



Tam Model Analysis: Interest in Using Shopee PayLater Among Students at the University of Jambi

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ABSTRACT

This study analyzes factors influencing students' interest in using SPayLater through the Technology Acceptance Model (TAM). Primary data were collected through questionnaires from 100 undergraduate students at the University of Jambi selected using random sampling, and analyzed using the SEM-PLS method. The variables examined include Perceived Ease of Use, Perceived Usefulness, Perceived Risk, and Digital Knowledge. The results show that Perceived Usefulness has a positive and significant effect, while Perceived Risk has a negative and significant effect on usage interest. In contrast, Perceived Ease of Use and Digital Knowledge do not show significant effects. The findings indicate that for the digital generation, technical convenience is considered standard; therefore, interest in using SPayLater is mainly influenced by functional benefits and awareness of data security risks and debt management. These results support the TAM framework in the fintech context.

INTRODUCTION

In Southeast Asia, the financial technology (fintech) industry is growing rapidly, and Indonesia occupies a strategic position in this industry. Data from the Financial Services Authority (OJK) in 2024 shows that more than 400 legal fintech companies are operating a variety of services, including digital financing services with the motto “buy now, pay later” (BNPL). Paylater has experienced significant growth, as this service offers users the flexibility to immediately obtain goods or services with installment payments . (Alamin et al., 2023) The growth of the e-commerce industry plays an important role in the development of Paylater. In 2020, the Indonesian Internet Service Providers Association (APJII) stated that the value of e-commerce business in Indonesia grew by 33%. This is evident from the highly active market, which has led to competition between platforms such as Shopee, Tokopedia, Lazada, and TikTok. Among all these platforms, Shopee dominates the market in digital services. (Asih,E.M.,2024) Shopee offers not only physical products but also various transaction features, including Shopee PayLater (SPayLater) (Survei Internet APJII, 2023)

SPayLater has implemented a peer-to-peer (P2P) lending system and is widely recognized among young people. Data from D Goodstats, (2025) shows that SPayLater ranks as the most frequently used application among Generation Z and millennials. Individuals aged 17–25 consider paylater services a practical solution when facing financial pressure at the end of the year or when trying to keep up with fashion trends. However, this convenience, combined with a consumptive lifestyle, creates the potential for long-term financial risks (Lestari et.al., 2024).

This study Applies the Technology Acceptance Model (TAM) by (Davis, 1989), which explains that a person’s acceptance of technology is mainly determined by two perceptions: perception ease of use and perceived usefulness. The easier and more beneficial a technology is perceived to be, the higher the user’s intention to adopt it. In addition, Perceived risk (Featherman & Pavlou, (2003) and digital knowledge are include in thus study to provide a more comprehensive understanding of students’ interest in using SPaylater.

Several previous studies have reported varying results. Studies by . Zuliansyah et al., (2024); Azizah, (2025); Ningsih et al., (2023); Dhanty et al., (2022) dan Saputra & Susanti, (2022) found that perceived ease of use has a significant effect on interest and consumptive behavior. In contrast, Kaihatu, (2023) stated that perceived ease of use and perceived risk do not have a significant effect on the intention to use paylater services. Meanwhile, Kaihatu, (2023) found that financial literacy and perceived risk have a negative and significant influence on the use of online loans. A similar finding was reported by Safitri, (2024) who stated that perceived ease of use has a positive and significant effect on the intention to use SPayLater, while perceived risk does not reduce users’ interest.

The inconsistency of these findings encouraged the researchers to conduct a follow-up study at a state university in Sumatra. This is because students are active users of digital technology services but remain vulnerable to financial risks. In addition, there is still limited research that integrates digital knowledge into the TAM model among university students. Therefore, this study aims to examine the factors that influence students' interest in using SPayLater by applying the Technology Acceptance Model (TAM).

LITERATURE REVIEW

The Effect of Perceived Ease of Use (PEOU) on Behavioral Intention (BI)

Perceived ease of use is part of the psychological factors that influence consumers' confidence in using a system. Ease of use is perceived when individuals do not need to exert much effort to operate a technology. Therefore, creating a system that is easy to use is an important factor for e-commerce companies in increasing users' interest. A decline in users' confidence in the ease of use of a system may also reduce their intention to use it (Nurajizah & Indriani, 2023); (Rahadian & Hendrayati, 2021) (Nurajizah & Indriani, 2023; Rahadian & Hendrayati, 2021). Several studies have found that perceived ease of use has a positive and significant effect on trust (Jatimoyo et al., 2021); (Syaharani & Yasa, 2022)

H₁: Perceived ease of use affects students' intention to use ShopeePayLater at the University of Jambi.

The Effect of Perceived Usefulness (PU) on Behavioral Intention (BI)

Perceived usefulness describes the extent to which students believe that ShopeePayLater is beneficial, practical, and capable of improving the efficiency of their transactions. This perception may include the ability to complete purchases more quickly, manage payments more flexibly, and support students' daily financial needs. When students perceive ShopeePayLater as useful and advantageous for their transactions, their interest in using the service is likely to increase. Thus, the higher the level of perceived usefulness, the stronger the intention to use Shopee PayLater for daily purchasing activities (Zuliansyah et al., 2024) ; (Ningsih et al., 2023) ; (Safitri, 2024).

H₂: Perceived usefulness has an effect on students' intention to use ShopeePayLater at the University of Jambi.

The Effect of Perceived Risk (PR) on Behavioral Intention (BI)

Perceived risk refers to the potential losses or uncertainties that users may experience when using a service. These risks may include the possibility of payment default, interest charges and late payment penalties, misuse of personal data, or negative impacts on the SLIK OJK credit record. The higher the level of perceived risk, the lower the students' intention to use the service. Conversely, if the risks are perceived as low or manageable, students are more likely to use it (Safitri, 2024) ; (Ningsih et al., 2023)

H₃: Perceived risk has an effect on students' intention to use ShopeePayLater at the University of Jambi.

The Effect of Digital Knowledge (DK) on Behavioral Intention (BI)

Digital knowledge describes the extent to which students understand how to use technology and digital services, including the features available in the Shopee application. This knowledge includes the ability to manage accounts, understand the transaction process, read information related to credit limits and billing, and recognize the risks and terms of using SPayLater. The higher the level of digital knowledge possessed by students, the more confident and secure they feel when using SPayLater. Therefore, good digital knowledge can increase students' intention to use the service to support their transaction needs (Bachtiar & Salsabila, 2024) ; (Geriadi & Pratiwi, 2025).

H4: *Digital knowledge has an effect on students' intention to use ShopeePayLater at the University of Jambi.*

The research model in this study is illustrated as follows:

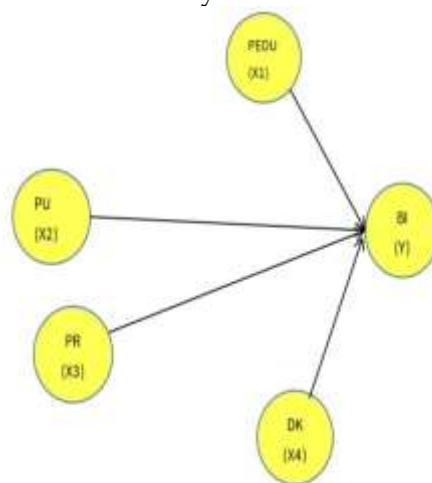


Figure 1. Conceptual Framework

METHODOLOGY

This quantitative descriptive study had a population of 27,198 registered and active undergraduate students at the University of Jambi. Random sampling was used to select the sample, and the sample size was determined using Slovin's formula, resulting in 100 respondents. This study, using primary data, examined exogenous variables, namely perceived ease of use, perceived usefulness, perceived risk, and digital knowledge, with the endogenous variable being the intention to use SPayLater services. The research instrument was adapted from previous studies to suit this research. Data were collected both online via Google Forms and offline from respondents. The questionnaire used a Likert scale and was analyzed using SEM-PLS version 4.0, following steps to determine outer loading, assess the inner model, and test hypotheses. Respondent profile analysis included gender, age, faculty, and frequency of digital service use. The direct effect hypotheses were tested using SEM-PLS bootstrapping results.

RESEARCH RESULT

Student Characteristics by Gender, Age, and Faculty

Based on gender, the majority of respondents were female students, accounting for 59% (62 respondents), while male students comprised 40% (38 respondents), indicating that female students tend to participate more actively in surveys regarding the use of SPayLater services. The respondents were primarily aged 17–19 years (51%) and 20–22 years (48%), reflecting Generation Z as the main target group for SPayLater fintech services. Most respondents came from the Faculty of Economics and Business (58.7%), followed by the Faculty of Science and Technology (29.8%), with the remainder from the Faculties of Medicine and Law. This distribution suggests that students from the Faculties of Economics and Business and Science and Technology show greater interest in innovative digital service systems.

Data Analysis Results Using SEM-PLS

Outer Model Evaluation

Convergent validity was assessed using the loading factor values. In the first stage, some indicators of perceived risk were eliminated because their values were below 0.70. After re-running the analysis, all remaining indicators had values above 0.70, indicating that the indicators of the variables used have a strong correlation with their respective latent constructs.

Discriminant validity was assessed using cross-loading values. The results showed that each indicator had the highest loading value on the construct it was intended to measure, confirming that the constructs were distinct from each other.

Table 1. Discriminant Validity

	BI	PEOU	PU	PR	DK
BI1	0.892				
BI2	0.884				
BI3	0.923				
BI4	0.896				
PEOU1		0.896			
PEOU2		0.925			
PEOU3		0/942			
PEOU4		0.869			
PU1			0.886		
PU2			0.911		
PU3			0.918		
PU4			0.959		
PU5			0.938		
PR1				0.793	
PR3				0.847	
PR4				0.911	
PR5				0.909	
DK1					0.767
DK2					0.807

DK3					0.829
DK4					0.898
DK5					0.925
DK6					0.853

The reliability and AVE test results indicate that the criteria have been met, with AVE > 0.5 and CR > 0.7.

Table 2. AVE and CR Values

Varibel Laten	AVE	Kriteria	CR	Kriteria	Keterangan
PEOU (X1)	0,723	> 0,5	0,940	> 0,7	Valid & Reliabel
PU (X2)	0,750	> 0,5	0,923	> 0,7	Valid & Reliabel
PR (X3)	0,825	> 0,5	0,950	> 0,7	Valid & Reliabel
DK (X4)	0,808	> 0,5	0,944	> 0,7	Valid & Reliabel
BI (Y)	0,852	> 0,5	0,966	> 0,7	Valid & Reliabel

Evaluasi Inner Model

The R-Squared value for the interest variable was 53.2%, indicating that the variation in students' interest can be explained by this variable, while the remaining 46.8% is influenced by other variables not examined in this study. The Predictive Relevance (Q²) value was 0.575, suggesting that the model has strong predictive relevance. The Effect Size (f²) of perceived usefulness showed a substantial effect of 0.383, whereas the other variables had relatively small effects.

Hypothesis Testing

The results of the bootstrapping process are presented as follows

Table 3. Bootstrapping Value

		PEOU	PU	PR	DK
BI	Path coeff	0006	0,692	-0,180	-0,003
	P values	0.961	0,000	0.025	0,978

Based on the values above, the results of hypothesis testing are as follows:

H₁: *Perceived Ease of Use (PEOU) affects Behavioral Intention (BI)*

The results indicate that Perceived Ease of Use (PEOU) does not have a significant effect on Behavioral Intention, with a coefficient of $\beta = 0.006$ and a p-value of 0.961 (≥ 0.05). This means that hypothesis H2 is not supported.

H₂: *Perceived Usefulness (PU) affects Behavioral Intention (BI)*

The results show that Perceived Usefulness has a significant effect on Behavioral Intention, with a coefficient of $\beta = 0.692$ and a p-value of 0.000 (≤ 0.05). This indicates that hypothesis H1 is supported.

H₃: *Perceived Risk (PR) affects Behavioral Intention (BI)*

The results show that Perceived Risk has a significant effect on Behavioral Intention, with a coefficient of $\beta = -0.180$ and a p-value of $0.025 (\leq 0.05)$. This indicates that hypothesis H3 is supported.

H₄: *Digital Knowledge affects Behavioral Intention (BI)*

The results indicate that Digital Knowledge does not have a significant effect on Behavioral Intention, with a coefficient of $\beta = -0.003$ and a p-value of $0.978 (\geq 0.05)$. This means that hypothesis H4 is not supported.

The path diagram (*path analysis*) of this study is drawn as follows:

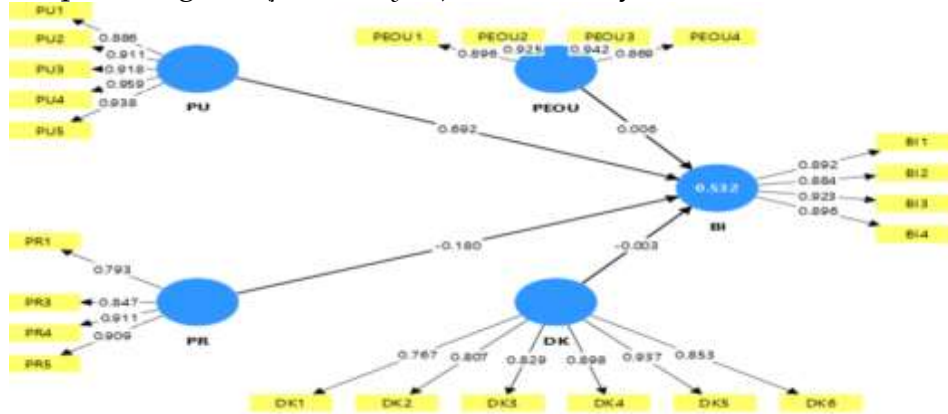


Figure 1. The Path Diagram

DISCUSSION

Perceived Ease of Use (PEOU) does not affect Behavioral Intention (BI)

The results show that Perceived Ease of Use does not have a significant effect on students' intention to use SPayLater, with a beta coefficient of 0.006 and a p-value of 0.961. According to the Technology Acceptance Model (TAM), this finding indicates a behavioral shift: ease of access and user-friendly application features are no longer seen as special added values, but rather as basic requirements or minimum standards for any digital platform today. For digitally savvy students, ease of navigation does not automatically trigger borrowing behavior, as their intentions are more influenced by rational considerations such as expense control and financial risk. In this financial service context, perceived ease of use serves only as a supporting technical factor rather than a primary motivator for behavior.

Perceived Usefulness (PU) affects Behavioral Intention (BI)

The results indicate that Perceived Usefulness is a dominant and significant factor driving students' intention to use SPayLater, with a beta coefficient of 0.692 and a p-value < 0.001 . This finding aligns with the Technology Acceptance Model (TAM) developed by Davis (1989), where students act as rational users, prioritizing functional benefits and transaction efficiency as the main reasons for adopting technology. High interest arises because students believe that SPayLater provides tangible added value by simplifying their shopping activities. In other words, the greater the perceived usefulness of the service, the stronger the students' intention to use it continuously.

Perceived Risk (PR) affects Behavioral Intention (BI)

The results indicate that Perceived Risk has a significant negative effect on students' intention to use SPayLater, with a beta coefficient of -0.180 and a p-value of 0.025. Based on the Technology Acceptance Model (TAM), this finding confirms that external factors, such as perceived risk, act as major barriers that can reduce system adoption even when the system is considered easy or useful. Students show a highly cautious attitude toward potential losses, such as misuse of personal data, high interest costs, and the risk of uncontrolled debt. The greater the students' concern about these negative consequences, the lower their intention to use and benefit from SPayLater in their digital transactions.

Digital Knowledge does not affect Behavioral Intention (BI)

The results show that higher digital knowledge may actually make students more cautious, as they understand and comprehend how the system works. However, this understanding does not automatically lead to borrowing behavior, since students are aware of the financial consequences associated with the digital service. According to the basic assumptions of the Technology Acceptance Model, knowledge is an external factor that can strengthen perceived ease of use. In this study, digital knowledge acts as a cognitive filter, enabling students to critically evaluate a system's service. Students not only consider ease of use but also assess interest calculations, service fees, and collection mechanisms, which encourages a cautious attitude and can reduce their intention to borrow, even if they fully understand how the technology operates

CONCLUSIONS AND RECOMMENDATIONS

This study concludes that students' intention to use SPayLater is driven more by tangible benefits and financial security rather than merely the technical ease of using the application. Perceived Usefulness has been proven to be the main driving factor, indicating that students are willing to use the service because they see added value, particularly in making shopping transactions more efficient. Conversely, Perceived Risk acts as a significant barrier. Concerns about personal data security and the fear of falling into debt clearly reduce students' intention to use the service.

An interesting finding of this study is that Perceived Ease of Use and Digital Knowledge do not have a significant effect on usage intention. For today's digital generation, easy application navigation is seen as a basic expectation rather than a major attraction. Additionally, higher digital knowledge makes students more critical and cautious in managing their finances in the future. Theoretically, these results reinforce the Technology Acceptance Model (TAM) in the fintech context, where rational considerations of benefits and risks are far more influential than mere technical proficiency in using the technology.

ADVANCED RESEARCH

The limitation of this study is that the research was conducted at only one university in Jambi, so the results may not fully represent all determinants of students' intention to use SPayLater. For future research, it is recommended to broaden the scope of the study and include additional exogenous variables, such as culture and/or intention as moderating variables.

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