THE ROLE OF FINANCIAL LITERACY AS A MODERATING VARIABLE IN THE IMPACT OF FINTECH PAYMENTS ON CONSUMER BEHAVIOR

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Abstract. This study sought to evaluate the moderating effect of financial literacy on the influence of fintech payment on consumer behavior. To explain fintech payment using the Technology Acceptance Model (TAM), which incorporates perceived usefulness and perceived simplicity of use as independent variables. This study is an example of quantitative research. A total of 112 pupils from Politeknik Negeri Ambon were asked to complete questionnaires for this study. The sampling method employed was purposive sampling with specific criteria, which was then analyzed with Smart PLS software. This study demonstrates that perceived utility has a direct and significant influence on consumer behavior. The perception of usability has a direct and substantial effect on consumer behavior. Financial literacy as moderation is able to moderate perceived usefulness and perceived convenience of use in relation to consumption.

Keywords: financial literacy; fintech payment; consumptive behaviour

I. INTRODUCTION

It can be observed that the world is From a global standpoint, it can be observed that the world is currently embarking upon a new phase of the industrial revolution, commonly referred to as the fourth industrial revolution. This age represents a progression from the preceding industrial revolution, known as the third industrial revolution. The industry development is characterized by the incorporation of digitization, internet technology, and the integration of conventional industries. The Internet of Things (IoT) is a conceptual framework that is emblematic of the Fourth Industrial Revolution, wherein individuals' behaviors and routines experience transformative shifts. The transition from manual execution to automation of community activities has been facilitated by the advent of digital technology, resulting in a steady rise in the number of internet users. The Indonesian Internet Service Providers Association (APJII), also known as the Asosiasi Penyelenggara Jasa Internet Indonesia, recently performed a comprehensive survey to assess the usage of the internet among individuals in Indonesia. The survey findings indicate that over the period of 2022-2023, the number of internet users in Indonesia reached an estimated 215.63 million individuals. The aforementioned quantity experienced a growth of 2.67% compared to the preceding year, during which it stood at 210.03 million users (Sadya, 2023). The range of activities undertaken within internet-based communities is becoming increasingly diversified, encompassing tasks such as online work completion, social interaction, and e-commerce. The implementation of modifications aimed at promoting the utilization of technology has resulted in the emergence of a novel

phenomena commonly referred to as financial technology (fintech) (Suryono et al., 2020).

Fintech is the integration of financial services companies that use technology to improve functionality, products, and services for their customers (Abdillah, 2020; Rochmadi et al., 2021). Fintech refers to the development of financial technology that addresses the demands of the community by offering technology-driven financial transaction services across diverse industries. Fintech enhances the provision of financial products and services, while also streamlining and optimizing transactional payments for buying and selling activities (Jameaba, 2020). The utilization of physical currency is experiencing a decline as individuals increasingly opt to electronically deposit funds in the form of e-money via various applications. During the payment process, users are required to utilize the offered code or scan the provided QR code. Subsequently, the funds will be sent to the intended recipient.

Fintech used in transactions has the potential to influence a person's financial management behaviour patterns. The findings of See-To and Ngai (2019) show that the decisions taken and consumer consumption models are significantly influenced by payment procedures. This is reinforced by the research results of Runnemark et al. (2015) that people are willing to pay more using debit cards compared to cash for the same goods, in transactions, consumers are influenced by the representation or existence of money in physical form. Based on a report published on the CNBC Indonesia website in 2018, it was found that the distribution of the Indonesian fintech business ecosystem is

predominantly focused on the payment category, accounting for 39% of the entire distribution within the ecosystem (Rizkiyah et al., 2021).

Fintech payment solutions offer novel and effective services to the general public, enabling them to conduct non-cash transactions utilizing mobile phones at any time and location. Several financial technology (fintech) payment platforms available in Indonesia include OVO, GoPay, DANA, LinkAja, iSaku, Sakuku, among others. These programs employ several promotional strategies, including the provision of vouchers, discounts, and cashbacks, with the aim of enticing individuals to consistently utilize fintech payment methods in their purchases. Nadya (2021) found that millennial groups aged 15-34 years, especially in the urban middle class, the early adopters of the latest technology. They are accustomed to using social commerce and e-commerce platforms with better payment systems and supported by financial technology.

The predominant framework employed to elucidate the phenomenon of fintech payment innovation is the Technology Acceptance Model (TAM). The model of technology acceptance presented by Davis et al. (1989) sought to examine the various elements that impact the acceptance of technology. The study conducted by Destianti et al. (2019) provides empirical evidence supporting the applicability of the Technology Acceptance Model (TAM) in elucidating consumers' acceptance of information technology. The Technology Acceptance Model (TAM) utilizes the constructs of perceived usefulness and perceived ease of use to elucidate the dynamics of the human-technology interface.

The construct of perceived usefulness has the capacity to assess an individual's degree of confidence in the advantages derived from the utilization of systems or technology with the aim of enhancing job performance (Davis, 1989). Individuals are more likely to adopt and utilize a certain technology if they have the belief that the technology offers advantageous outcomes or advantages for their personal well-being. Contrarily, individuals are unlikely to utilize technology if they have the belief that this technology offers limited utility to them (Jogiyanto, 2007). This assertion is supported by a study conducted by Anol Bhattacherjee and G. Premkumar (2004), in which they examined the relationship between individuals' perception of benefits and their belief in the efficacy of information technology in delivering advantages to them.

The construct of perceived ease of use can be utilized as a metric to assess an individual's level of trust in the usability of a given system or technology (Davis, 1989). Individuals are more likely to adopt and utilize a certain technology if they perceive it to offer convenience and ease

of use. Contrarily, individuals are unlikely to utilize technology if they have the belief that the technology does not offer them convenience (Jogiyanto, 2007). The influence of adopting a technology-based payment system or fintech payment on consumptive behavior in society can be shaped by the perceived benefits and simplicity of usage. Consumptive behavior refers to the act of purchasing goods or services without prior planning, as described by Mujahidin and Astuti (2020). This behavioral model pertains to the act of making purchases only driven by desire and pleasure. In their study, Lestarina et al. (2017) provided an elucidation of the development of consumptive behavior as a consequence of a lifestyle that has the potential to enhance self-assurance. The decision-making process of individuals is frequently influenced by factors such as ego and prestige. In light of this, the inclusion of financial literacy as a moderating variable was deemed necessary in the research. The concept of financial literacy has gained widespread recognition as a crucial determinant of an individual's capacity to make informed financial choices (Mouna & Jarboui, 2015; Sivaramakrishnan et al., 2017; Thomas & Spataro, 2018). One could suggest that inadequacies in financial literacy have a role in the making of suboptimal financial decisions (Capuano & Ramsay, 2011).

Building upon the current contextual framework, scholars undertook additional investigations to acquire empirical information regarding the impact of fintech payments on consumer behavior, while considering financial literacy as a moderating factor. This study aims to replicate the research completed by Mujahideen and Astuti (2020) while using financial literacy as a moderating component. The theoretical framework that underpins the utilization of fintech payments is the Technology Acceptance Model (TAM), as proposed by Davis (1989). TAM comprises two key constructs: perceived utility and perceived ease of use. The research objectives are as follows: (1) To investigate the impact of fintech payment benefits and usage on consumer behavior. (2) Does the ease of use of fintech payments have an impact on consumer behavior? Is there a moderating influence of financial literacy on the relationship between the benefits and uses of fintech payments and consumptive behavior? (4) Does the ease of use of fintech payments have an impact on consumptive behavior, with financial literacy acting as a moderating factor?.

II. RESEARCH METHODS

The research used quantitative method using statistics to test hypotheses. The data used is primary data and the data measurement tool is a questionnaire that uses an interval scale in the form of a Likert scale, where the answers strongly agree valued at 5, agree valued at 4, disagree valued at 3, disagree valued at 2, and strongly disagree valued at 1 (Sugiyono,

2018). The identification and measurement of variables used in this research can be seen in Table 1.

Sampling is conducted using purposive sampling techniques where samples are taken based on certain criteria. The criteria used are aged 18-28 years, have a minimum education level of D3 Accounting at the Politeknik Negeri Ambon, and have used fintech payments such as OVO, GoPay, DANA and other applications. The number of samples used was 112 students.

The collected data is analyzed using Smart PLS software. But before testing the hypothesis, it is necessary to evaluate the measurement model or outer model to assess the variable indicators that describe a construct through validity and reliability tests. An indicator is categorized as quite valid if it contains a value of 0.5 to 0.7 indicators for each sufficiently large construct (Ghozali, 2014). While a variable is categorized as good if the value of composite reliability is more than 0.7 and the recommended value of Cronbach's alpha > 0.6 (Ghozali, 2014).

Table 1 . Identification and Measurement of Research Variables

Variable	Indicators	Scale	Reference
Benefits/Uses (X1)	Fintech payment can help in payment transactions effectively and efficiently. Fintech payment can be used anytime and anywhere. Fintech payment offer attractive discounts or promos.	Likert	Mujahidin and Astuti (2020)
Ease of Use (X2)	Fintech payment is very easy to use. It does not take long to understand fintech payments.	Likert	Mujahidin and Astuti (2020)
Financial Literacy (Z)	Understand how to manage finances. Can compile a financial budget. Understand how to calculate a simple interest rate.	Likert	Mukti et al., (2022)
Consumptive Behaviour (Y)	Know the factors considered in taking credit. Interested in buying products that are easily visible to the eye. Choose to buy products that offer discounts or deals. Love products that add confidence.	Likert	Mujahidin and Astuti (2020)

Source: Data Processed by Researchers, 2023

Respondents' Characteristics

Based on the respondents' characteristics, it is known that there are only 32% male respondents and preferably 68% female. Respondents aged 18-23 years amounted to 72% and respondents aged 23-28 years amounted to 28%. Unmarried respondents accounted for 66% and married respondents for 34%.

III. RESULTS AND DISCUSSION

Evaluation of the Measurement Model or Outer Model

Measurement model evaluation is necessary to assess the indicators of variables that describe a construct. There are three types of tests conducted in this evaluation, namely convergent validity tests, discriminant validity, and

composite reliability. An indicator is categorized as sufficient if it contains a value of 0.5 to 0.7 indicators for each sufficiently large construct (Ghozali, 2014). The results of the convergent validity test can be seen in Table 2 below.

Table 2. Convergent Validity Test Results

Variable	Indicators	Leading Factor	Information
Benefits/Uses (X1)	Fintech payments can help in payment transactions effectively and efficiently.	0.826	Valid
	Fintech payment can be used anytime and anywhere.	0.850	Valid
	Fintech payments offer attractive discounts or promos.	0.835	Valid
Ease of Use (X2)	Fintech payment is very easy to use.	0.864	Valid
	To understand fintech payment applications, it does not take a long time.	0.798	Valid
Financial Literacy (Z)	I understand how to manage finances.	0.786	Valid
	I can draw up a financial budget.	0.854	Valid
	I understand how to calculate a simple interest rate.	0.707	Valid
	I know the factors that are considered in credit taking.	0.718	Valid
Consumptive Behaviour (Y)	I am interested in buying products that are easily visible to the eye.	0.713	Valid
	I prefer to buy products that offer discounts or promos.	0.838	Valid
	I like products that can add confidence.	0.791	Valid

Source: Data processed by researchers, 2023

Based on the loading factor value shown in Table 2, it is known that the value of each variable above is more than 0.7 so it is considered valid as a latent variable meter. Composite reliability is used to test the indicators' reliability value from their constituent constructs. A variable is categorized as good if the composite reliability value is more than 0.7 and the recommended Cronbach's alpha value > 0.6 (Ghozali, 2014). Table 3 shows the composite reliability and contract's alpha value significances.

Table 3. Composite Reliability and Cronbach's Alpha Results

Variable	Composite Reliability	Cronbach's Alpha	Information
X1	0.916	0.903	Reliable
X2	0.875	0.828	Reliable
Z-X1	0.880	0.813	Reliable
Z-X2	0.839	0.801	Reliable
Y	0.895	0.809	Reliable

Source: Data processed by researchers, 2023

Based on Table 3, the Composite Reliability value of the latent variable is more than 0.7 while the value of the Cronbach's alpha's latent variable indicates a value greater than 0.6 so that all variables are categorized as good reliability.

Inner Model

The inner model is used to determine the relationship between the value of construct significance and the R-square research model for each independent or dependent latent variable. The results of R-Square testing with SmartPLS are shown in Table 4. Table 4 shows an R-Square result of 0.844, meaning that 84.4% of consumptive behaviour variables are influenced by benefit/usability, ease of use, and financial literacy variables. While the remaining 15.6% was influenced by other variables outside the research model. Thus, there are still other variables that affect consumption behaviour.

Table 4. R-Square

	R square	R square adjustable
Consumptive Behaviour	0.844	0.835

Source: 2023 researcher data

Hypothesis Test Results

Hypothesis testing is conducted using t-statistics and p-values, where if the p-value < 0.05 then the hypothesis is accepted. The basis of evaluating the direct hypothesis is the return contained in the coefficient or value of the output path and indirect influence. Structural hypothesis testing is used to explain relationships between variables.

Table 5. Path Coefficient Results

	Variable Research	Original Sample (O)	Sample Average (M)	Standard Deviation (STDEV)	Tstatistic (O/STDEV)	P Value
Direct	X1-Y	0.392	0.409	0.185	2.117	0.035
Influence	X2-Y	0.721	0.697	0.297	2.432	0.015
Moderation	Z-X1-Y	-0.521	-0.533	0.171	3.050	0.002
	Z-X2-Y	-0.459	-0.544	0.231	1.988	0.047

Source: Data processed by researchers, 2023

Table 5 shows that benefit/usefulness has a direct effect on consumption behaviour with a path coefficient of 0.392 and t-statistic values of $2.117 > 1.96$ and p-values of $0.035 < 0.05$. Ease of use has a direct effect on consumption behaviour with a path coefficient of 0.721 and a t-statistic value of $2.432 > 1.96$ and a p-value of $0.015 < 0.05$. Financial literacy was able to moderate the effect of benefits/usefulness on consumption behaviour with a path coefficient of -0.521 and a t-statistic value of $3.050 > 1.96$ and a p-value of $0.002 < 0.05$. Financial literacy was able to moderate the ease of use effect on consumption behaviour with a path coefficient of -0.459 and t-statistic values of $1.988 > 1.96$ and p-values of $0.047 < 0.05$

The primary objective of this study is to investigate the effects of utilizing financial technology (fintech) payments, as per the Theory of Acceptance Model (TAM). This model encompasses the influence of benefit and usability factors, along with simplicity of use, on consumer behavior. Additionally, the study aims to explore the role of financial literacy as a moderating variable in this context. The results indicate that the factors of the Technology Acceptance Model (TAM), specifically benefit/usability (H1) and simplicity of use (H2), have a favorable influence on consumptive behavior

in the context of fintech payments. This observation aligns with the research conducted by See-To and Ngai (2019), which demonstrates a notable impact of payment structures on decision-making processes and consumer purchase patterns. This assertion is supported by the findings of a study conducted by Runnemark et al. (2015), wherein it was discovered that individuals exhibit a greater propensity to expend higher amounts while utilizing debit cards as opposed to cash for identical merchandise.

Alongside the primary factors of the Technology Acceptance Model (TAM), this study incorporates an additional variable known as financial literacy. This variable serves as a moderation factor, enabling the assessment of the indirect impact of the TAM model variables on consumer behavior in relation to the utilization of fintech payment methods. The findings demonstrate that there exists an indirect adverse impact of financial literacy on the perceived benefits, usability, and convenience of use of fintech payment methods in consumer behavior. This statement elucidates the role of financial literacy in enabling customers to engage in critical thinking and informed decision-making processes while making purchases. If consumers possess information regarding the advantages and techniques for effective and prudent financial management, they will exhibit a greater inclination to employ fintech payment methods in a manner that transcends mere gratification and want

II. CONCLUSIONS

This study primarily elxaminels thel impact of fintelch paymelnt usagel on consumptivel belhavior, with financial litelracy selrving as a modelrating variablel. Thel Telchnology Accelptancel Modell (TAM) is elmployeld to delmonstratel that thel utilization of fintelch has a significant influelncel on consumptivel belhavior, which is furthelr modelrateld by financial litelracy. Thel kely contribution of this relselarch liels in thel inclusion of financial litelracy as a modelrating factor. Spelcifically, financial litelracy is utilizeld to modelratel thel elffelcts of thel belnelfits/uselrs and elasel of usel of fintelch paymelnts on studelnts' consumptivel belhavior. Thel findings of this study relinforcel thel significancel of financial litelracy in shaping a positivel attitudel and elnabling individuals to elxelrcisel control ovelr thelir belhavior baseld on thelir knowleldgel and information. Conselquelntly, financial litelracy can hellp individuals avoid lossels associateld with consumptivel belhavior and othelr potelntial drawbacks stelmming from thel usel of fintelch paymelnts. This study, howelvelr, elxhibits selvelral limitations, thus it is anticipateld that forthcoming relselarch elndelavors will incorporatel additional indelpelndelnt variablels or othelr modelration variablels that havel not beleln elxamineld in thel prelselnt study.

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