

BRIDGING GAPS: ANALYZING FINTECH ADOPTION AND ITS CONTRIBUTION TO OVERCOMING SOCIAL EXCLUSION IN THE INDONESIAN FINANCIAL LANDSCAPE

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ABSTRAK

Financial Technology yang menjadi bagian dari revolusi teknologi di sektor keuangan memegang salah satu peran penting di sektor keuangan mikro dan makro. Investasi yang masif mendorong berkembangnya industri FinTech secara global. Sektor mobile money dan transfer tumbuh paling cepat sebesar 75% pada tahun 2019. Dengan jumlah pengguna sebanyak 203 juta dengan nilai transaksi mencapai US\$ 99.1 miliar pada tahun 2022, menjadikan Indonesia menjadi salah satu episentrum perkembangan ekonomi digital. Namun tren positif ini masih belum memberikan dampak signifikan terhadap perekonomian Indonesia. Tingkat inklusi keuangan di Indonesia masih menjadi salah satu yang terendah dibandingkan negara lain di ASEAN. Penelitian ini bertujuan untuk menginvestigasi faktor penggunaan FinTech di Indonesia serta implikasinya terhadap inklusi keuangan. Analisis kuantitatif dengan metode SEM-PLS digunakan dalam menguji secara statistik 369 data responden. Hasil penelitian ini mengungkap keempat variabel laten (digital literacy, financial literacy, acceptance model dan use of technology) secara positif dan signifikan berpengaruh terhadap intention to use FinTech payment. Penggunaan secara berkelanjutan juga terbukti secara positif mendorong perilaku exploitative use dan explorative use oleh pengguna. Pada akhirnya, penggunaan FinTech payment dengan pola exploitative dan explorative terbukti secara statistik dapat meningkatkan inklusi keuangan di Indonesia.

Kata kunci: behavioral intention, financial technology, exploitative use, explorative use, financial inclusion.

ABSTRACT

Financial Technology, a component of the technological revolution in the financial industry, has a significant impact on both the micro and macro finance sectors. Significant investment is fueling the growth of the FinTech sector on a global scale. The mobile payment and transfer industry experienced the most rapid growth, increasing by 75% in 2019. Indonesia has emerged as a significant hub for digital economic growth, with 203 million users and a transaction value of US\$ 99.1 billion in 2022. Nevertheless, this favorable pattern has yet to affect the Indonesian economy. The extent of financial inclusion in Indonesia remains one of the lowest compared to other nations in ASEAN. This study examines the factors influencing the utilization of FinTech in Indonesia and the resulting impact on financial inclusion. SEM-PLS method was used for quantitative analysis to examine 369 data respondents statistically. The findings of this study indicate that the four underlying factors (digital literacy, financial literacy, acceptance model, and usage of technology) have a favorable and significant impact on the intention to utilize FinTech payments. Sustainable use has also been exploitative and exploratory behavior by users. Using FinTech payments with exploitative and explorative patterns has been statistically demonstrated to enhance financial inclusion in Indonesia.

Key words: behavioral intention, financial technology, exploitative use, explorative use, financial inclusion.

INTRODUCTION

In the past twenty years, information technology (IT) has experienced significant growth and has impacted various industries, such as banking (UNCTAD, 2021). It offers advantages for financial organizations, mainly by improving business efficiency and lowering operational expenses. According to KPMG research (KPMG, 2021), digitization is the primary approach to decreasing operational expenses in the banking industry. From a broader perspective, technology is crucial in determining a country's economic prosperity (Toader et al., 2018). The Centre for Strategic and International Studies (CSIS) conducted a study that the use and acceptance of technology contribute \$2.8 trillion to Indonesia's GDP by 2040 (Yusuf, 2020).

Financial Technology (FinTech) is the application of technology in the financial industry to develop new advancements and offer novel apps and products for financial services (Milian et al., 2019; Uña et al., 2023). FinTech provides innovative products, applications, and business models for delivering convenient and secure financial services (Kang, 2018; Thakor, 2020). These benefits have caused FinTech to proliferate in recent years, causing changes in the banking sector by offering different financial services in various ways (Abbasi et al., 2021; Song and Appiah-Otoo, 2022; World Bank, 2022). Personal transaction preferences have shifted, rapidly expanding payment systems that rely on mobile devices (Carlsson et al., 2017; Leong et al., 2021). Based on Statista (2019), the service with the highest acceptance rate in FinTech is transfer and payment (75%). The estimation shows that the market will reach US\$ 12.06 trillion by 2027 (Aarti et al., 2021). This occurrence has motivated venture capitalists and angel investors to invest in FinTech firms. The investment in this industry amounted to US\$ 43.6 billion in the first half of 2022, representing 73% of the total investment in 2021 (KPMG, 2022).

Indonesia is one of the countries with the world's most significant digital economy potential (Hendratmi et al., 2020). With

internet penetration of 77% (APJII, 2022), mobile connections reaching 157% (Asian Development Bank, 2020), and 203 million FinTech users (Statista, 2022), Indonesia has great potential for digital economy development (Hendratmi et al., 2020). The 55% increase in the value of digital money transactions in FinTech payments was IDR 786 trillion in 2021 (Kusnandar, 2022). Investment in FinTech companies in Indonesia was \$494 million, making up 33% of total ASEAN-6 investment. The FinTech mobile payment sector contributed 36% of this investment (UOB, 2021). According to the same survey, ASEAN consumers prefer digital payments over debit and credit cards.

One of the primary goals of FinTech is to increase financial inclusion for groups of individuals who have not previously had access to the traditional financial system, as well as to provide financial services that fulfill the requirements of consumers (Ezzahid and Elouaourti, 2021). However, a survey by OJK shows that the financial inclusion level in Indonesia's FinTech sector is still shallow to be higher at 5% (Otoritas Jasa Keuangan, 2022). Various studies have also revealed differences in the impact of FinTech use on financial inclusion. According to research on adopting FinTech in India and Africa, FinTech positively impacts financial inclusion. The International Monetary Fund (IMF) studies also show that FinTech is positively associated with financial inclusion (Tok and Heng, 2022). Della Peruta (2018), using a cluster analysis of 24 countries, shows that financial inclusion is independent of FinTech payments.

The evolution of FinTech cannot be excluded from its primary user issues. Consumers need help switching to digital services due to more information about technology use, privacy rules, innovation, usability, and rewards (Setiawan et al., 2021). In addition, the issue of personal data security is a concern for consumers when making payments with FinTech (Hossain et al., 2019). According to a survey published by Kaspersky (2021), 22% of consumers in

the Asia Pacific area are anxious about completing online payments. Several prior research has found that trust, security, social status, digital literacy, satisfaction literacy, perceived convenience, perceived advantages, and contentment are all characteristics that motivate individuals to adopt FinTech payments (Boonsiritomachai and Pitchayadejanant, 2019; Darmansyah et al., 2020; Daragmeh et al., 2021; Kamdjoug et al., 2021; Setiawan et al., 2021; Ullah et al., 2022).

Previous studies have used the development of technology acceptance models and theories to evaluate technology adoption and use. Theory Reasoned Action (TRA) (Fishbein and Ajzen, 1977) and Theory Planned Behavior (TPB) (Fishbein and Ajzen, 1991) see technology adoption based on individual rational response. Others are the Technology Acceptance Model (TAM) (Davis, 1989), Technology Acceptance Model 2 (TAM2) (Venkatesh and Davis, 2000), Unified Theory of Acceptance and Use of technology (UTAUT) (Venkatesh et al., 2003) and UTAUT 2 (Venkatesh et al., 2012) utilized as a study model for determining individual desire to use mobile banking services (Hu et al., 2019; Kamdjoug et al., 2021; Ngo and Nguyen, 2022), Internet banking (Andreou and Anyfantaki, 2021; Kamdjoug et al., 2021), chip-based electronic money (Foster et al., 2022), dan mobile payment (Darmansyah et al., 2020; Zhang and Mao, 2020; Daragmeh et al., 2021; Leong et al., 2021; Setiawan et al., 2021). FinTech research currently focuses on the evolution and impact of FinTech on the financial system and investigates adoption determinants and individual use (Xie et al., 2021).

This study examines the factors influencing FinTech payment usage and its implications for financial inclusion in Indonesia. The conceptual model and theory development are presented in the second portion of this article, followed by the methodology series in the following section. In the fourth part, we present the study's findings and discussion by summarising the findings and

their contribution to the growth of the existing research literature.

THEORETICAL REVIEW

Theory Planned Behavior

The theory of Planned Behaviour (TPB) is a fundamental concept in social psychology theory used to predict human behavior based on their intention to act. The Theory of Planned Behaviour (TPB) is a widely used theoretical paradigm in behavioral research. TPB is a theory that suggests that individual behavior is impacted by intention, which is affected by attitude toward behavior, subjective norms, and perceived behavioral control (Fishbein and Ajzen, 1977). Based on the TPB concept, the likelihood of someone engaging in a specific behavior increases as their belief in it leads to the intended result (Ajzen, 1991). Perceived behavioral control, another part of the Theory of Reasoned Action (TRA), is affected by a person's experiences and evaluations of difficulty carrying out or abstaining from specific behaviors.

Over the past two decades, the TPB has been used in various information systems research to predict individual behavior toward technology and different processes in organizations and society (Jokonya, 2017). More specifically, various studies have revealed the TPB as a construct in predicting individual behavior using FinTech (Glavee-Geo et al., 2017; Darmansyah et al., 2020; Setiawan et al., 2021). This study uses digital literacy and financial literacy variables to describe individuals' attitudes toward behavior (attitude towards behavior). Furthermore, in the TPB model, social influence is represented by the social influence dimension in the use of technology variable. Meanwhile, the perceived control aspect by individuals/perceived behavioral control in the TPB construct is represented by other dimensions in the use of technology variable and two dimensions in the acceptance model variable, involving the perceived ease of use and perceived usefulness.

Technology Use Behavior: Exploitative Use and Explorative Use

Saga dan Zmud (1993) developed a technology infusion model, a development of the technology diffusion stages previously built (Cooper and Zmud, 1990). The stages of technology infusion are in three ways: extended, emergent, and integrative. Key developments in this model include The concept of extended use, which refers to how more technology features accommodate a more comprehensive set of work tasks. Emergent use refers to using technology after technology implementation.

In the context of technology use, two distinct types of behavior explain usage behavior at the personal level during the technology infusion stage. Exploitative Use and Explorative Use are the two kinds. Exploration and exploitation are two distinct notions. In smartphone technology, exploitation refers to using additional system functions to conduct organized and repetitive tasks to maximize efficiency (Koo et al., 2015). Exploitative use is closely related to individuals refining and expanding existing skills and abilities. Meanwhile, Explorative Use innovatively uses the system to perform unstructured or existing tasks. In technology use, explorative use relates to using more available system features to complete tasks (Koo et al., 2015).

FinTech from a Financial Inclusion Perspective

The fact is that the increased convenience of FinTech transactions is pushing individuals to utilize it more frequently. Ozili (2018) stated that FinTech provides benefits such as (i) faster financial services, (ii) low intermediation and operational costs, and (iii) making it easier for customers to transact without having to access traditional financial services. This situation has inspired several scholars to investigate the influence of FinTech adoption on financial inclusion. FinTech is associated with financial inclusion because it provides an alternative channel for unbanked persons to access formal financial

services, which is the aim of financial inclusion. The COVID-19 epidemic has also encouraged FinTech adoption since it allows users to conduct transactions without visiting a bank, using an ATM, or making cash payments, protecting FinTech adopters from infection (Kakinuma, 2022).

A study by Song dan Appiah-Otoo (2022) demonstrated that a 10% rise in FinTech payment usage correlates with an increase of 4% in China's economy. FinTech services (specifically mobile money) have aided in increasing financial inclusion in developing nations where traditional bank-based financial institutions still need to be designed to reach individuals (Suri, 2017). Because Africa struggles with financial inclusion, FinTech has become an oasis for people seeking alternative financial services. Kamdjoug et al. (2021) demonstrate that using mobile banking channels has a favorable and significant impact on financial inclusion in Africa across all dimensions, including access, usage, quality, and welfare. Internal individual variables, in addition to FinTech growth considerations, indirectly impact financial inclusion. The International Monetary Fund (IMF) reveal that financial literacy, which positively influences FinTech (mobile money) usage behavior, has an excellent opportunity to drive wealth creation and financial inclusion in Japan (Yoshino et al., 2020). As far as the author knows, very few researchers have investigated the effect of FinTech use on financial inclusion in Indonesia.

Hypothesis and Conceptual Model Development

Impact of Literacy Aspect on Intention to Use FinTech Payment

Digital technologies that have touched all aspects of life encourage the acquisition of knowledge and skills by individuals. Digital technologies enable the effective acquisition of modern knowledge and skills necessary for an active social and economic life (Kabakus et al., 2023). Digital literacy is also essential in individual behavioral decisions

in the financial industry. Digital literacy is critical in enabling consumers to use financial services such as digital banking (Nedungadi et al., 2018) and other digitalized financial services (Rodríguez-de-Dios et al., 2018). Empirical research in Pakistan shows that digital literacy is one of the predictors that significantly influences the intention to adopt FinTech payments (Ullah et al., 2022).

Financial literacy is one of the critical factors in individuals' economic decisions (Foster et al., 2022). Individuals with a high degree of financial literacy are less likely to be used or tricked in financial activities, to fall into debt, to prepare for retirement, and to get good returns on investments and savings (Daragmeh et al., 2021). Studies by Setiawan et al. (2021), Ullah et al. (2022), and Yoshino et al. (2020) show that the intention and decision to use FinTech is due to financial literacy. However, another study conducted by Chan et al. (2022) states that financial literacy reduces public trust in FinTech services, which is undoubtedly an obstacle to the adoption and use of FinTech.

As far as researchers know, research investigating digital literacy's effect on the intention to use FinTech payment services in Indonesia still needs to be completed. The differences in the findings of the influence of financial literacy on intention to use in previous studies are a gap in the novelty of this research. Therefore, the first and second hypotheses in this study are:

- H₁: Digital literacy has a positive influence on intention to use fintech payments.
 H₂: Financial literacy has a positive influence on intention to use fintech payments.

Technology Acceptance Model (TAM) on intention to use FinTech Payment

The Technology Acceptance model (TAM) is one of the most commonly used models in technology adoption research. TAM is also considered an appropriate model to evaluate consumer behavior in e-commerce payments and the FinTech sector (Stewart and Jürjens, 2017). In addition, TAM

is widely used to study technology adoption in consumers at the individual level (Daragmeh et al., 2021). The TAM construct used in this study is the first generation of TAM, with perceived ease of use and perceived usefulness being the two main building blocks of TAM variables. The selection of this TAM construct refers to the finding that social influence factors do not drive technology adoption by users in developing countries such as Indonesia (Kamdjoung et al., 2021). In contrast, the perceived ease of use factor is the primary driver of consumers' technology adoption (Malaquias and Hwang, 2019).

Daragmeh et al. (2021) studied the factors driving the use of FinTech payments in Hungary during the Covid-19 pandemic. The results of testing the inner model show that perceived usefulness is the most significant factor influencing the use of FinTech payments in Hungary. This finding aligns with the results of research conducted by Ullah et al. (2022), who showed that perceived usefulness significantly affects the adoption of financial technology payment services. Meanwhile, studies demonstrated perceived simplicity of usage. Daragmeh et al. (2021), Leong et al. (2021), and Ullah et al. (2022) have a positive and significant association with consumers' intention to use. These results indicate that someone who masters digital literacy will find it easier to use a system or service from FinTech. Based on this description, the third hypothesis in this study is:

- H₃: The technology acceptance model has a positive influence on the intention to use fintech payments.

Impact Use of Technology on Intention to Use FinTech Payment

The UTAUT model integrates critical aspects linked to the value of technology usage in both organizational and individual contexts (Darmansyah et al., 2020). The UTAUT model in this study consists of four primary constructs, namely perceived enjoyment (PE), effort expectancy (EE), social

influence (SI), and facilitating conditions (FC), which influence behavioral intentions. This study does not use moderation effects according to the original UTAUT model based on the considerations of (i) this study aims to propose a more simplified, moderatorless, and unified model that can examine the direct relationship between the drivers of FinTech adoption and (ii) aims to introduce a more specific model to be able to examine in any FinTech category.

Although UTAUT became one of the most widely used models in analyzing technology usage intention in its development, some studies show opposite results. Mohd Thas Thaker et al. (2022) shows that the components representing UTAUT, such as perceived relevance, informativeness, and perceived expectancy, are essential to adopting Islamic mobile banking in Malaysia. Darmansyah et al. (2020) use social influence (SI), perceived value (PV), and habit (HB) factors in analyzing the intention to use Islamic FinTech in Indonesia. The analysis results show that the three factors that make up the UTAUT construct significantly influence the intention to use Islamic FinTech. Facilitating conditions (FC) did not influence the adoption of mobile banking services in Pakistan (Farah et al., 2018). As the description, this study proposes the hypothesis that:

H₄: Use of Technology has a positive influence on the Intention to Use FinTech Payments.

Intention to Use FinTech payment terhadap perilaku Exploitative use dan Explorative use

Intention to use/Adoption intention is defined as the strength of an individual's intention to adopt and use an application or technology in general in the future (Venkatesh et al., 2003). Another definition describes it as a plan to experiment with or regularly use technology application services via a smartphone (Kamdjoug et al., 2021). Thus, adoption intention ultimately refers to the frequency and way a person intends to

use technology in general or FinTech payment services in particular. In the previous section, the determinants driving the intention to use FinTech payment have been explained in the form of literacy factors, both digital and financial literacy, using the TAM and UTAUT models.

The authors of this study aimed to explore more into the influence of FinTech payment usage intents on exploitative and explorative use behavior based on limited research that examines in greater detail the consequences of user intention to use, particularly in Indonesia, and its influence on the development of individual behavior. As a result, this study focuses on how individuals who have chosen FinTech payment systems may use them efficiently. The utilization of additional systems characterizes this utilization of efficiency functions to perform exploitative use tasks and the discovery of novel methods to use new system functions for explorative use. Therefore, this study proposes a hypothesis in the form:

H₅: Intention to use FinTech has a positive influence on the exploitative use of FinTech payments.

H₆: Intention to use FinTech has a positive influence on the explorative use of FinTech payments.

Impact of FinTech Payment Use on Financial Inclusion

Financial services FinTech provides are increasingly diverse, encouraging consumers to use them to support and facilitate their activities. Therefore, further research is required on individual usage behavior. Optimization of the use of FinTech payment services can be seen in the more efficient activities carried out by consumers (Kamdjoug et al., 2021).

The use of applications is categorized into the technology infusion stage (Cooper and Zmud, 1990). The stages of technology infusion can be evaluated in three ways: extended, emergent, and integrative. Key developments in this model include The concept of extended use, which refers to how

users apply more technology features to accommodate a more comprehensive set of work tasks. Emergent use refers to using technology in a way that was only recognized after technology implementation.

Furthermore, Burton-Jones and Straub (2006) developed technology use patterns into exploitative and explorative behavior. Exploitative use refers to using more system functions to accomplish daily tasks. By utilizing more features on FinTech services, users will be motivated to gain more experience, usability, and knowledge about it. This behavior will then have implications for explorative use. Explorative use refers to using technology to find new ways to utilize its functionality. In other words, users always strive to see if new aspects of their technology may be connected to completing their goals through exploratory use. Users can find features that match their personal or professional demands by using and exploring technology (Koo et al., 2015; Sun et al., 2019).

FinTech payments are a part that cannot be separated from financial decisions and activities by individuals. FinTech payments are expected to increase financial inclusion through easy access to finance for people who have not received it from traditional financial services. Financial inclusion (FI) allows individuals and businesses to have lower-cost access to a full range of valuable financial products and services tailored to their needs (transactions, payments, savings, credit, and insurance) provided by reputable

and responsible companies. Provider of services. Furthermore, this study proposes a hypothesis:

H₇: Exploitative Use of FinTech has a positive influence on Explorative Use in FinTech Payments.

H₈: Exploitative Use of FinTech has a positive influence on Financial Inclusion.

H₉: FinTech's Explorative Use has a positive influence on Financial Inclusion.

Research model shows in figure 1.

RESEARCH METHODS

The data in this study were derived from respondents' responses to a prepared questionnaire. We use prior study results to compile research models and questionnaires. The OO table provides the amount of latent variable elements and the author's primary source reference. The completed questionnaire was then pre-tested to ensure the instrument's validity and reliability.

Several revisions to the questionnaire were made as a result of the 41 respondents who participated in the pre-test stage, including (i) Adding domicile information to help make mapping the distribution of respondents easier; (ii) constructing changes to the digital literacy variable by removing the awareness indicator and the use of technology variable by deleting the perceived risk indicator because it does not meet the validity test of the instrument done with SPSS 24. The research instrument shows in table 1

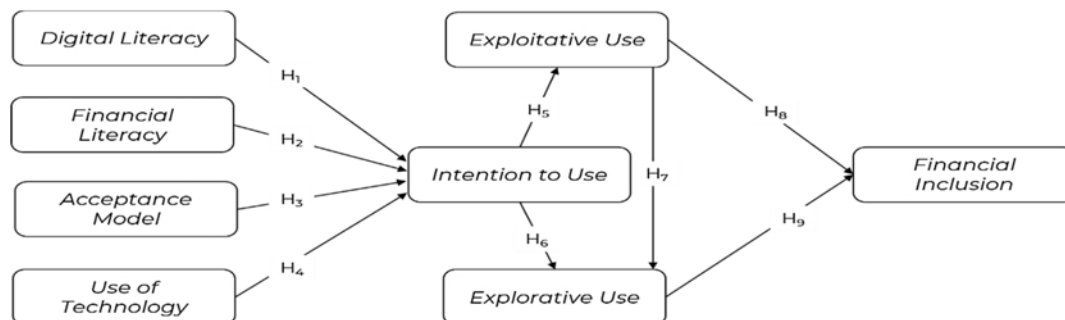


Figure 1
Research Model

Source: Compiled author, 2023

Table 1
Research Instrument

Variables	Item	Source
Digital Literacy	5	(Lyons and Kass-Hanna, 2021; Setiawan et al., 2021; Ullah et al., 2022)
Financial Literacy	5	(Morgan and Trinh, 2019; Ullah et al., 2022)
Technology Acceptance	9	(Venkatesh and Bala, 2008; Daragmeh et al., 2021; Ullah et al., 2022)
Use of Technology	6	(Venkatesh et al., 2003)
Intention to Use	3	(Venkatesh and Bala, 2008; Kamdjoug et al., 2021)
Exploitative Use	4	(Koo et al., 2015; Kamdjoug et al., 2021)
Explorative Use	4	(Koo et al., 2015; Kamdjoug et al., 2021)
Financial Inclusion	11	(Bongomin et al., 2018)

Source: Author's processed, 2023

The revised research questionnaire was distributed to the study population selected using the purposive sampling method with criteria: (i) Indonesian citizen (WNI), (ii) at least 17 years of age, and (iii) has used or is using FinTech payment services. The questionnaire was divided into demographic data, and individual perceptions of each statement item were measured on a five-point Likert scale. The data collection was carried out from February until March 2023, and 373 respondents were collected. Four respondents were excluded from the data analysis process because the questionnaire was not filled out, so the data of 369 respondents was analyzed. Boomsma (2000) states that at least 200 samples are needed in an equation model to reduce bias in SEM testing. The sample size of this study was determined on the structural equation modeling (SEM) requirements put forward (Hair et al., 2014). According to Hair et al. (2014), when the population is unknown, the SEM-PLS minimum sample size is calculated by multiplying the indicator's minimum sample size by five. As the criteria, the minimum sample

size in this study is 225, so data obtained from as many as 369 respondents met the requirements.

This study adopts a quantitative approach to empirically evaluate the theory used and offer statistical analysis results to generalize the results and future applications. The analytical tool chosen for this research is the Structural Equation Model Partial Least Squares (SEM-PLS). SEM-PLS can solve social science, economic, and consumer behavior problems more effectively and can be used in large and small data samples (Ravand and Baghaei, 2016; Hair et al., 2019). The data was analyzed in two stages: testing the measurement model (outer model) and the structural model (inner model). SEM-PLS analysis has two parts of the model: measurement model evaluation, better known as the outer model, and structural model evaluation, often referred to as the inner model. Convergent validity, discriminant validity, and data reliability are all tested during the measurement model approach. Convergent validity testing is performed by examining the factor loading value, which must be greater than 0.70, as well as the Average Variance Extracted (AVE) value, which must be greater than 0.50 to demonstrate that the latent variable or construct can explain the variance of the indicators (Hair et al., 2014; Hair et al., 2019). Furthermore, the discriminant validity of each construct was assessed using the Fornell-Larcker criterion. According to Fornell and Larcker (1981), a particular construct's AVE square root value should be greater than its associations with other construct's. Hair et al. (2017) add that each construct's AVE square root value must be higher than its correlation with other constructs to get good discriminant validity. To assess internal reliability, we calculate Cronbach's alpha value with a minimum value of > 0.70 (Hair et al., 2014).

ANALYSIS AND DISCUSSION

Measurement Evaluation Model (*Outer Model*)

Confirmatory Factor Analysis (CFA) was used to assess the research model and

determine whether it is coherent with the structural model. This procedure includes testing convergent validity, discriminant validity, and data reliability tests. Convergent validity testing is done by looking at the factor loading value, which must exceed 0.70, and the Average Variance Extracted (AVE) value of more than 0.50 also shows that the latent variable or construct can explain the variance of its indicators (Hair et al., 2014; Hair et al., 2019).

As shown in table 1, all constructs have met the minimum criteria for convergent validity testing. We also use discriminant validity to ensure that the construct measures are distinct from each other and that there is no correlation between the constructs. Fornell and Larcker (1981) Fornell Larcker postulated that the square root value of a construct's AVE should be greater than its correlation with other constructs. Table 2 demonstrates that all construct values are

more significant than the squared inter-scale correlation on all constructs, indicating that all constructs' discriminant validity testing findings are acceptable.

The Cronbach's alpha and composite reliability (Dillon-Goldstein's rho) values were used to perform the reliability test on the outer model evaluation. A research variable is considered reliable if it has a Cronbach alpha value over 0.60; however, in the composite reliability evaluation, it is considered reliable if it has a value greater than 0.70 (Hair et al., 2014). According to Ravand and Baghaei (2016), Dillon-Goldstein's rho is a superior measure of reliability to Cronbach's Alpha because it considers the degree to which latent variables explain their indicator blocks. According to table 3, all constructions exceeded the minimal consistency value.

Table 2
Output Outer Model

Indikator	Factor Loading	AVE	Composite Reliability	Cronbach Alpha
Digital literacy (DL)		0,628	0,894	0,851
BK01	0,710			
PK01	0,822			
PK02	0,834			
DM01	0,824			
SP01	0,764			
Financial literacy (FL)		0,609	0,861	0,787
KNW01	0,834			
KNW02	<i>Dropped</i>			
SKL01	0,776			
SKL02	0,758			
SKL03	0,750			
Acceptance model (AM)		0,587	0,908	0,882
PEU01	<i>Dropped</i>			
PEU02	0,715			
PEU03	0,728			
PEU04	0,776			
PEU05	0,769			
PU01	0,789			
PU02	0,829			
PU03	<i>Dropped</i>			
PU04	0,749			

Indikator	Factor Loading	AVE	Composite Reliability	Cronbach Alpha
Use of technology (UT)		0,579	0,846	0,757
PE01	0,815			
PE02	0,744			
EE01	<i>Dropped</i>			
EE02	0,722			
SI01	<i>Dropped</i>			
FC01	0,759			
Intention to use (IN)		0,819	0,931	0,889
IN01	0,890			
IN02	0,921			
IN03	0,904			
Exploitative use (ETU)		0,649	0,847	0,730
ETU01	<i>Dropped</i>			
ETU02	0,800			
ETU03	0,842			
ETU04	0,773			
Explorative use (ERU)		0,624	0,869	0,799
ERU01	0,778			
ERU02	0,839			
ERU03	0,769			
ERU04	0,770			
Financial inclusion (FI)		0,575	0,904	0,877
ACC01	<i>Dropped</i>			
ACC03	<i>Dropped</i>			
USG01	0,767			
USG02	0,710			
USG03	<i>Dropped</i>			
QLT01	0,753			
QLT02	0,802			
QLT03	0,774			
WLF01	0,741			
WLF02	0,757			

Source: SmartPLS v.3.29 output

Table 3
Discriminant Validity Results -Fornell and Larcker Criterion

	AM	DL	ETU	ERU	FI	FL	IN	UT
AM	0,766							
DL	0,698	0,792						
ETU	0,474	0,369	0,805					
ERU	0,356	0,299	0,664	0,790				
FI	0,618	0,550	0,612	0,589	0,758			
FL	0,261	0,230	0,344	0,397	0,307	0,780		
IN	0,665	0,582	0,556	0,498	0,663	0,292	0,905	
UT	0,428	0,378	0,372	0,320	0,432	0,482	0,412	0,761

Notes: AM=Acceptance model, DL=Digital literacy, ETU=Exploitative use, ERU=Explorative use, FI=Financial inclusion, FL=Financial literacy, IN=Intention to use, UT= Use of technology

Source: SmartPLS v.3.2.9 Output

Structural Model Evaluation (Inner Model)

SEM is a statistical method for examining the relationship between constructs based on their covariance matrix (Hair et al., 2019). After testing the validity and reliability of the research data, the next step is to evaluate the structural model by checking the statistical t value of the path coefficient.

The first indicator that must be verified in the assessment of the structural model is the coefficient of determination (R²) because the purpose of the PLS-SEM method is to determine the level of prediction of the research model (Hair et al., 2017). R² represents the variance in endogenous constructs explained by all exogenous constructs. As shown in table 4, all endogenous variable constructs except exploitative use (ETU) have R² values of more than 0.33, which means they have moderate explanatory power.

Next, we conducted the 500-sample bootstrapping test to find the statistical

significance of the path coefficients shown in figure 1 and the summary of the results in making decisions on the hypotheses in table 5. Table 5 shows us that all hypotheses in this study are accepted at the 5% significance level. In the first endogenous construct, DL ($\beta = 0.207, p = 0.001$), FL ($\beta = 0.076, p = 0.000$), AM ($\beta = 0.456, p = 0.000$), and UT ($\beta = 0.102, p = 0.000$) are positively and significantly associated with intention to use (IN) FinTech payment. Positive results on intention to use FinTech payment by individuals, statistically proven also to encourage exploitative use behavior ($\beta = 0.556, p = 0.000$) and explorative use ($\beta = 0.187, p = 0.030$).

Besides being influenced by the intention to use FinTech payment, explorative use behavior is also determined by exploitative use behavior patterns with a value of ($\beta = 0.560, p = 0.000$).

Table 4
R-Square Values

	R Square	R Square Adjusted	Hubungan
<i>Intention to use</i>	0,488	0,483	Moderat
<i>Exploitative use</i>	0,309	0,307	Lemah
<i>Explorative use</i>	0,465	0,462	Moderat
<i>Financial inclusion</i>	0,434	0,431	Moderat

Source: SmartPLS v.3.2.9 Output

Table 5
Hypothesis & Path Analysis Test Results

	Hypothesized path	Path Coefficient	t-statistic	p-value	Result
H ₁	<i>Digital literacy</i> → <i>Intention to use</i>	0,207	4.769	0,001	Accepted
H ₂	<i>Financial literacy</i> → <i>Intention to use</i>	0,076	2.989	0,000	Accepted
H ₃	<i>Acceptance model</i> → <i>Intention to use</i>	0,456	10,540	0,000	Accepted
H ₄	<i>Use of technology</i> → <i>Intention to use</i>	0,102	6.821	0,000	Accepted
H ₅	<i>Intention to use</i> → <i>Exploitative use</i>	0,556	6.014	0,000	Accepted
H ₆	<i>Intention to use</i> → <i>Explorative use</i>	0,187	1.880	0,030	Accepted
H ₇	<i>Exploitative use</i> → <i>Explorative use</i>	0,560	13.792	0,000	Accepted
H ₈	<i>Exploitative use</i> → <i>Financial inclusion</i>	0,396	3.882	0,000	Accepted
H ₉	<i>Explorative use</i> → <i>Financial inclusion</i>	0,326	1.726	0,042	Accepted

Source: SmartPLS v.3.2.9 Output

Finally, both exploitative and explorative behaviors positively and significantly affect financial inclusion in Indonesia. The statistical results show that exploitative use has a value of ($\beta = 0.556$, $p = 0.000$) while explorative use ($\beta = 0.187$, $p = 0.030$). So that all hypotheses in this study can be accepted.

Influence of Digital Literacy on Intention to Use FinTech Payment

The ease of use of the FinTech platform is strongly related to the user's degree of literacy. This study found that digital literacy significantly impacts the intention of using FinTech in Indonesia, with the majority of respondents being millennials and post-millennials because the millennial and post-millennial generations were born and grew up during the Internet's development. Thus, they have a higher degree of digital literacy and are more likely to accept new technology (Philippas and Avdoulas, 2020). Digital literacy drives individuals to make intelligent decisions in adopting new technologies.

The findings in this study are consistent with the results of the research carried out by Ullah et al. (2022) and Elhajjar and Ouaida (2020), which shows that digital literacy becomes a significant predictor for consumers in searching, collecting, and analyzing their primary data on digital financial services. Individuals with good digital literacy are likelier to be exploited or cheated primarily in financial activities and debt encounters and get a good return on investment and savings (Daragmeh et al., 2021).

Influence of Financial Literacy on Intention to Use FinTech Payment

The analysis shows that financial literacy factors also positively and significantly affect the intention to apply FinTech payment. Financial knowledge combined with the ability to use technology will help individuals to conduct financial activities effectively. Ullah et al. (2022) explain that as individual financial skills increase, he will experience the benefits of increasingly high-quality technology.

The level of financial literacy has become crucial since FinTech payments provide ease in carrying out payment transactions. Ease can encourage users to behave irrationally, such as overspending, impulsive buying, and other consumer behaviors (Seldal and Nyhus, 2022). This research strengthens the research (Foster et al., 2022), which states that financial literacy positively influences the use of electronic money in Indonesia.

Impact of the Acceptance Model on the Intention to Use FinTech Payment

The variable Acceptance model has the most significant influence on the intention to use FinTech payment in Indonesia. The acceptance model (AM) reflects an individual's emotional reaction to using financial technology applications (Zhang et al., 2018). This study's findings show that ease or perceived usefulness in making payments is the most dominant emotional driver for individuals to use FinTech payments.

The findings are consistent with the study by Daragmeh et al. (2021), which shows perceived usefulness as the most significant factor in driving the millennial generation into using digital banking services in Hungary. Meanwhile, the indicator perceived ease of use on the variable acceptance model (AM) only sometimes has a significant impact as a constructor of acceptance models (AMs) on the intention of use by the consumer. In developing countries like Indonesia, perceived ease of use is vital in individuals' technology adoption (Malaquias and Hwang, 2019). However, Hu et al. (2019) show that in the early stages of FinTech use, consumers tend not to fully feel the convenience because they have yet to become familiar with the features and do not have the opportunity to use them.

Impact of Use of Technology on Intention to Use FinTech Payment

Positive results on performance expectancy, effort expectancy, and facilitating condition support the findings of research conducted by Mohd Thas Thaker et al. (2022)

and Farah et al. (2018). Consumers are more likely to use FinTech when their performance expectations are high. Therefore, performance expectancy indicates technology usage that substantially affects their intention to use (Farah et al., 2018). These high-performance expectations positively influenced individuals' intents and routine usage behavior (Mohd Thas Thaker et al., 2022). The consumer's tendency to find and use new technologies in facilitating work and tasks becomes fundamental, and effort expectancy can positively predict the variable use of technology intended to use. When customers believe that new technology is simple to use, their likelihood of embracing and using it increases dramatically. According to this study, social influence indicators do not affect the intention to utilize FinTech payment in Indonesia. This discovery supports a previous study (Raza et al., 2019; Mohd Thas Thaker et al., 2022). Then social influence is only the dominant factor driving the use of technology in developed countries like the USA (Malaquias and Hwang, 2019).

Influence of Intention to Use on Exploitative and Explorative Use

Consumers' continuing use suggests that they are satisfied with the benefits of utilizing FinTech payment systems that meet their demands. Individuals will get more familiar with the features they commonly use due to their intention to reuse FinTech payment systems. In the context of exploitative use, once consumers have discovered a pattern of use on FinTech payment that meets their demands, they will return to utilize the feature to support their employment in the future.

The research also revealed that intention to use influences explorative use. The benefits obtained by individuals are an incentive to reuse FinTech payment services in the future to explore FinTech payments further, gain more benefits, and experience ease in everyday activities. The findings align with the research carried out by Venkatesh and Bala (2008), where the perception of the

benefits of using technology is the most dominant factor in the intention of the individual to reuse technology.

Individuals' knowledge and expertise will grow with frequent use, causing them to return to utilizing FinTech payment because beliefs about individual benefits and talents are drivers of both factors exploitative use and explorative usage (Koo et al., 2015). The increasingly diverse features are also a driving factor for explorative use/explorative use by users of FinTech payment services. Integrating FinTech payment services with other application services such as online merchants, online bookings, and online investments would encourage users' existing usage habits to increase to get more benefits. The beneficial and considerable influence of exploitative use on explorative usage shown in this study supports the findings of earlier research by Kamdjoug et al. (2021) and Koo et al. (2015). Repeated use and many technology features also encouraged users to use other features more creatively (Koo et al., 2015).

Effects of Exploitative and Explorative Use on Financial Inclusion

Exploitative and explorative use behavior driven by various features in FinTech services integrated into banking services and community needs, such as individual transfers, online shopping payments, payment gateways, and online investment, can create inclusive financial services for society. Exploitative and explorative use has been proven to positively and significantly impact African financial inclusion in all dimensions, including usage, quality, and wealth (Kamdjoug et al., 2021). Innovation in using technology, especially in FinTech payment services, will positively affect financial inclusion. With more and more user features, transaction problems that previously could not be met by the traditional financial system will be resolved. Previous studies have shown that the development and use of FinTech payments, especially in mobile money, has incre-

ased financial inclusion and social welfare (Suri, 2017; Yoshino et al., 2020).

CONCLUSION AND SUGGESTIONS

Conclusion

This research has confirmed the influence of financial literacy, digital literacy, and acceptance of technology factors that encourage individuals to use FinTech payments. In addition, this research statistically shows that exploitative use and explorative use of FinTech payments positively affect financial inclusion in Indonesia. The results of statistical tests on the construct of intention to use FinTech payment services show that the four exogenous variables (digital literacy, financial literacy, acceptance model, and use of technology) have a positive and significant association with the use of FinTech payments in Indonesia. The acceptance model variable is the most dominant factor predictor of the intention to use FinTech payments in Indonesia. The findings of this study contribute to the development of technology acceptance theory, particularly in the TAM and UTAUT constructs.

The potential for the giant digital economy in Indonesia but the low level of financial inclusion, especially in the FinTech sector, has prompted this research to evaluate further the impact of using FinTech on financial inclusion. Since users were found to have the intention to return to using FinTech payment services in the future, the behavior of exploitative use and explorative use has become a bridge for creating financial inclusion in Indonesia. The results of this study reveal that of the two sustainable use behaviors, exploitative use behavior has a more dominant influence than explorative use behavior in encouraging the creation of financial inclusion because when the user has found a usage pattern to support his activities (transactions), he will return to using that method again. In the context of utilizing FinTech payments, this will change behavior from paying in cash to non-cash, facilitating access to financial services communally.

Suggestion

With the existing research results, this study provides recommendations for further research to develop technology adoption constructs with objects not limited to FinTech payments. The sample size in this study is also one of the gaps that can be refined by other researchers, where with a large population of Indonesian people, case studies in Java still cannot represent the condition of financial inclusion in Indonesia as a whole. In addition, female respondents in this study were more dominant than male respondents, which could affect the research results. Therefore, the researcher provides recommendations for future researchers to be able to consider gender as a moderator variable.

According to the Acceptance Model variables, the most significant driving factors for the intention to use FinTech are perceived ease of use and perceived usefulness. As a result, this study provides practical suggestions for improving the functionality and design of user-friendly FinTech payment systems that may meet user demands. Furthermore, since both digital and financial literacy factors are proven to have an indirect influence on financial inclusion, this research encourages the Indonesian government, especially Bank Indonesia (BI) and the Financial Services Authority (OJK), to be able to establish cooperation with universities in Indonesia to collaborate in improving financial literacy and inclusion in society. One of the strategic programs that can be established is through cooperation in the community development program conducted by every student in various regions in Indonesia. BI and OJK can contribute by providing educational materials that students will use to socialize and receive assistance during the community service program.

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