0.832	Valid
	QAS2	0.933		Valid
	QAS3	0.923		Valid
	QAS4	0.864		Valid
	QAS5	0.902		Valid

Source: SmartPLS, processed by researchers

Based on table 1, it is known that all variables have an AVE value of more than 0.5. It is also known that there is only one indicator, namely FL2 has an outer loading value below 0.7 (0.623), where other indicators have a value above 0.7. Since the outer loading value is still above 0.4, it is still acceptable and the analysis can be processed further. Here are the results of discriminant validity testing.

Table 2. Heterotrait-Monotrait Ratio (HTMT) discriminant validity test results

	TWO	DSP	FL	FEW	PR	PT	PU	PV	QAS
TWO									
DSP	0.128								
FL	0.636	0.098							
FEW	0.159	0.417	0.227						
PR	0.059	0.315	0.211	0.412					
PT	0.862	0.186	0.696	0.226	0.102				
PU	0.160	0.496	0.237	0.856	0.313	0.272			
PV	0.115	0.845	0.193	0.558	0.517	0.172	0.600		
QAS	0.199	0.101	0.305	0.188	0.102	0.256	0.115	0.114	

Source: SmartPLS, processed by researchers

Based on the results of Table 2, all HTMT values are below 0.9, which indicates that the variables have good discriminant validity. It can be said that all variables are declared valid.

Table 3. Fornell Lacker Discriminant Validity Test Results

	TWO	DSP	FL	FEW	PR	PT	PU	PV	QAS
TWO	0.910								
DSP	0.117	0.835							
FL	0.613	0.079	0.715						
FEW	0.143	0.367	0.188	0.826					
PR	0.064	0.282	0.167	0.352	0.864				
PT	0.784	0.165	0.634	0.197	0.097	0.832			
PU	0.148	0.452	0.205	0.767	0.266	0.245	0.869		
PV	0.098	0.705	0.164	0.458	0.431	0.144	0.510	0.780	
QAS	0.187	-0.095	0.251	0.167	0.103	0.236	0.108	-0.066	0.912

Source: SmartPLS, processed by researchers

Based on the results of Table 3, overall, all constructs show that the square root of AVE is greater than the correlation with other constructs, thus meeting the *Fornell-Larcker* criterion for discriminant validity. Thus, there is no issue of discriminant validity in a given model.

Table 4. Cross Loading Discriminant Validity Test Results

	TWO	DSP	FL	FEW	PR	PT	PU	PV	QAS
BI1	0.914	0.037	0.563	0.111	0.034	0.693	0.104	0.049	0.156
BI2	0.941	0.122	0.573	0.095	0.051	0.735	0.119	0.104	0.178
BI3	0.853	0.143	0.55	0.186	0.092	0.723	0.195	0.116	0.174
BI4	0.928	0.121	0.543	0.127	0.055	0.699	0.121	0.087	0.172
PSD1	0.071	0.846	0.065	0.258	0.188	0.139	0.358	0.551	-0.096
PSD2	0.061	0.842	0.051	0.342	0.249	0.134	0.409	0.62	-0.104
PSD3	0.092	0.832	0.064	0.287	0.215	0.137	0.351	0.58	-0.064
PSD4	0.134	0.811	0.059	0.287	0.271	0.146	0.337	0.589	-0.05
PSD5	0.128	0.843	0.091	0.342	0.249	0.133	0.418	0.595	-0.078
FL1	0.4	0.09	0.735	0.156	0.175	0.399	0.162	0.138	0.246
FL2	0.193	0.036	0.623	0.072	0.111	0.231	0.095	0.042	0.206
FL3	0.652	0.063	0.79	0.154	0.126	0.639	0.166	0.144	0.174
FL4	0.281	0.025	0.702	0.129	0.059	0.36	0.143	0.103	0.114
PEU1	0.116	0.337	0.13	0.876	0.259	0.169	0.647	0.425	0.1
PEU2	0.099	0.252	0.17	0.749	0.285	0.126	0.466	0.312	0.154
PEU3	0.09	0.34	0.113	0.882	0.321	0.156	0.65	0.411	0.157
PEU4	0.16	0.275	0.21	0.788	0.299	0.191	0.727	0.354	0.145
PR1	0.038	0.204	0.181	0.289	0.818	0.053	0.248	0.354	0.022
PR2	0.018	0.342	0.128	0.314	0.733	0.057	0.316	0.426	-0.011
PR3	0.074	0.287	0.129	0.33	0.95	0.097	0.218	0.414	0.102
PR4	0.023	0.17	0.174	0.359	0.866	0.066	0.276	0.362	0.132
PR5	0.083	0.24	0.144	0.284	0.935	0.113	0.194	0.359	0.135
PT1	0.653	0.116	0.518	0.161	0.109	0.802	0.2	0.113	0.215
PT2	0.658	0.142	0.542	0.153	0.069	0.865	0.231	0.117	0.211
PT3	0.651	0.151	0.534	0.199	0.116	0.867	0.235	0.149	0.187
PT4	0.58	0.134	0.522	0.179	0.051	0.751	0.192	0.139	0.157
PT5	0.712	0.141	0.523	0.132	0.058	0.868	0.164	0.086	0.209
PU1	0.137	0.355	0.163	0.681	0.244	0.167	0.842	0.414	0.1
PU2	0.154	0.388	0.154	0.673	0.186	0.228	0.874	0.454	0.058
PU3	0.103	0.437	0.179	0.65	0.23	0.203	0.877	0.469	0.107
PU4	0.165	0.361	0.234	0.676	0.292	0.255	0.878	0.399	0.124
PU5	0.082	0.424	0.16	0.651	0.204	0.21	0.874	0.483	0.081
PV1	0.071	0.475	0.109	0.473	0.375	0.116	0.434	0.755	-0.027
PV2	0.083	0.627	0.121	0.271	0.291	0.083	0.347	0.784	-0.202
PV3	0.082	0.564	0.143	0.293	0.345	0.127	0.372	0.838	-0.029
PV4	0.07	0.543	0.137	0.385	0.327	0.118	0.433	0.738	0.027
QAS1	0.185	-0.096	0.238	0.166	0.075	0.238	0.118	-0.09	0.936
QAS2	0.16	-0.079	0.233	0.162	0.106	0.218	0.094	-0.056	0.933
QAS3	0.203	-0.085	0.232	0.126	0.112	0.229	0.066	-0.035	0.923
QAS4	0.171	-0.035	0.214	0.137	0.107	0.201	0.072	-0.015	0.864
QAS5	0.133	-0.132	0.227	0.167	0.072	0.19	0.139	-0.097	0.902

Source: SmartPLS, processed by researchers

Based on the results of Table 4, the results of *cross loading* analysis show that the *cross loading* value of each variable is higher than the *cross loading* value of other variables.

2. Measurement Model Reliability Test

Here are the results of Cronbach alpha and *composite reliability testing*:

Table 5. Hasil Internal Consistency Reliability

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Information
<i>Behaviour Intention</i>	0.930	0.930	0.950	Reliable
<i>Data Security & Privacy</i>	0.891	0.896	0.920	Reliable
<i>Financial Literacy</i>	0.717	0.776	0.806	Reliable
<i>Perceived Ease of Use</i>	0.844	0.855	0.895	Reliable
<i>Perceived Risk</i>	0.919	1.017	0.936	Reliable
<i>Perceived Trust</i>	0.888	0.890	0.918	Reliable
<i>Perceived Usefulness</i>	0.919	0.919	0.939	Reliable
<i>Perceived Value</i>	0.784	0.790	0.861	Reliable
<i>Quality Administrative Service</i>	0.949	0.952	0.961	Reliable

Source: SmartPLS, processed by researchers

Based on the results of Table 5, overall, all nine constructs show strong reliability based on Cronbach's alpha and composite reliability values. Therefore, these results indicate that the construct measurements in this study are trusted and used for further analysis.

3.4 Structural Model Analysis (Inner Model)

1. Collinearity Statistics (VIF)

Table 6. Hasil Collinearity Statistics

	TWO	DSP	FL	FEW	PR	PT	PU	PV	QAS
TWO									
DSP	2.104			1.009			1.190		
FL	1.768					1.060			
FEW	2.622					2.578	1.213		
PR	1.316					1.302			
PT	1.772								
PU	2.760					2.679			
PV	2.488					1.552			
QAS	1.153			1.009			1.059		

Source: SmartPLS, processed by researchers

Based on the results of Table 6, it can be seen that the VIF value in each construct variable is smaller than 5.0 (<5.0). Based on the results of the calculation of the VIF value, all variables do not have symptoms of multicollinearity and can be used in subsequent analyses.

2. Test Analysis of Coefficient of Determination (R-Square)

Here are the results of the research fit model test:

Table 7. R-square result

	R-square	R-square adjusted	Information
Behavior Intention	0.642	0.634	Moderate
Perceived Ease of Use	0.175	0.171	Low
Perceived Trust	0.418	0.409	Low
Perceived Usefulness	0.621	0.618	Moderate

Source: SmartPLS, processed by researchers

The results of structural model strength tests, or R², show variations in the categories of each variable. For the Behavior Intention variable, the R² value recorded was 0.642 with an adjusted R² of 0.634, indicating that the model successfully explained about 64.2% of the variation in the data. A moderate level of prediction accuracy, together with a moderate adjusted R², indicates that the model has moderate relevance to the variable. On the other hand, Perceived Ease of Use has an R² value of 0.175 and an adjusted R² of 0.171, which means the model is only able to account for about 17.5% of the variation, reflecting a low level of prediction accuracy. Furthermore, the Perceived Trust variable recorded an R² value of 0.418 and an adjusted R² of 0.409, allowing the model to account for approximately 41.8% of the variation, marking a low level of prediction accuracy. Finally, for Perceived

Usefulness, an R^2 value of 0.621 and an adjusted R^2 of 0.618 indicate that the model can account for about 62.1% of the variation, indicating a moderate degree of predictive accuracy and significant relevance to this variable.

3. Effect Size Test Results (F-Square)

Table 8. F-square results

	TWO	DSP	FL	FEW	PR	PT	PU	PV	QAS
TWO									
DSP	0.002			0.179			0.088		
FL	0.068					0.612			
FEW	0.003					0.000	1.042		
PR	0.002					0.002			
PT	0.706								
PU	0.009					0.013			
PV	0.001					0.000			
QAS	0.001			0.050			0.000		

Source: SmartPLS, processed by researchers

From the analysis of table 8, significant variations in the influence of exogenous variables on endogenous variables can be seen. Major influences ($f^2 \geq 0.35$) appeared in Financial Literacy on Perceived Trust ($f^2 = 0.612$), Perceived Ease of Use on Perceived Usefulness ($f^2 = 1.042$), and Perceived Trust on Behavior Intention ($f^2 = 0.706$). Moderate effect ($0.15 \leq f^2 \leq 0.35$) is only found in Data Security & Privacy on Perceived Ease of Use ($f^2 = 0.179$). Small influences ($f^2 < 0.15$) include Data Security & Privacy on Perceived Usefulness ($f^2 = 0.088$), Financial Literacy on Behavior Intention ($f^2 = 0.068$), and Quality Administrative Service on Perceived Ease of Use ($f^2 = 0.050$). Very little or no effect ($f^2 < 0.02$) was seen in Data Security & Privacy to Behaviour Intention ($f^2 = 0.002$), as well as the relationship of Perceived Ease of Use to Perceived Trust and Quality Administrative Service to Perceived Usefulness, both showing very low or zero values.

4. Relevance Predicted Value Results (Q-Square)

Table 9. Q-square results

	Q ² predict	RMSE	THERE ARE
Behaviour Intention	0.362	0.803	0.612
Perceived Ease of Use	0.165	0.922	0.706
Perceived Trust	0.398	0.780	0.575
Perceived Usefulness	0.216	0.895	0.657

Source: SmartPLS, processed by researchers

Based on the analysis of Stone-Geisser Q^2 values, the model under study shows strong predictive relevance. The variables Behaviour Intention and Perceived Trust have Q^2 values of 0.362 and 0.398 respectively, indicating great predictive relevance. Meanwhile, Perceived Ease of Use and Perceived Usefulness recorded Q^2 values of 0.165 and 0.216, respectively, signifying moderate predictive relevance. A Q^2 value greater than 0.35 indicates significant predictive relevance, so Behaviour Intention and Perceived Trust have strong predictive capabilities. Overall, the model has a solid capacity to predict the variables tested, demonstrating the potential for practical application in real contexts.

5. Fit Test (Model Fit) Structural Model

The results of the structural model fit test in this study are presented in the following table:

Table 10. Fit Model Test Results

Leave it variable	Saturated model	Estimated model
SRMR	0.057	0.074
NFI	0.815	0.812
Chi-square	2097.776	2131.709

Source: SmartPLS, processed by researchers

In a comparative analysis between saturated models and estimated models, various evaluation metrics are examined to measure the suitability of the model to the data. The saturated model recorded an SRMR value of 0.057, while the estimated model recorded 0.074; both are below the threshold of 0.08, but saturated models are better because SRMR is lower. In terms of NFI, the saturated model has a value of 0.815 and the estimated model 0.812; both are below the 0.90 threshold, indicating an acceptable but not

ideal level of conformity. For Chi-square, the saturated model recorded a value of 2097,776, while the estimated model was 2131,709, indicating that the saturated model is closer to the data and has a better fit.

6. Test the Overall Significance of the Research Model

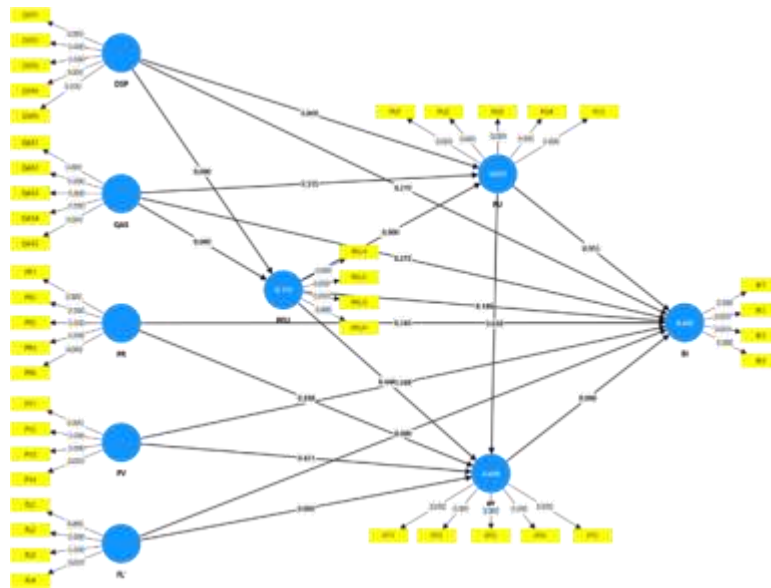


Figure 2. Overall Results of the Research Model

Source: SmartPLS, processed by researchers

7. Hypothesis Test Results

The conclusions of hypothesis testing in this study are presented in the following Table 11:

Table 11. Hypothesis Test Results

Code	Hypothesis	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Information
H1a	Perceived Usefulness has a positive effect on the Intention to Use Digital-Based Loan Applications	-0.097	0.060	1.599	0.055	Rejected
H1b	Perceived Ease of Use has a positive effect on the Intention of Using Digital-Based Loan Applications	0.054	0.061	0.894	0.186	Rejected
H1c	Perceived Trust has a positive effect on the Intention to Use Digital-Based Loan Applications	0.670	0.045	15.017	0.000	Accepted
H1d	Quality Administrative Service has a positive effect on the Intention to Use Digital-Based Loan Applications	-0.016	0.029	0.606	0.272	Rejected
H1e	Data Security & Privacy positively affects the Intention to Use Digital-Based Loan Applications	0.033	0.059	0.612	0.270	Rejected
H1f	Perceived Risk negatively affects the Intention to Use Digital-Based Loan Applications	-0.028	0.045	0.616	0.269	Rejected
H1g	Perceived Value has a positive effect on the Intention to Use Digital-Based Loan Applications	-0.017	0.070	0.335	0.369	Rejected
H1h	Financial Literacy has a positive effect on the Intention to Use Digital-Based Loan Applications	0.209	0.046	4.493	0.000	Accepted
H2a	Data Security &; Privacy positively affects Perceived Usefulness	0.201	0.044	4.489	0.000	Accepted
H2b	Data Security &; Privacy positively affects Perceived Ease of Use	0.390	0.052	7.423	0.000	Accepted
H3a	Quality Administrative Service positively affects Perceived Usefulness	0.013	0.027	0.426	0.335	Rejected
H3b	Quality Administrative Service positively affects Perceived Ease of Use	0.205	0.040	5.072	0.000	Accepted
H4a	Perceived Risk negatively affects Perceived Trust	-0.031	0.068	0.532	0.298	Rejected

Code	Hypothesis	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Information
H4b	Perceived Value positively affects Perceived Trust	0.001	0.047	0.173	0.431	Rejected
H4c	Financial Literacy positively affects Perceived Trust	0.619	0.033	18.618	0.000	Accepted
H6	Perceived Usefulness positively affects Perceived Trust	0.138	0.072	1.937	0.026	Accepted

Source: SmartPLS, processed by researchers

8. Mediation Relationship Analysis

The results of the mediation relationship analysis are as follows:

Table 12. Mediation Relationship Analysis

Code	Hypothesis	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Information
H5a	Perceived Ease of Use -> Perceived Usefulness -> Behaviour Intention	-0.067	0.042	1.587	0.056	Rejected
H5b	Perceived Ease of Use -> Perceived Trust -> Behaviour Intention	-0.010	0.046	0.131	0.448	Rejected

Source: SmartPLS, processed by researchers

In the analysis of mediating relationships tested in this study, neither hypothesis showed statistical significance. First, the pathway from "Perceived Ease of Use" to "Behavior Intention" through "Perceived Trust" also shows very low t-statistics and high p-values, resulting in rejection of the H5a hypothesis and acceptance of the null hypothesis (H0). Second, the path from "Perceived Ease of Use" to "Behavior Intention" through "Perceived Usefulness" shows low t-statistics and p-values that exceed commonly recognized significance levels, so that the H5b hypothesis is rejected and the null hypothesis (H0) is accepted. Overall, the results of the analysis did not support a significant mediating relationship between "Perceived Ease of Use" and "Behavior Intention" through "Perceived Usefulness" or "Perceived Trust", so both mediation hypotheses tested (H5a and H5b) were rejected.

3.5 Hypothesis Test Analysis

1. Factors Affecting the Intention of Using Digital-Based Loan Applications

H1a: Perceived Usefulness has a positive effect on the Intention to Use Digital-Based Loan Applications

The H1a hypothesis which states that Perceived Usefulness (PU) has a positive effect on the Intention to Use Digital-Based Loan Applications is not accepted. This is because based on the results of hypothesis testing, it produces a p-value of 0.055 > 0.05. However, in the case of the digital-based loan application studied, the hypothesis of a positive relationship between PU and usage intention was not proven. This suggests that while users recognize an app's usefulness in theory, other factors such as Perceived Ease of Use (PEU), data security, and trust in the platform play a more significant role in influencing their decision to use the app. This opens up opportunities for researchers to delve deeper into the influence of factors such as interface design, security features, and marketing strategies on end-user usability perceptions and acceptance of digital lending technology.

H1b: Perceived Ease of Use has a positive influence on the intention to use digital-based loan applications

The rejection of the H1b hypothesis that evaluates the effect of Perceived Ease of Use (PEU) on the Intention to Use Digital-Based Loan Applications, with a p-value of 0.186 indicates that there is no statistically significant relationship between ease of use and user desire to continue using the application. The findings underscore the importance of paying attention to aspects such as trust and security in the design and promotion of digital loan applications, and suggest the need for further research to dig deeper into how these factors together influence user behavior in the long term.

H1c: Perceived Trust has a positive influence on the intention to use digital-based loan applications

The acceptance of the H1c hypothesis which states that Perceived Trust has a positive effect on the Intention to Use Digital-Based Loan Applications, with a p-value of 0.000, shows a significant and strong relationship between the trust felt by users and their desire to use digital loan applications. These findings are consistent with previous theories and research that have emphasized the importance of trust in the context of technology and online transactions. The findings of this hypothesis testing is that to increase the use of digital-based loan applications, service providers must prioritize building and maintaining user trust.

H1d: Quality Administrative Service has a positive influence on the intention to use digital-based loan applications

The rejection of the H1d hypothesis in a study that examined the effect of Quality Administrative Service (QAS) on the Intention to Use Digital-Based Loan Applications, which was recorded with a p-value of 0.272, showed that there was no statistically significant relationship between the quality of administrative services and the intention to use loan applications. These results indicate that although QAS covers important aspects such as contract support and problem solving, these factors are not sufficient to motivate continued use of the application.

H1e: Data Security & Privacy has a positive influence on the intention to use digital-based loan applications

The H1e hypothesis of the effect of Data Security & Privacy on the Intention to Use Digital-Based Loan Applications has been rejected, with the results showing a p-value of 0.270. This indicates that there is no significant relationship between data security and privacy with the intention to use digital loan applications. In conclusion, although the security aspect is fundamental, in practice, factors such as financial literacy and perception of benefits received are often more important in determining the intention of reusing digital loan applications in this study.

H1f: Perceived Risk negatively affect the Intention to Use Digital-Based Loan Applications

The rejection of the H1f hypothesis that assesses the effect of Perceived Risk on the Intention to Use Digital-Based Loan Applications, expressed with a p-value of 0.269, indicates that there is no significant relationship between risk perception and application usage intention. The results of this study show that these factors are not as important as previously considered in the context of digital loan applications. The implication of these findings is that digital loan service providers need to shift their focus from simply addressing risk to strengthening factors such as user trust and satisfaction to increase adoption and continued use of their apps.

H1g: Perceived Value positive influence on the intention to use digital-based loan applications

Based on the results of the study that showed a p-value of 0.369, it can be concluded that there is not enough evidence to support the H1g hypothesis, which states that Perceived Value has a positive effect on the Intention to Use Digital-Based Loan Applications. These results show that in the context of digital-based loan applications, Perceived Value does not have a significant influence on users' intentions to adopt and use the technology.

H1h: Financial Literacy has a positive influence on the intention to use digital-based loan applications

The acceptance of the H1h hypothesis which states that Financial Literacy positively affects the Intention to Use Digital-Based Loan Applications supports the concept that higher financial understanding allows individuals to make more informed and effective decisions in the management of their financial resources. With a p-value of 0.000, these results show a very significant and strong relationship between financial literacy and users' willingness to adopt and use financial technology, such as digital loan applications.

2. Effects of Data Security & Privacy

H2a: *Data Security & Privacy* positive effect on *Perceived Usefulness*

Research by Putri et al. (2023) and from Hu et al. (2019) indicates that aspects of data security and privacy in digital loan applications affect the perceived usefulness of these applications. Good security is thought to reinforce confidence that the application will support users in carrying out their financial tasks more efficiently, which directly adds to the perceived usability of the application. Therefore, this hypothesis is accepted with a p-value of 0.000, in accordance with the theory of the Technology Acceptance Model (TAM) which states that external factors such as data security can increase the perceived usefulness of a technology.

H2b: *Data Security & Privacy* positive effect on *Perceived Ease of Use*

Acceptance of the H2b hypothesis with a p-value of 0.000 which shows that Data Security & Privacy positively affects Perceived Ease of Use confirms that adequate data security and privacy can improve the perception of ease of use of technology, especially in the context of digital-based loan applications. This research confirms the importance of data security and privacy as external factors that have an impact on user perceptions of Ease of Use of Digital-Based Loan Applications..

3. Effect Quality Administrative Service

H3a: *Quality Administrative Service* positive effect on *Perceived Usefulness*

The rejection of the H3a hypothesis with a p-value of 0.335 in this study indicates that Quality Administrative Service (QAS) does not have a significant effect on Perceived Usefulness for digital-based loan application users. Although theoretically, efficient QAS is expected to improve application usability by simplifying administrative procedures and speeding up transactions, the results of this study show that other factors not examined in this study play a more dominant role in influencing the perception of application usability.

H3b: *Quality Administrative Service* has a positive effect on *Perceived Ease of Use*

The H3b hypothesis is accepted with a p-value of 0.000. Putri et al. (2023) also found that QAS has a positive effect on Perceived Ease of Use. In the context of digital loan applications, QAS that includes an intuitive interface, clear procedures, and effective customer support, can make the system easier to operate. This hypothesis is also accepted, affirming that improvements in administrative services make it easier for users to operate digital-based loan applications.

4. Factors Affecting Perceived Trust

H4a: *Perceived Risk* negatively affect *Perceived Trust*

The rejection of the H4a hypothesis with a p-value of 0.298, which states that perceived risk negatively affects perceived trust in the context of digital-based lending applications, shows that users do not see risk as a major determining factor in their trust in the technology. This can be due to several reasons based on existing literature and theories.

H4b: *Perceived Value* has a positive effect on *Perceived Trust*

The rejection of the H4b hypothesis with a p-value of 0.431 which states that Perceived Value positively affects Perceived Trust in the context of digital-based loan applications provides interesting insights into the dynamics of user trust in financial technology. The rejection of this hypothesis also highlights the need to better understanding of how users assess and respond to risk in the use of financial technology.

H4c: *Financial Literacy* has a positive effect on *Perceived Trust*

The H4c hypothesis is accepted with a p-value of 0.000. Financial literacy is often associated with increased trust in the context of financial services. Users who have a good understanding of financial concepts and the capacity to manage their financial resources effectively tend to have more confidence in financial technology. Higher financial literacy helps them understand and assess the security and potential of the financial services offered, allowing them to make more informed and confident decisions. This hypothesis is accepted, which suggests that higher financial literacy contributes to increased trust.

5. Mediation Variables

H5a: *Perceived Trust* Become a mediator in influence *Perceived Ease of Use* on the Intention of Using Digital-Based Loan Applications

Based on the results of hypothesis testing, the H5a hypothesis which states that Perceived Trust is a mediator in the influence of Perceived Ease of Use on the intention to use digital-based loan applications (H5a) is not supported by data. This hypothesis was rejected based on statistical analysis showing a low t-statistic and a p-value higher than the general significance level (0.05). Specifically, the p-value found was 0.056, indicating that the mediated relationship tested was not statistically significant at the 95% confidence level.

H5b: *Perceived Usefulness* become a mediator in influence *Perceived Ease of Use* on the Intention of Using Digital-Based Loan Applications

The H5b hypothesis that states that Perceived Usefulness acts as a mediator in the influence of Perceived Ease of Use on the intention to use digital-based loan applications has been rejected based on the results of statistical analysis. The data showed that the t-statistic value was very low (0.131) with a p-value much higher than the generally accepted significance level (0.448), which suggests that this mediating relationship is not statistically significant. The rejection of this hypothesis can be explained through several theoretical and empirical perspectives in the literature related to the acceptance of technology..

6. The Effect of Perceived Usefulness to Perceived Trust

H6: *Perceived Usefulness* positively affects *Perceived Trust*

Acceptance of the H6 hypothesis with a p-value of 0.026, which states that Perceived Usefulness positively affects Perceived Trust in the context of digital-based loan applications, shows a significant relationship between the two constructs.

3.6 Summary of Hypothesis Test Results

Visually, the results of the hypothesis test can be seen in figure 4.2. In the picture, it can be seen that only perceived trust and financial literacy variables directly affect the desire to continue using digital financing applications. Perceived usefulness or perceived usefulness of digital financing applications also influences the desire to continue using these applications through perceived trust. In the context of this digital financing application, only 3 independent variables influence, namely related to data security & privacy, quality administrative service, and financial literacy from customers.

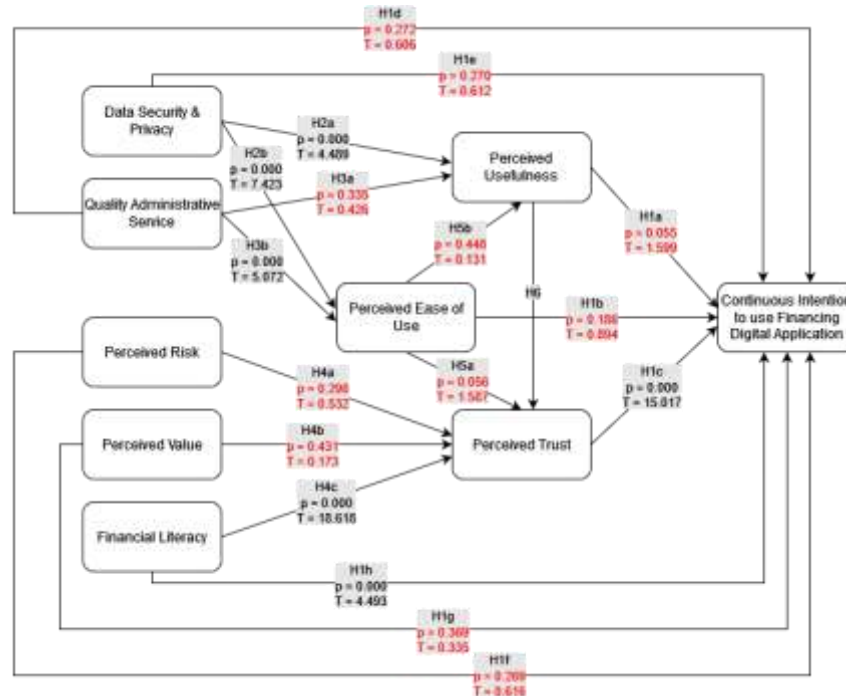


Figure 3. Results of P-Value, T Value, and R Square

Source: SmartPLS, processed by researchers

4. Conclusion

Results show that trust and perceived usability directly dominate in influencing user decisions rather than ease of use or security factors. This research confirms the importance of integrating various factors in the Technology Acceptance Model to effectively increase the adoption of digital financial applications. This research confirms that aspects of data security and privacy have a significant influence on the perceived usefulness and perceived ease of use of digital loan applications. While theoretically an efficient Quality Administrative Service could improve application usability by simplifying administrative procedures, other factors may have a more dominant role in influencing perceived usability.

In the context of digital-based loan applications, this study highlights that Perceived Risk does not have a significant negative influence on Perceived Trust. Although Perceived Value is expected to have a positive influence on Perceived Trust, the results of rejecting this hypothesis suggest that user trust in digital-based loan applications is more complex and influenced by other factors such as data security, provider reputation, and previous usage experience. However, Financial Literacy was shown to have a significant positive influence on Perceived Trust, underlining that higher financial understanding helps users to better understand and navigate financial services, effectively increasing their trust.

Perceived Trust and Perceived Usefulness do not act as significant mediators in the relationship between Perceived Ease of Use and the intention to use digital-based loan applications. Meanwhile, results showing the positive influence of Perceived Usefulness on Perceived Trust indicate the importance of the application to demonstrate clear financial benefits and reliability in its operations to build trust.

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