

## Does Financial Literacy Matter in Cashless Payment Usage?

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### ABSTRACT

This study aims to examine the effect of social influence and effort expectancy on the intention to use and actual usage of cashless payment systems with financial literacy as moderating variable. To conduct this study questionnaires were distributed to all active accounting students at Airlangga University and from there, 128 research samples were obtained. The collected data were analyzed using WarpPLS 8.0. The results show that effort expectancy and social influence have a positive effect on the intention to use cashless payment systems. The result also shows that the intention to use cashless payment systems has a positive effect on the actual usage of cashless payment systems. In addition, the research results indicate that financial literacy does not moderate the effect of effort expectancy and social influence on the intention to use cashless payment. The results of this study are expected to provide insight and a better understanding of financial literacy and cashless payment system.

**Keywords:** Actual usage; behavioral intention; effort expectancy; financial literacy; social influence.

### INTRODUCTION

Over the past few years, technology in the areas of telecommunication and information has made tremendous progress. Through the digital revolution, business operating systems have changed significantly, especially in the financial services industry. [33] stated that technology has changed business models and the way humans do their activities. The expansion of the internet network and the high number of mobile phone users have opened up great opportunities for payment system growth [3] [19]. Moreover, due to the development of communication technology and information media, people can share information easily through their cellphone [25]. This makes it possible for the rapid dissemination of information and new trends which then bring about changes in various aspects of human life and behavior (Hall & Liu, 2022; [13].

Due to the technology developments, people's behavior in making payments have also changed [39]. People tend to look for a payment system that is practical, fast, and effective for their daily transactions, so they began to switch from a traditional payment system which is identical to physical cash to an electronic payment system. Electronic payment system (e-payment) is known as a cashless payment system [48]. Ng et al. (2021) explained that cashless payments are financial transactions that allow consumers to make transactions without physical cash, mostly it can be through cards or electronic methods.

Cashless payments have spread rapidly and increased significantly around the world and are projected to have great potential to grow [16], especially since the Covid-19 pandemic. During the pandemic, people try to avoid direct contact with items that could potentially carry the virus, such as physical cash, which encourages them to switch to cashless payment systems. The World Payments Report 2021 issued by the [6] recorded that the volume of global non-cash transaction volume in 2020 reached 785 billion transactions or grew by 7.8% compared to 2019 which only reached 728.3 billion transactions. In Indonesia, based on statistical data from Bank Indonesia, the volume of non-cash transactions during 2019-2021 also increased significantly. During 2019-2021, the volume of non-cash transaction in Indonesia reached 7-15 million transactions, while in previous years the highest volume of non-cash transaction only reached three million transactions.

The high volume of non-cash transactions shows that the cashless payment system has a large market potential. This condition creates opportunities and challenges for cashless payment system providers to innovate their products and services to meet consumer needs and expectations [16] [39]. Therefore, they are becoming competitive to create added value for their products and services and identify factors that can attract consumers to use their products and services. However, [17] found that the various advantages and ease of access offered by cashless payment system can encourage

people to make online purchases more often and tend to become impulse buying, especially for the millennial generation, who are highly proficient in using electronic payment and e-commerce but not used to or do not have sufficient knowledge in managing finance. [24] found that compared to the previous generation, millennials have less financial knowledge to understand and evaluate their financial decisions that can impact their future. Therefore, financial literacy is needed to control their finance [21].

Financial literacy is an individual's knowledge, abilities, and skills to understand financial information and use it to make appropriate and effective decisions in aspects of budgeting, saving, and spending [12] [21] [47]. Financial literacy is also defined as the ability to evaluate and make appropriate judgements about the choice and effectiveness of a new financial instrument [30]. Research conducted by [10] explained that financial literacy has an important role in making financial decisions. This shows that financial literacy can influence individual decisions in choosing financial products and services.

According to the Unified Theory of Acceptance and Use of Technology (UTAUT) model developed by [44], consumer behavior in using technology can be influenced by effort expectancy and social influence. This is in line with the results of research conducted by [40], which found that social influence and perceived of use (one component of effort expectancy) have a positive influence on the intention to use WeChat Payment. However, some previous studies show different results. The study of [18], [29], and [34] showed that effort expectancy had no significant effect on e-payments usage. In addition, [32] results showed that social influence had no effect on behavioral intention. This shows that there are inconsistencies in research results related to the effect of effort expectancy and social influence on the use of technology.

Based on the explanation above, this study aims to examine the effect of effort expectancy and social influence on consumer intention to use cashless payment and its effect on actual usage of cashless payment, with financial literacy as the moderating variable. This study uses financial literacy because financial literacy plays an important role in bridging the gap between the use of the internet or technology and financial management, and can affect the use of digital financial products and services [12].

The results of this study are expected to provide insight and a better understanding of the importance of financial literacy in the digitalization era, especially for the millennial generation. The results of this study are also expected to contribute by providing a better understanding of the factors

that influence consumer interest in using cashless payment systems. Therefore, the results of this study are expected to be a reference and consideration for cashless payment system providers in developing and marketing their products.

This study is divided into five sections. The first section explains the phenomena and problems that motivate this research. Next, the second section explains the theory that underlies this research and how the research hypotheses are developed. The third section describes how data was collected and analyzed. The fourth part explains the research results obtained. Finally, the fifth section contains the conclusions of the research.

## LITERATURE REVIEW

### Theoretical Background

#### *Unified Theory of Acceptance and Use of Technology (UTAUT)*

Unified Theory of Acceptance and Use of Technology (UTAUT) is a comprehensive technology acceptance model developed by [44]. This model was formed from the restructuring and modification of various technology acceptance theories and behavior theories, therefore this model is considered better than other models [28]. This model aims to explain and predict users' intention to adopt or use technology and its impact on their subsequent behavior [28] [37] [46].

UTAUT divides user behavior into two stages, namely behavioral intention and actual usage. This model assumes that users' acceptance is influenced by four main factors that act as direct determinants, namely performance expectancy, effort expectancy, social influence, and facilitating conditions [44]. In addition, the effect of effort expectancy, social influence, and facilitating condition on behavioral intention is moderated by experience.

This study uses the UTAUT model to identify internal and external factors that influence consumers' intentions to use a cashless payment system and its impact on their actual usage of cashless payment systems. Based on this model, effort expectancy as an internal factor and social influence as an external factor are expected to influence consumers' intention to use cashless payment systems. In this study, financial literacy act as an experience that moderates the effect of effort expectancy and social influence on the intention to use cashless payment systems.

#### *Effort Expectancy*

Based on the UTAUT, effort expectancy is the ease of use perceived by consumers from the use of

technology systems [44]. Effort expectancy is formed from three constructs: perceived ease of use which indicates an individual's level of belief that the technology does not require much effort; complexity which describes the level of difficulty to learn and use the technology; and ease of use. [7] stated that the level of effort expectancy could be used to find out how likely an application or a technology system will be adopted by consumers.

[9] explained that the ease of use could be felt by consumers if the technology system offers various benefits to consumers, such as convenience of use, short waiting times, high speed of payment, and efficiency. Ease of use of technology systems can come from various aspects, such as display design and functional features. [42] stated that user-friendly design is the most important factor of effort expectancy. [15] and [28] also found that an interface system that is user-friendly can lead to consumer perceptions that the technology is easy to use. The user-friendly design indicates that the technology system is designed by prioritizing user convenience so that it tends to have a simple and easy-to-use design. When the technology system has low complexity and a high level of ease of use, consumers do not need to spend a lot of effort to understand and operate it. Therefore, consumers' effort expectancy for the technology system will be high and can motivate consumers to switch their payment systems to those technology systems [19].

### ***Social Influence***

According to the UTAUT, social influence is the level of consumers' perception that people around them need to believe that they should use a new technology or system to meet the social environment expectation [44]. Social influence is formed from three constructs, namely subjective form, social factors, and image. Subjective form refers to the perception of important people around the individual who think that the individual should or should not perform certain behaviors. Social factors relate to individuals' internalization of the subjective culture of a group in certain social situations. Finally, the image construct reflects how far the use of technology is considered to improve a person's image or status in a social system.

The form of social influence itself can be in the form of the late trends that develop in society, invitations from people around individuals, and assessments from influential people around them. When individuals feel that the judgments of those around them regarding the use of technology are important, they will feel that they must switch to using the latest technology to feel trendy and professional [28] [34]. Therefore, social influence can be an important factor in increasing consumer intention to use technology.

Based on the explanation of [18], social influence is an important aspect of consumer communication. Providers can take advantage of social influence to market or promote their products or services. [9] explained that providers could use advertising, social media, and public relations to disseminate information about the benefits or advantages of using their products to attract consumers to use their products or services.

### ***Intention to Use Cashless Payment and Actual Usage of Cashless Payment***

Based on the UTAUT model, consumer behavior is divided into two stages, namely behavioral intention and actual usage [44]. Behavioral intention is an individual's interest or desire to perform a certain behavior [37]. [38] defined behavioral intention as the individuals' subjective probability that they will use new technology for their activities. Behavioral intention can show how much effort and time individuals want to spend to use technology, therefore it can indicate the acceptance or rejection of the technology [5]. The behavior discussed in this study focuses on individual behavior in using cashless payment systems. Therefore, the intention to use cashless payment is defined as an individual interest or desire that prefers to use cashless payment systems for transactions rather than using physical cash.

Behavioral intention is the driving force for the occurrence of behavior [1], [5]. [44] explained that the intention to use a technology leads to actual usage. Actual usage is the stage when an individual decides to continue using the technology. Behavioral intention can motivate an individual to use and reuse a technology until it shapes a behavior. Therefore, actual usage of cashless payment means the condition when an individual decides to use a cashless payment system for transaction. When individual have a good experience when using cashless payment system, they can be motivated to continue using it until it becomes a habit or behavior. This is in line with the results of research conducted by [14] and [37] that found the behavioral intention of technology has a positive effect on the usage behavior of the technology.

### ***Financial Literacy***

Financial literacy is an individual's ability to obtain, understand, and evaluate financial information needed to make efficient financial decisions aimed at individual financial well-being [30]. Financial literacy is also defined as individuals' ability to process economic information and make financial decisions by considering aspects of

financial planning, total wealth, debts, and pensions [21]. Financial literacy plays an important role in identifying effective financial strategies and products [47]. Financial literacy helps increase individuals' understanding of financial products and concepts through various instructions, information, and advice so that they can develop skills in identifying financial risks and opportunities [13].

[22] and [30] describe that financial literacy consists of three dimensions, namely financial knowledge, financial attitude, and financial behavior. Financial knowledge is an individual's knowledge capital through learning aspects that can affect the ability to manage income, expenses, and saving effectively. Financial attitude is a combination of concepts, information, and emotion related to finance that produces a tendency to act favorably.

### Hypotheses Development

#### *The Effect of Effort Expectancy on Intention to Use Cashless Payment*

Based on the UTAUT model, effort expectancy positively influences individual use intention to adopt a technology [44]. This theory assumes that high effort expectancy will increase individual intention to adopt or use new technology because the technology is considered not to require much effort and is not difficult to learn, understand, and use. The research conducted by [15], [20], and [28] support that theory by finding that a technological system with a low level of complexity and user-friendly design can make it easier for consumers to learn and operate it. [49] also stated that consumers prefer technology that is simple to learn and use. Consumers will expect that they can spend less effort to operate it so they can save time and energy. This can cause consumers to think that the technology system can be useful and benefit them, so they are interested in switching to cashless payments [2] [37] [50]. Therefore, the hypothesis of this study is as follows.

H<sub>1</sub>: Effort expectancy has a positive effect on the intention to use cashless payment.

#### *The Effect of Social Influence on Intention to Use Cashless Payment*

Social influence is one of the main factors that motivate individuals to accept and use new technology [29]. In the UTAUT model, social influence can increase consumer intention to use technology. Based on the UTAUT model, social influences such as subjective norms, internalization, and social status pressures can encourage individuals to use technology. The results of [23], [40], and [46] also

show that social influence has a positive effect on behavioral intention. Social influence is considered to increase an individual's intention to use new technology through an invitation or the way family, friends, or people around the individual assess the use of new technology [2] [50]. This shows that individuals can feel or be considered more trendy or professional when using the latest technology so the intention to use the technology is increasing. Based on this explanation, the hypothesis of the effect of social influence on the intention to use cashless payment is as follows.

H<sub>2</sub>: Social influence has a positive effect on the intention to use cashless payment.

#### *The Effect of Intention to Use Cashless Payment on Actual Usage of Cashless Payment*

UTAUT model assumes that behavioral intention or intention to use technology will drive the actual use of technology and shape behavior [44]. [37] explains that behavioral intention or intention to use reflects the desire to perform a behavior with actual usage being an actual response from a certain situation related to the given target. When individuals intend to continue using cashless payment, they will save the related technology features in their devices [46]. This can encourage the individual to continue using the cashless payment system and shape a habit or behavior. Therefore, the hypothesis in this study is as follows.

H<sub>3</sub>: Intention to use cashless payment has a positive effect on actual usage of cashless payment.

#### *The Moderating Effect of Financial Literacy on The Effect of Effort Expectancy on Intention to Use Cashless Payment*

UTAUT theory assumes that the effect of effort expectancy on individual intentions or decisions to use technology is moderated by individual experience [44]. However, several previous studies found that individuals' education can influence individuals' decisions to use technology. The research result of [20] explained that individuals with higher education tend not to hesitate to try new technological systems because they are more aware of and understand the ease and difficulty of using technology. In contrast, individuals with lower education will think that new technological systems are too complex and challenging to learn and use. In line with this explanation, the research result of [26] found that individuals with a higher education level prefer using digital financial services.

In this study, the education discussed focuses on financial literacy and acts as a moderating variable. [47] explained that financial literacy has

an important role in making effective financial decisions, including those related to preferences in using financial products or services. In addition, [12] stated that financial literacy is a leading force that can influence individuals' ability to use financial products or services. Individuals with adequate financial literacy are considered to have the ability and knowledge to understand financial products and services. With adequate financial literacy, these individuals have no difficulty using a cashless payment system, so it is easier for them to adopt a cashless payment system. Therefore, financial literacy is expected to strengthen or increase the effect of effort expectancy on the intention to use cashless payment. Based on this explanation, the fourth hypothesis of this study is as follows.

H4: Financial literacy moderates (strengthen) the effect of effort expectancy on the intention to use cashless payment.

**The Moderating Effect of Financial Literacy on The Effect of Social Influence on Intention to Use Cashless Payment**

In the UTAUT model, the influence of social influence on the intention to use technology is also moderated by individual experience [44]. However, several previous studies found that education also has an important role in making decisions on the use of technology [20] [26]. [47] explain more specifically that financial decisions, such as choosing financial products and services, can be influenced by financial literacy. Therefore, this study focuses on financial literacy as a moderating variable.

[31] and [41] explain that in making financial decisions, such as deciding which financial products and services to use, individuals with a high level of financial literacy will be selective and consider many aspects. Individuals with a high level of financial literacy will not be directly affected by external influences. However, they will filter the information obtained and then consider financial products and services that are effective and suitable for them. This is supported by [7] who explained that financial literacy shapes individual perceptions of external information that can influence the intention to adopt or use technology. Therefore, individuals with adequate financial literacy will filter the information obtained and consider various aspects so they can use the cashless payment system effectively. In making financial decisions, an individual with high financial literacy is expected to use judgment based on the knowledge and information they have rather than based on social influence so this can weaken the effect of social influence on the intention to use a cashless payment system. Based on this explanation, the research hypothesis is as follows.

H5: Financial literacy moderates (weaken) the effect of social influence on the intention to use cashless payment.

**RESEARCH METHOD**

**Research Approach**

This study uses a quantitative research approach to analyze and describe the influence between independent variables consisting of effort expectancy (EE), social influence (SI), and intention to use cashless payment (BI) on the dependent variable, namely actual usage of cashless payment (AU), with financial literacy (FL) as the moderating variable. Based on this, the research framework of this study is presented in Figure 1.

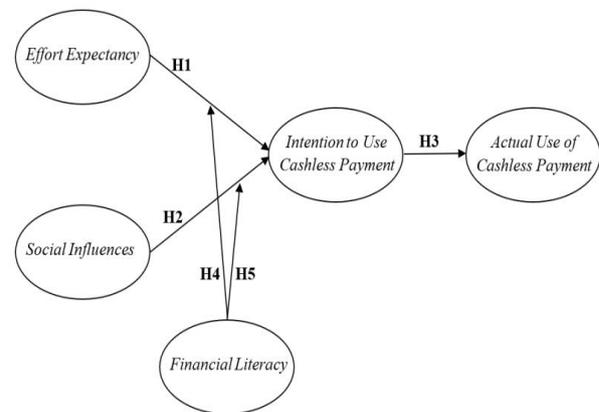


Figure 1. Research Conceptual Framework

**Population and Sample**

The population of this study is active accounting students at Universitas Airlangga. Accounting students were chosen as respondents because they are considered to have complex financial knowledge, from basic to advanced. Therefore, accounting students are expected to have a high financial understanding and skills in managing finances and are competent in making effective financial decisions. In addition, students can represent the millennial generation who actively use information technology and are vulnerable to being trapped in consumptive behavior.

To obtain representative samples, this study used a purposive sampling technique in selecting the research sample. Therefore, the students who are respondents in this study must meet predetermined criteria, namely, the students are active accounting undergraduate students in Universitas Airlangga class of 2017-2020 and have made transactions using cashless payment systems. The students must also have taken Financial Management, Management Accounting, Accounting

Information System, and Management Information System courses so that they are expected to have a better understanding of financial management and financial product and services in the digitalization era.

To ensure that the study results are representative, the minimum sample size is determined based on the following Slovin formula:

$$n = \frac{N}{1 + N(e^2)}$$

With

n = Minimum sample size

N= Population size

e = Acceptable margin of error (e=0,1)

Therefore:

$$n = \frac{845}{1 + 845(0,1^2)} = 89,42 \sim 90 \text{ samples}$$

Based on this calculation, the minimum number of samples required in this study was 90 samples. This study obtained 128 data samples, therefore the minimum sample size criteria have been fulfilled and the study results can be expected to be representative.

## Data Collection

This study used primary data obtained by distributing online questionnaires to active accounting undergraduate students in Universitas Airlangga class of 2017 – 2020 and obtained 128 data. The questionnaires distributed contained questions about effort expectancy, social influence, financial literacy, intention to use cashless payment, and actual usage of cashless payment, which were adopted from previous studies.

## Variable Measurement

In this study, effort expectancy is defined as the consumers' perception of the level of complexity and convenience they felt when using cashless payment systems. The higher the ease of use of the cashless payment system, the higher consumer expectations regarding the effort that needs to be spent, and it will motivate consumers to switch to using the cashless payment system [2] [20] [27] [37]. The measurement of the effort expectancy variable consists of four questions adopted from the study of [50]. Each question was measured using a five-point Likert scale. The social influence variable reflects the extent to which environmental factors, such as peoples' opinions and societal trends, can encourage individuals to use cashless payment systems [46]. The measurement of social influences variables consists of four questions adopted from [35] and measured using a five-point Likert scale. Based on

the UTAUT model, the intention to use the cashless payment variable reflects the behavioral intention variable. This variable indicates the extent of individuals' interest and desire to use cashless payment system in their lives. The measurement of this variable consists of five questions adopted from [35] and also measured using a five-point Likert-scale. The actual usage of cashless payment reflects the variable of usage behavior. This variable shows the extent to which individuals use cashless payment systems in their lives. The measurement of actual usage of cashless payment consists of four questions adopted from [35] and measured using a five-point Likert scale.

Financial literacy is defined as the ability, skill, and knowledge of individuals to understand financial information and make appropriate judgments about the effectiveness of a new financial instrument [30]. Based on the research conducted by [30] and [43], the measurement of financial literacy variables is divided into three parts. The first part consists of nine questions related to financial attitude. Furthermore, the second part consists of eight questions related to financial behavior. Finally, the third part contains seven questions related to financial knowledge. For the first and second parts, each question was measured using a five-point Likert scale. However, the questions in the third part are in the form of multiple-choice questions so that the correct answer will get a score of 1 point, and the other answers will get a score of 0 point.

## Data Analysis

In this study, data analysis begins by analyzing some data related to the characteristics of the respondents, such as gender, monthly allowance, and the type of cashless payments used. Then, this study analyzes the relationship between variables using Partial Least Square (PLS) analysis model. The PLS model is used with the consideration that this model can be used at all measurement scales, does not require many assumptions, and does not require large samples [11]. Data analysis was performed using WarpPLS 8.0. software. The tests carried out include outer model measurement, inner model measurement, and hypotheses testing.

The measurement of the outer model is carried out through two tests, namely the validity test and the reliability test. The validity of variables was assessed based on the value of outer loadings and Average Variance Extracted (AVE). The variable is considered valid if the value of outer loadings is greater than 0.7 and the minimum AVE value is 0.5 [11]. However, if the value of outer loadings is greater than 0.5, variable indicators can still be considered. Furthermore, the reliability test was

assessed based on the composite reliability value. The variable can be stated as reliable if the composite reliability value is greater than 0.7 [36].

The inner model is evaluated based on the value of the coefficient of determination ( $R^2$ ) and the value of cross-validated redundancy ( $Q^2$ ). [11] explained that the value of  $R^2 \leq 0.75$  indicates that the model prediction accuracy is substantial,  $\leq 0.50$  indicates a moderate level of accuracy, and  $\leq 0.25$  indicates that the model accuracy level is weak. The value of  $Q^2$  assesses the predictive validity of the model. The models' predictive validity is considered good and can be accepted if the  $Q^2$  value is greater than zero [36].

Finally, hypotheses testing is carried out in two stages. This test begins by testing the direct effect between variables. If the results indicate that the relationship between variables is significant, the analysis is continued by testing the indirect effect or, in this study, the moderating effect of the financial literacy variable.

## RESULTS AND DISCUSSION

### Descriptive Analysis of Respondents

Based on 128 data collected, the characteristic of respondents in this study are shown in Table 1.

Table 1. Respondents' characteristics

Respondents' Characteristic	Freq.	%
<b>Gender</b>		
Male	39	30.5
Female	89	69.5
<b>Monthly Allowance</b>		
<Rp500,000	35	27.3
Rp500,000 – Rp1,000,000	53	41.4
Rp1,000,000 – Rp3,000,000	32	25
>Rp3,000,000	8	6.3
<b>Type of Cashless Payment*</b>		
Credit card	9	7
Debit card	86	67.2
Mobile banking	102	79.7
E-Money (OVO, Gopay, DANA, other)	122	95.3

\*For this item, respondents can choose more than one answer

Table 1 shows that the respondents of this study consisted of 39 male respondents (30.5%) and 89 female respondents (69.5%). The table also shows that the majority of respondents or 53 respondents (41.4%) have a monthly allowance of Rp 500,000 – Rp 1,000,000. As many as 32 respondents (25%) have a monthly allowance of Rp1,000,000 – Rp 3,000,000. For students, this amount can be considered a large monthly allowance because this amount of money not only can be used to meet the

average student's needs but also to buy various other things. If these students do not have sufficient knowledge and ability to manage their finances, they are very vulnerable to consumptive behavior. In addition, this table shows that most respondents (122 respondents or 95.3%) have used cashless payment with the type of e-money.

### Outer Model Measurement Result

The outer model measurement was carried out by conducting validity and reliability tests because all variables only used reflective indicators. Invalid data will be eliminated, and other data will be iterated again until all data is valid. Table 2 shows the results of the second iteration after eliminating data that did not meet the criteria or were invalid. Table 2 shows that each variable indicator has an outer loading value above 0.5 and each variable has an Average Variance Extracted (AVE) value greater than 0.5, which is in accordance with the explanation of [11]. The composite reliability value of each variable is also greater than 0.7, which is in accordance with the explanation of [36]. Therefore, it can be stated that all variables are valid and reliable.

Table 2. Outer Model Measurement Result

Variable and Indicator	Outer Loading	AVE	CR
<b>Effort Expectancy (EE)</b>			
EE_1	0.836	0.709	0.907
EE_2	0.879		
EE_3	0.879		
EE_4	0.768		
<b>Social Influence (SI)</b>			
SI_1	0.878	0.590	0.849
SI_2	0.857		
SI_3	0.632		
SI_4	0.674		
<b>Intention to Use Cashless Payment (BI)</b>			
BI_1	0.860	0.674	0.912
BI_2	0.814		
BI_3	0.857		
BI_4	0.820		
BI_5	0.749		
<b>Actual Usage of Cashless Payment (UB)</b>			
AU_1	0.789	0.683	0.896
AU_2	0.837		
AU_3	0.862		
AU_4	0.817		
<b>Financial Literacy (FL)</b>			
FL_A	0.888	0.788	0.882
FL_B	0.888		

### Inner Model Measurement Result

The inner model measurement is carried out to test the quality of the model by assessing the value

of the coefficient of determination ( $R^2$ ) and the value of cross-validated redundancy ( $Q^2$ ). Table 3 below presents the results of the inner model analysis.

**Table 3.** Inner Model Measurement Result

Endogen Variable	Coefficient of Determination ( $R^2$ )	Cross-Validated Redundancy ( $Q^2$ )
BI	0.539	0.538
AU	0.692	0.692

Table 3 shows that the intention to use the cashless payment variable has an  $R^2$  value of 0.539. This indicates that effort expectancy, social influence, and financial literacy affect the intention to use cashless payment variable by 53.9% and the remaining 46.1% is influenced by other variables. The actual usage of cashless payment has an  $R^2$  value of 0.692 which indicates that the intention to use the cashless payment variable has an influence of 69.2% on the actual usage of the cashless payment variable, while 30.8% is influenced by other variables. In addition, the  $R^2$  value of the two variables are greater than 0.5 so it can be stated that the variables used have a substantial level of model prediction accuracy.

Table 3 also shows that intention to use cashless payment has a  $Q^2$  value of 0.538 (53.8%) and actual usage of cashless payment has a  $Q^2$  value of 0.692 (69.2%). Both variables have a  $Q^2$  value greater than zero so that the predictive validity of the model can be stated to be good and the model can be accepted.

**Hypothesis Testing Result**

In this study, hypothesis testing was carried out based on the value of the beta coefficient ( $\beta$ ) and p-value. The results of hypothesis testing are shown in Table 4.

**Table 4.** Hypothesis Testing Result

Hypotheses	$\beta$	p-value	Conclusions
<b>Direct Effect</b>			
EE $\rightarrow$ BI	0.349	<0.001	H1 supported
SI $\rightarrow$ BI	0.451	<0.001	H2 supported
BI $\rightarrow$ AU	0.832	<0.001	H3 supported
<b>Moderating Effect</b>			
FL*EE $\rightarrow$ BI	-0.072	0.206	H4 not supported
FL*SI $\rightarrow$ BI	0.021	0.405	H5 not supported

For the direct effects, Table 4 shows that the relationship between effort expectancy and the intention to use cashless payments has a beta coefficient ( $\beta$ ) of 0.349 and a p-value <0.001. This indicates that effort expectancy has a positive effect on the intention to use cashless payment so hypothesis 1 is supported. The relationship between

social influence and intention to use cashless payment has a beta coefficient ( $\beta$ ) of 0.451 and a p-value <0.001 indicating that social influence has a positive effect on the intention to use cashless payment, so hypothesis 2 is also supported. Furthermore, the relationship between the intention to use cashless payments and the actual usage of cashless payment has a beta coefficient ( $\beta$ ) of 0.832 with a p-value <0.001, which indicates that the intention to use cashless payment positively affects the actual usage of cashless payment, so hypothesis 3 is supported.

Table 4 also shows the testing results of the moderating effect of the financial literacy variable. Based on Table 4, the moderating effect of financial literacy on the effect of effort expectancy on intention to use cashless payment has a beta coefficient ( $\beta$ ) of -0.072 and a p-value of 0.206. This shows that the moderating effect is not significant because the p-value is more than 0.1, so hypothesis 4 is not supported. The moderating effect of financial literacy on the effect of social influence on intention to use cashless payment is also not significant because the p-value is 0.405 or more than 0.1, so hypothesis 5 is also not supported.

**Discussion**

***The Effect of Effort Expectancy on Intention to Use Cashless Payment***

The results of hypothesis testing show that effort expectancy positively affects the intention to use cashless payments. This result indicates that the higher the level of convenience perceived by consumers, the consumers' intention to use cashless payment systems will also increase. When consumers feel that the cashless payment system is easy to learn and use, the consumers' effort expectancy for this system will be high, so the consumers' intention to use cashless payment systems will increase.

This result is in line with the UTAUT theory that effort expectancy or the level of ease that individuals feel when learning, understanding, and using a technology system can encourage individual intention to use the technology [44]. The results of this study are also in line with the research results of [2], [15], [19], [20], [28], [35], [42], [49], and [50] which stated that effort expectancy can increase behavioral intention. However, the result of this study is contradicted by the results of research by [18], [29], and [34] which stated that effort expectancy does not affect the intention to use cashless payment.

[20] and [49] stated that consumers would more quickly accept and adopt new technologies

that are less complicated to learn and use. With a technology system that is designed to be user-friendly and easy to use, consumers will feel that the technology system will be useful, so they are encouraged to use it [15] [28]. This shows that it is important for cashless payment system providers to design and develop systems that are uncomplicated, fast, and easy to use.

### ***The Effect of Social Influence on Intention to Use Cashless Payment***

Based on the hypothesis testing results, social influence positively influences the intention to use cashless payments. This result is in line with the UTAUT theory which stated that social influence can increase individual intention to use a technology [44]. This shows that the greater the social influence around consumers, such as the latest trends and the influence of family, friends, and people around consumers, the consumer's intention to use cashless payment systems is higher.

This result is in line with previous research conducted by [2], [9], [18], [23], [28], [34], [35], and [46] which stated that social influence has a positive effect on behavioral intention. According to [46], consumers will decide to continue using e-money if there is an inducement or invitation from the surrounding environment as a social factor, such as the shop they visit and close friends or family. [2] stated that consumers' intention to use cashless payment systems is influenced by social pressure and the opinion of important colleagues. [9] highlight this as an important aspect for providers in promoting cashless payment system products or services. Providers can use various communication tools to create a usage trend or hire influential figures to promote their products or services to attract consumers to use cashless payment systems.

### ***The Effect of Intention to Use Cashless Payment on Actual Usage of Cashless Payment***

The result of testing the third hypothesis shows that the intention to use cashless payments positively affects the actual usage of cashless payments. Therefore, the higher the consumers' intention to use cashless payment systems, the more actual usage of cashless payments will increase. These results are in line with the UTAUT theory which stated that usage intention can predict technology usage behavior [44]. This result is also in line with the result of [35] which explained that the intention to use a technology system can affect the actual usage of the technology system. According to [46], this can happen because when consumers intend to use cashless payments, consumers will

save or download cashless payment tools. This can encourage consumers to use it again until they get used to continuing to use the cashless payment system for transactions.

### ***The Moderating Effect of Financial Literacy on The Effect of Effort Expectancy on Intention to Use Cashless Payment***

The result of testing the fourth hypothesis shows that the financial literacy variable does not moderate (strengthen) the effect of effort expectancy on the intention to use cashless payments. This result indicates that the cashless payment system has been designed to have simple and easy-to-use features so users do not need to have high financial literacy to be able to learn and use it. Both users who have high financial literacy and users with low financial literacy can use it easily. Therefore, the level of users' financial literacy does not increase or affect the ease that users feel in using the cashless payment system. However, the result of this study is not in line with [20] and [26] which stated that education influences the decisions to use financial products or services and explained that individuals with low education would find a new technology too difficult to learn and use. The result of this study is also different from the research of [47] which stated that financial literacy influences individual decisions regarding preferences for financial products and services to be used.

### ***The Moderating Effect of Financial Literacy on The Effect of Social Influence on Intention to Use Cashless Payment***

The hypothesis testing result shows that the financial literacy variable also does not moderate the effect of social influence on the intention to use cashless payments. This might happen because there are circumstances or other external factors that cannot be avoided, such as the government's demonetization policies or cashless society program, post-Covid-19 pandemic conditions which caused many merchants only accept cashless payment transactions, and most offices that are using bank payroll system. This situation can force individuals to use cashless payment systems so their financial literacy does not affect their decision to use a cashless payment system. This is supported by the research results of [4], [8], and [45] which found that the existence of government policies regarding demonetization and cashless society can encourage individuals to adopt electronic payment systems. In addition, this result is also supported by the research conducted by [26] which stated that a payroll system with transfers increases individual intention to use digital financial services.

However, this result is contradictory to the explanations of [20], [31], and [41] that financial literacy influences individual decisions to use financial products and services. In addition, this result is also not in line with the result of [7] which stated that a high level of financial literacy would make the individual more skeptical, so it can reduce initial trust in new technology and influences individual intentions to adopt or use the technology.

### CONCLUSIONS

In line with UTAUT theory, the results show that effort expectancy and social influence have a positive effect on consumer's intention to use cashless payment and the consumers' intention to use cashless payment has a positive effect on the actual usage of the cashless payment. However, the results of this study found that the moderating role of financial literacy in cashless payment usage is not significant. Financial literacy does not moderate either the effect of effort expectancy on the intention to use cashless payment or the effect of social influence on the intention to use cashless payment. This may happen because the cashless payment systems have been designed to have simple and easy-to-use features and there are other external factors that cannot be avoided.

These results are expected to provide insight and a better understanding of the importance of financial literacy in making financial decisions, especially for the millennial generation in the digitalization era. The results of this study are important for cashless payment system providers by providing a better understanding of the factors that influence consumer behavior in using cashless payment systems. This result indicates that effort expectancy and social influence have an important role in the acceptance and use of the cashless payment system. Therefore, this should be an important concern for cashless payment providers, especially in developing and marketing their products and services. Cashless payment system providers can develop their products and services to be user-friendly to make it easier for consumers to use them. In addition, companies can take advantage of positive opinions and testimonials from existing users to create a word-of-mouth effect or hire influencers to market their products and services so that they can attract the attention of potential users of the cashless payment system.

The limitation of this study is that some respondents who had difficulty understanding the meaning of some questions did not fill the questionnaires seriously and it made some variable indicators could not be analyzed further. In addition, the financial literacy variable questionnaire in the third part uses two different scales so further methods are needed to analyze it.

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