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The Role of Digital Payment, Peer-to-Peer Lending, and Digital Financial Literacy in Fostering Gen Z's Micro Small Medium Enterprises Sustainability

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Abstract. *This study investigates the influence of Digital Financial Literacy (DFL), Digital Payment adoption, and Peer-to-Peer (P2P) Lending adoption on the Sustainability of Gen Z Micro, Small, and Medium Enterprises (MSMEs) in Bandung, Indonesia. This study is motivated by the paradox that while the national financial inclusion index exceeded the government target of 75 percent, whereas financial literacy lagged at 38 percent in 2019. This gap highlights a crucial constraint on the effective utilization of emerging FinTech by entrepreneurs. Utilizing a quantitative descriptive approach, data were collected through a questionnaire administered to 100 Gen Z entrepreneurs in Bandung, with analyses conducted using SEM-PLS. Results indicate that Gen Z respondents are on average well-literate in digital finance. Digital financial literacy and payment gateway adoption significantly effect MSME sustainability, whereas P2P lending adoption has no significant effect. Theses findings suggest that strengthening Gen Z's financial skills and payment technologies is crucial for MSME sustainability, while trust and risk issues may limit P2P lending's role. We recommend targeted financial education and supportive fintech policies to empower young entrepreneurs*

Keywords: Digital *financial literacy, payment gateway, P2P Lending, MSMEs, Sustainability, Gen Z*

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Introduction

Micro, Small, and Medium Enterprises (MSMEs) have a significant role in the economic development by contributing to poverty alleviation efforts through job creation. Referring to the World Bank (2023), MSMEs represent 90 percent of business and more than 50 percent of employment around the world. They also contribute 40 percent of Gross Domestic Product in emerging countries. In Indonesia, MSMEs play even more significant role, by contributing 60.5 percent to the nation's Gross Domestic Product and employing nearly 97 percent of the national workforce (Coordinating Minister of Economic Affairs, 2022). MSMEs are fundamental to promoting inclusive and sustainable economic growth, as envisioned in Sustainable Development Goal (SDG) 8, which emphasizes decent work and economic growth through entrepreneurship, innovation, and financial inclusion (United Nations, 2023)

Despite their economic importance, MSMEs continue to face structural barriers, particularly in accessing formal financing. The International Finance Corporation (IFC, 2023) estimated that there are 40% of Formal MSMEs in emerging countries have not meet their financing needs around $5.2 trillion each year, which equal to 1.4 times of current global MSMEs lending. In Indonesia, the number of SME's lending provided by the bank is IDR 16.4 million accounts with total financing of IDR 1.037,6 trillion (Muhammad & Nissa, 2020).

Only 20% - 22% of SMEs in Indonesia have access to formal financial institutions because of the limitation on fulfilling the financial administration (Mulyani & Seonhadji, 2020). Consequently, many MSMEs rely in informal funding sources such as cooperatives, family loans, or peer-to-peer lending platforms (Yuneline & Suryana, 2020). These persistent financing gaps hinder MSMEs ability to grow, innovate, and sustain operations, particularly among youth entrepreneurs.

The significant increase in access to formal institutions is driven by the emerging innovations in financial technology (fintech). Fintech has become an opportunity for SMEs to overcome the capital problem (Yuneline, 2022). Fintech was believed to have a significant effect on the development of financial inclusion and providing access to unbanked population (Ozili, 2018; Salampasis & Mention, 2018). The Otoritas Jasa Keuangan (2022), reported that Indonesia's financial inclusion index had reached 76.19 percent, exceeding the national target of 75 percent. However, the financial Literacy index remained significantly lower at 38.03 percent. This disparity reveals a critical challenge, while digital financial services have expanded access, many users still lack the knowledge and skill to manage and optimize these tools effectively.

Generation Z (born approximately 1997 – 2012) represents Indonesia's first fully digital-native cohort entering entrepreneurship. They are characterized by high adaptability to technology, strong online engagement, and aspirations for social and environmental impact. Despite their digital fluency, many youth entrepreneurs exhibit limited digital financial literacy as crucial competency for sustainable management (Golden & Cordie, 2022). Studies indicate that young entrepreneurs often overestimate their ability to use digital financial platforms and underestimate financial risks, leading to poor capital management and overreliance on unregulated fintech services (Andriansyah et al., 2025; Tandilino et al., 2025).

According to Lontchi, et.al (2023), sustainable MSMEs integrate digital competence, financial literacy, and responsible innovation. Yet, among youth entrepreneurs, sustainable is often undermined by short-term digital enthusiasm, limited experience, and insufficient understanding of risk management (Rahayu et al., 2023). These challenges highlight the need to view digital financial literacy as strategic resource contributing to sustainable entrepreneurial advantage.

The Resource-Based View (RBV) posits that firms achieve sustainable competitive advantage through valuable, rare, inimitable, and non-substitutable resources (Barney, 1991). In the context of MSMEs, digital financial literacy (DFL) constitutes a form of human capital resource as an intangible capability that enhances strategic decision-making, risk assessment, and financial planning (Kumar et al., 2023; Lontchi et al., 2023). Under the RBV framework, youth entrepreneurs with higher DFL represents an internal capability that enhances their business' adaptive capacity in rapidly changing digital economy.

While DFL represents the internal capability of entrepreneurs, the Unified Theory of Acceptance and Use of Technology (UTAUT) provide a framework to understand external adoption behaviors (Venkatesh et al., 2003), specifically on how youth entrepreneurs decide to use FinTech services such as digital payment systems and P2P lending. These technologies can enhance MSMEs sustainability by improving liquidity, reducing transaction costs, and facilitating access to alternative financing sources. However, when trust and regulatory assurance are weak, adoption stagnates, limiting FinTech's potential benefits (Ozili, 2018). Integrating these perspectives align with SDG 8s call for inclusive and sustainable economic growth, by enabling young entrepreneurs to access, manage, and leverage digital financial resources effectively.

Although prior studies have examined FinTech's role in financial inclusion and MSMEs, the literature seldom integrates RBV and UTAUT within sustainability framework. Hence, this research addresses the following questions: 1) How does DFL influence Gen Z MSME sustainability? 2) How do digital payment and P2P lending adoption contribute to sustainable business growth; 3) How do these factors collectively strengthen the long-term viability of Gen Z-led MSMEs.

This study contributes theoretically and practically by providing an integrated understanding of internal capability, technology acceptance, and sustainability in the digital era. It also offers policy insights for enhancing young entrepreneurs' capacity to use FinTech responsibly, thereby promoting Indonesia's progress toward inclusive digital and sustainable economic development

Literature Review

Digital Financial Literacy

Financial Literacy enables financial planning and helps to make financial decisions effectively. Lusardi & Mitchell (2014) argued that people who are financially healthy are people who are more effective in financial planning and debt management. People with financial literacy have better knowledge about how to generate, expend, invest, and save money.

Digital Literacy is an important tool to ensure the organization's performance in a digital business environment (Omiunu, 2017). Furthermore Zhang, et al. (2010) argued that digital literacy enhances an organization's process on decision making by efficient information management, thus digital literacy enables SMEs to collect, evaluate, synthesize, and share the relevant information efficiently.

Digital Financial Literacy is the knowledge and skills to use digital devices to make better financial decisions. (Golden & Cordie, 2022). Referring to Morgan, et.al (2019), digital financial literacy consists of knowledge of digital finance product and service, awareness of digital finance risk, knowledge of digital finance risk mitigation, and knowledge of consumer rights. Kumar et al. (2023) added that digital financial literacy is important for empowering individuals with appropriate digital skill to navigate digital financial domain wisely to create better financial decisions.

Digital Financial Literacy reflects an entrepreneur's knowledge and skills in using digital tools for financial decisions. In Resource-based View terms, Digital Financial Literacy is an intangible resource that can support competitive advantage and firm sustainability. For example, MSMEs with

higher digital financial literacy can better manage cash flows and investments (Lontchi et al., 203; Tandilino et al., 2025).

Financial Technology

Financial Technology is the new technology to improve and automate the delivery and use of financial services (Pandey, et al., 2022). Fintech changes the financial service industry at an unprecedented level (Guidici, 2018). The first wave of financial technology revolution stemmed from changes in global information transformation with the construction of the TransAtlantic submarine cable (Hsueh & Kuo, 2017), but it only reached the high-end society. In this fourth wave of fintech revolution (Fintech 3.0 and Fintech 3.5) marked by the electronic-based business development by fully using network data or an online system. The Fintech revolution has influenced the financial planning, financial well-being, and economic disparities, starting from mobile payment until investment-based application and robo-advising until online banking solution (Anthony et al., 2021; Bartholomae & Fox, 2021)

The rapid adoption of fintech has created a significant challenge due to increasing the use of integrated platforms and the demands of services. Technology Acceptance Model (TAM) is an important model to understand the level of technology adoption.

UTAUT is part of the technology acceptance model and was formulated by Venkatesh et al. (2003). It is used to interpret the level of acceptance of the use of new technology. It evaluates whether the user can accept the new technology and the user's ability to handle the new technology (AlQudah, 2014). Venkatesh et al. (2003) developed the UTAUT model based on eight well-known technology acceptance models. The eight models include the Innovation Diffusion Theory (IDT), Motivation Model (MM), PC Utilization Model (MPCU), Technology Acceptance Model (TAM), Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPM), Combined TAM and TPB (C-TAM-TPB), and

Social Cognitive Theory (SCT)

Referring to Venkatesh, et.al (2003), UTAUT has four key concepts, namely performance expectations, effort expectations, social influence, and facilitation conditions. These concepts are independent variables, while behavioral intention and usage behavior are dependent variables. In addition, gender, age, experience and voluntary use will indirectly influence behavioral intentions and usage behavior through these four concepts.

AlQudah (2014) added that performance expectations mean an individual's level of confidence when using a new technology, it will improve his or her performance. The relationship between performance expectations and behavioral intentions is hypothesized to be moderate based on age and gender. In addition, effort expectation is defined as the level of ease when using a new technology (Venkatesh et al., 2003). The relationship between effort expectations and behavioral intentions is hypothesized to be moderate by experience, age and gender (AlQudah, 2014).

Furthermore, social influence refers to the level of a person's perception of important people from the confidence that he or she should adopt a new technology (Venkatesh et al., 2003). The relationship between social influence and behavioral intention is hypothesized to be moderated by experience, voluntary use and gender (AlQudah, 2014). Moreover, it facilitates the condition of the degree to which one perceives that an organizational and technical infrastructure exists to effectively adopt a new technology (Venkatesh et al., 2003). Relationship between Facilitating conditions and usage behavior are hypothesized to be moderate by age and experience (AlQudah, 2014).

MSMEs Sustainable Growth

The basic economic purpose is to achieve sustainable growth. Sustainable Development Goals were adopted by the United Nations in 2015 in order to alleviate poverty all over the world. SDG-8 and 9 promote sustained,

inclusive and sustainable economic growth, full and productive employment and decent work for all by improving entrepreneurship activity and innovation and growth.

Previous literature describes that SMEs sustainable growth was constructed from performance measurement. Referring to Perwitasari (2022), SMEs performance indicator can be measured by company size, company age, skillful human resource, ownership type, collaboration, and foreign investment. Mjongwana (2018) argued that performance measurement must consider profitability, productivity, and market perception of SMEs entrepreneurs related to size suitability. Referring to Lontchi, et.al (2023), SMEs performance can be measured by operational performance and financial performance.

Hypothesis Development and Conceptual Framework

Digital Financial Literacy and MSMEs sustainable growth

Digital literacy is important in organization for planning, interaction, customer service, and business administration. Iansiti & Lakhani (2014) highlighted the positive relationship between digital literacy and SMEs performance. Simpson & Docherty (2004) identified that digital literacy was a key driver to SMEs sustainable growth.

In terms of financial literacy, Adomako & Danso (2014) revealed that financial literacy increases company performance, especially when they have flexible resources and easier access to funding. Dahmen & Rodríguez (2014) found a relationship between financial literacy and business performance. Chepngetich (2016) argued that financial literacy is related to business performance where financial data assess the success of previous decisions and determine the current business position, thus increasing business performance. However, there is no paper that explicitly conducted the relationship between digital financial literacy and SMEs sustainable growth.

Based on the description above, it is believed that digital financial literacy that consists of digital skills, financial literacy, awareness of risk and consumer's right can lead to better decision making for SMEs sustainable growth. Hence, the following is the hypothesis:

H1: Digital Financial Literacy has positive effect on SMEs sustainable growth

Financial Technology and SMEs Sustainable Growth

Financial technology is used to describe many services that are provided by different financial technologies for various industries related to product quality improvement and financial services supported by information technology (Gabor & Brooks, 2020).

Referring to Pizzi, et.al. (2021), fintech as a developing sector driven by Revolution Industry 4.0 has potentials in helping SMEs to shift the industry to a sustainable business model. Fintech lending provides funding access for SMEs in the underserved criteria, so they have the possibility to develop. Fintech services also provide an option for the SMEs sustainable financing through crowdfunding and microfinancing (Moro-Visconti, et.al, 2020). Mild, et.al (2015) argued that SMEs can borrow or lend funds to develop social and sustainable initiatives.

Furthermore, Liu, et.al (2022) argued that the adoption of fintech has accelerated the automation that can lead to decrease the energy consumption. Deng, et.al (2019) argued that fintech has great potential in promoting environmental, social, and ecological benefits by encouraging fund usage for energy efficiency. Based on the description above, the hypothesis is:

H2: Intention to Use Peer-to-peer lending has a positive effect on SMEs sustainable growth

H3: Intention to Use Digital payment has a positive effect on SMEs sustainable growth

Figure 1 illustrates the conceptual framework. Digital Financial Literacy, Digital Payment Gateway, and P2P Lending are hypothesized to positively influence MSME Sustainability.

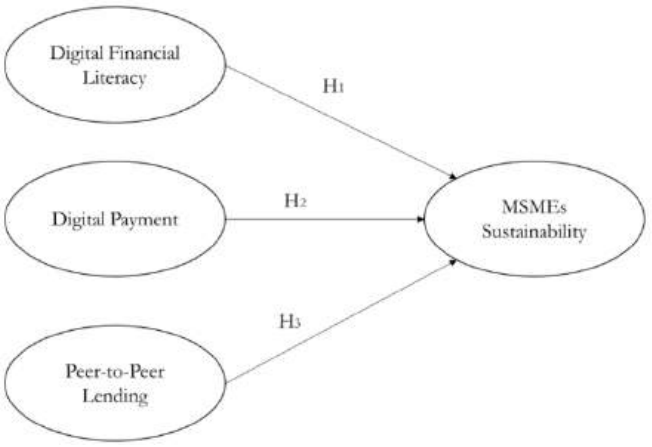

Figure 1.
Conceptual Framework of the Research. Digital Financial Literacy, Digital Payment Gateway, and P2P Lending are posited to influence MSME Sustainability

Research Methodology

The research design is categorized as descriptive quantitative research which explains the empirical phenomenon with statistical data, characteristics, and relationship between variables. The population in this study consists of MSMEs in Bandung, West Java, Indonesia. The study population comprises 523,584 MSMEs in the city of Bandung, as reported by Open Data Jabar in 2023. This study employs a simple random sampling technique on the population. Additionally, the sampling formula employed in this study is the Taro Yamane formula, delineated as follows:

$$n = \frac{N}{1+N\,(e)^2} \quad \text{.....} \quad (1)$$

The calculated sample size, accounting for a 10 percent margin of error, is 99.98, which is rounded up to 100 respondents. A 10 percent margin was chosen to balance feasibility and precision given resource constraints. While a smaller error would increase sample requirements, 100 respondents still meets minimum guidelines for PLS-SEM (Hair et al., 2017) and acceptable for the exploratory study focusing on a specific and niche demographic (Gen Z) within a vast urban population (Adam, 2020). This research utilized primary data sources, focusing on Gen Z entrepreneurs in Bandung, collected via a Likert scale questionnaire. The indicators for all reflective constructs, Digital Financial Literacy, Intention to Use Digital Payment, Intention to Use Peer-to-Peer Lending, and MSMEs Sustainability, were adapted from established theoretical scales as mention in Table 1. Prior to the main survey, the adapted instrument was subjected to an initial pilot test to confirm its relevance and clarity within the local context, ensuring content validity.

For ethical considerations, participation was voluntary and anonymous. Respondents gave informed consent and data were kept confidential, in line with institutional guidelines. This study used the SEM-Partial Least Squares (PLS) analytical method utilizing smartPLS software.

Digital financial literacy is constructed of three items (Morgan, et.al., 2019), such as Knowledge of digital finance product and service, behavior in using digital finance and attitude in using digital finance. The fintech variable is construct from UTAUT model which consist of Performance Expectancy, Effort Expectancy, Facilitating Condition, Social Influence, Security, Trust and Behavior Intention (Venkatesh, et.al., 2003; Qasim & Abu-Shanab, 2016). In terms of SMEs sustainable growth consists of three items such as financial capabilities, strategic capabilities, and organizational capabilities. In this study, the operational definition can be specified as follows:

Table 1.
Operational Definition and Variable Indicators

Variable	Definition	Indicator	Adapted From
Digital Financial Literacy (LK = *Literasi Keuangan*)	The knowledge and skills to use digital devices to make better financial decisions.	1. Knowledge of digital finance product and service 2. Behavior in using digital finance 3. Attitude in using digital finance	Morgan, et.al (2019); Kass-Hana, et.al (2021); Pandey, et.al., (2022); Golden & Cordie (2022); Kumar, et.al (2023)
Intention to Use Digital Payment (PG = *Payment Gateway*)	Financial service that facilitates the authorization of manual payments for digital transactions using credit cards, debit cards, bank transfers, or electronic money.	The Unified Theory of Acceptance Use of Technology (UTAUT) Model 1. Performance Expectancy 2. Effort Expectancy 3. Facilitating Condition 4. Social Influence 5. Security 6. Trust 7. Behavior Intention	Pandey, et.al., (2022); Riley (2018); Venkatesh, et.al (2003); Qasim & Abu-Shanab (2016); Abdullah et.al (2020
Intention to Use Peer-to-Peer Lending (PTP = Peer-to-Peer Lending)	Financial service reliant on information technology, particularly via internet platforms. P2P lending is a genuine financial mechanism that facilitates direct transactions between lenders and borrowers, providing accessible funding in contrast to the challenges associated with traditional bank financing.	The Unified Theory of Acceptance Use of Technology (UTAUT) Model 1. Performance Expectancy 2. Effort Expectancy 3. Facilitating Condition 4. Social Influence 5. Security 6. Trust 7. Behavior Intention	Pandey, et.al., (2022); Riley (2018); Venkatesh, et.al (2003); Qasim & Abu-Shanab (2016); Abdullah et.al (2020

Table 1. Continued

Variable	Definition	Indicator	Adapted From
MSMEs Sustainability (KU=*Keberlanjutan Usaha*)	The consistent state of its operations, encompassing continued functionality, growth, development, methods for maintaining continuity, and expansion.	1. Financial capabilities 2. Strategic Capabilities 3. Organizational Capabilities	Attanasio, O (2011) Lontchi, et.al (2023)

Results and Discussion

Respondents

The examination of 100 samples indicates that 61% respondents are female, whereas 39% respondents are male. The age distribution of these samples is 97% aged 17-26 years, 2% aged 27-35 years, and 1% aged over 35 years. Among the respondents, 82% own a bachelor's degree or are currently enrolled in one, while 18 have attained a high school education. The business length percentages for these MSMEs are as follows: 1-3 years at 50%, 3-10 years at 34%, over 10 years at 4%, and those that are no longer operational at 12%. Generation Z, characterized by their technological proficiency, predominantly favors utilizing personal capital for financing, accounting for 84%, while a combination of bank and personal capital constitutes 16%. The monthly income of these MSMEs is classified as follows: less than 3 million at 44%, 3-10 million at 44%, 10-20 million at 7%, and over 20 million at 5%.

Table 2.
Respondents Demographic

Variable	Percentage (%)	Variable	Percentage (%)
Gender		**Business Length**	
Men	39	1 – 3 years	50
Women	61	3 – 10 years	34
Age		More than 10years	4
17 – 26 years-old	97	Out of Business	12
27 – 35 years-old	2	**Source of Fund**	
More than 35 yearsold	1	Owner's Equity	84
Education		Bank	0
High School	18	Others	16
Bachelor Degree	82	**Income per month**	
Business Type		Less than 3 million	44
Food & Beverage	50	3 – 10 million	44
Fashion	25	10 – 20 million	7
Agribusiness	1	More than 20 million	5
Service	19		
Handcraft	5		

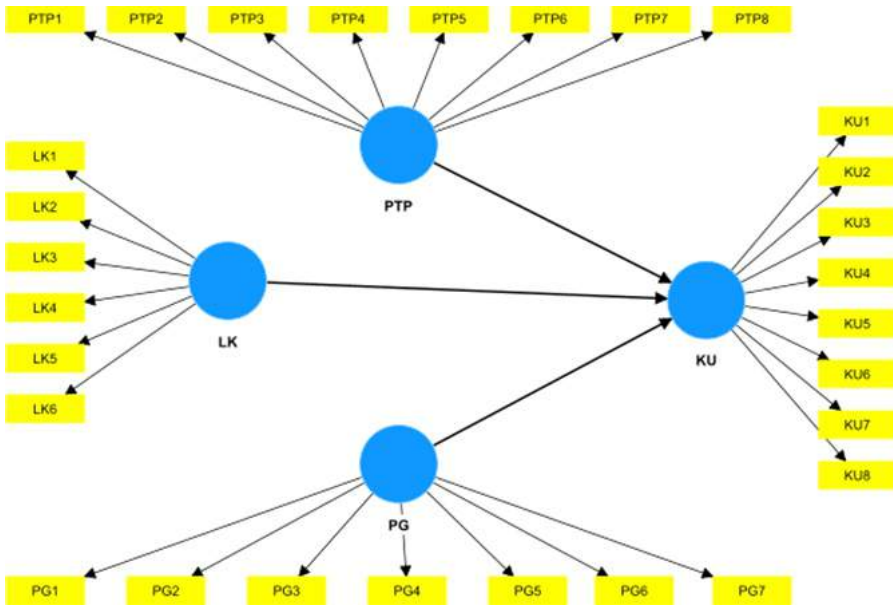

Figure 2.
SEM-PLS Model. Constructs and abbreviations are defined as LK = Digital Financial Literacy; PG=Intention to use Digital Payment Gateway; PTP = Intention to use Peer-to-Peer Lending; KU = MSMEs Sustainability)

Planning Model Measurement
The construct in this research is reflective, evident in the formulation of Financial Literacy, Peer-to-Peer Lending, Digital Payment, and MSME Sustainability; thus, the reflection must be directly aligned with the indicators. Figure 2 presents the SEM-PLS model with latent constructs and loadings.

Outer Model Testing
Outer model testing is conducted to assess the validity and reliability of constructs, which can be observed through convergent validity and discriminant validity.

Convergent Validity and Discriminant Validity
Convergent Validity is employed to assess the validity of each indicator in relation to its latent variables within SmartPLS. The validity findings are observable in the outer loading table. Hair et al. (2022) indicated that for the initial assessment, a loading factor below 0.3 meets the lowest threshold, a loading factor around 0.4 is deemed superior, and a loading factor over 0.5 is regarded as noteworthy. The limitation in this study is a loading factor of 0.5.

The loading factor indicates that each outer loading indicator exceeds 0.5, so validating each indication as it fulfills the criteria for convergent validity, allowing for subsequent analysis.

The discriminant validity test is considered valid if the correlation or cross-loading value of the variable is the highest across all variables. This indicates that each indicator employed in this investigation possesses strong discriminant validity.

Average Variance Extracted (AVE)
An effective AVE test measurement requires each indicator to exceed a value of 0.5, hence confirming its validity.

The table 3 below indicates that the AVE value exceeds 0.5, so confirming that each variable possesses a robust discriminant validity.

Table 3.
Measurement Model Assessment Result

Constructs	Items	Factor Loadings	CA	CR	AVE
MSMEs Sustainability	KU1	0.826	0.935	0.937	0.689
	KU2	0.821			
	KU3	0.871			
	KU4	0.820			
	KU5	0.798			
	KU6	0.769			
	KU7	0.876			
	KU8	0.854			
Digital Financial Literacy	LK1	0.806	0.846	0.867	0.562
	LK2	0.791			
	LK3	0.741			
	LK4	0.750			
	LK5	0.726			
	LK6	0.679			
Digital Payment	PG1	0.789	0.897	0.912	0.618
	PG2	0.710			
	PG3	0.717			
	PG4	0.862			
	PG5	0.703			
	PG6	0.820			
	PG7	0.882			
Peer-to-peer Lending	PTP1	0.840	0.876	0.909	0.545
	PTP2	0.524			
	PTP3	0.807			
	PTP4	0.845			
	PTP5	0.558			
	PTP6	0.849			
	PTP7	0.694			
	PTP8	0.703			

Outer Model Reliability Test

If Cronbach's alpha in data analysis exceeds 0.06 for composite reliability values, the variable is deemed reliable. Moreover, the subsequent outcomes are as follows:

1. The table 3 above indicates that the Cronbach's Alpha value for all variables exceeds 0.6. The results indicate that each variable fulfil the criteria, thereby confirming a high level of reliability for each variable.
2. The table 3 above indicates that the composite dependability value for each variable exceeds 0.7. This result demonstrates that each variable has satisfied Composite Reliability, indicating that all variables possess a high level of reliability.

Inner Model (Structural) Test

The R-Square test is a way to assess how much the endogenous construct can be explained by the exogenous construct. The R-Square value is an assessment of the magnitude of the simultaneous influence between variables. The R-Square value is expected to be between 0 and 1 with values of 0.75, 0.50, 0.25 indicating that

the model is strong, moderate, and weak. If the value is greater, then this indicates that the model predictor is getting better at explaining variance. Based on the table 4. above, it can be concluded that the results of the R-square and adjusted R-square above 0.75. An R^2 of 0.907 for MSMEs sustainability indicates strong explanatory power, likely due to the combined effects of the three predictors. To address potential overfitting, we note that these constructs are theoretically expected to co-drive MSMEs performance (Tandilino et al., 2025) and aligns with RBV predictions (Rahayu & Musdholifah, 2017; Ruli & Rohmawati, 2021).

It is concluded that the influence of all exogenous constructs on the endogenous construct (MSMEs Sustainability) is strong.

The R-Square results show that digital financial literacy, digital payment, and peer-to-peer lending are able to explain the MSMEs Sustainability variable by 90.7% simultaneously and the remaining 9.3% is explained by other constructs outside this study.

Table 4.
R-Square Test

	R-Square	Adjusted R-Square
KU	0.907	0.904

Hypothesis Testing
The following figure shows the result of hypothesis testing:

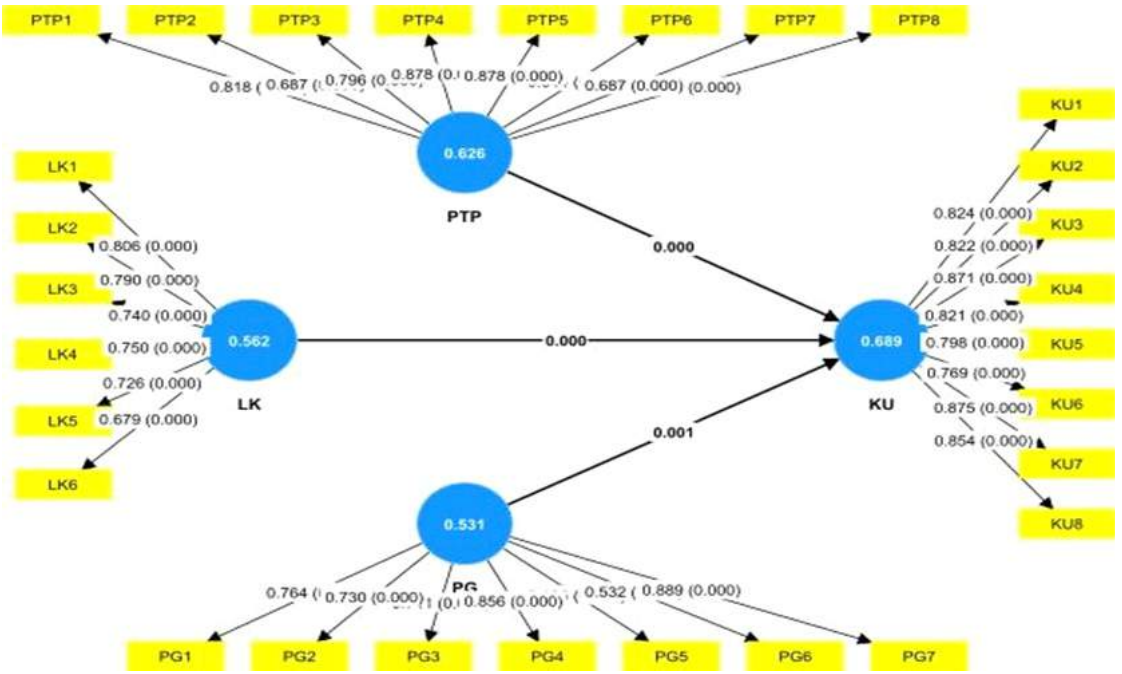

Figure 3.
Hypothesis Testing with Bootstrapping

Path Coefficients Test is a test of linear relationships between variables using route coefficients in this study.

The bootstrapping route coefficient test produces the following results:

Table 5.
Path Coefficient Test

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
LK -> KU	0.267	0.266	0.076	3.504	0.000
PG -> KU	0.575	0.572	0.110	5.237	0.000
PTP -> KU	0.144	0.149	0.070	2.060	0.039

Based on the path coefficient test with T table value of df of 2.776 and a P Value less than 0.05, it shows that all variables have a T statistic value above greater than the T table and a P Value below 0.05. Then an equation is obtained KU = 0.267 LK + 0.575 PG + 0.144 PTP. From the following equation, it can be concluded that there is a positive reciprocal relationship between the variables of Digital Financial Literacy, Digital Payment, and Peer to Peer (P2P) Lending on the Sustainability of MSMEs.

Discussions

The Effect of Digital Financial Literacy on MSMEs Sustainability

The hypothesis test confirmed that Digital Financial Literacy has a positive and significant effect on MSMEs Sustainability, with a P Value of 0.000 and T-Statistics of 3.504. The average Digital Financial Literacy level among the youth entrepreneurs was determined to be in the well literate category, with a rate of 87.5 percent.

This positive influence supports the underlying RBV argument that superior financial knowledge acts as a valuable resource (Barney, 1991). It indicates that higher level of digital financial literacy enhances young entrepreneurs' capacity for financial planning, debt management, and effective risk mitigation (Lusardi & Mitchell, 2014).

This improvement in business and financial decision-making translates directly into enhanced sustainability, aligning with literature that links financial knowledge to increased company performance, especially when entrepreneurs can leverage resources effectively (Rahayu & Musdholifah, 2017; Ruli & Rohmawati, 2021). The implementation of digital financial literacy initiatives, therefore, secures the essential human capital needed to navigate the complexities of the digital financial ecosystem (Tandilino et al., 2025)

From the result above, digital financial literacy is essential for the viability of MSMEs, however previous research show its influence is frequently indirect (Widagdo & Sa'Diyah, 2023). Although financial literacy may not directly impact corporate sustainability, it shapes financial behavior and the utilization of financial technologies, which subsequently effect sustainability (Widagdo & Sa'Diyah, 2023). This indicates that initiatives to enhance MSME sustainability should not only concentrate on improving financial literacy, but also fostering good financial behaviour and the appropriate use of fintech application (Tandilino et al., 2025).

Contrasting with youth entrepreneurs, older MSMEs owners (particularly those from Gen X and Baby Boomers) often possess higher levels of experiential financial literacy due to years of business operations, traditional bookkeeping practices, and familiarity with formal banking systems (Uddin et al., 2023). While they may be slower in digital fluency, their risk assessment, debt management, and financial discipline are typically more established than those of Gen Z entrepreneurs

The Effect of Digital Payment on MSMEs Sustainability

The finding confirms that the intention to use digital payment exerts a strong positive effect on MSME Sustainability, resulting a P Value of 0.000 and a T-Statistic of 5.237. The interpretation of this study is that the increasing number of digital payment users around 88.2 percent of MSME owners in Bandung City will be followed by an increase in the sustainability of MSMEs as one of the payment methods. This can happen because of the characteristics of respondents who are in the productive age of 17-26 years where that age follows the development of the technological era where technology is present to facilitate all productivity.

The strong relationship is explained by three critical mechanisms inherent in digital payment adoption such as 1) operational efficiency and productivity; 2) market access and consumer convenience; and 3) trust and acceptance. Firstly, digital payments enhance business productivity by reducing the reliance on cash handling, minimizing manual errors, and decreasing the associated costs of cash management. This directly translates into optimized operational performance (Purnamasari, 2020; Lubis, 2021). Secondly, adoption of digital payments satisfies costumer demand for convenience and facilitate access to broader digital marketplaces and integrated platforms, which boosts household consumption and trade (Wardani & Darmawan, 2020). Thirdly, the adoption is reinforced by a high degree of perceived security, as 74.2 percent of respondents feel safe using digital payments. This indicates that the UTAUT constructs of Trust is successfully met for digital payment platforms (Singh, 2020; Nur & Panggabean, 2021)

However, previous study on digital payment for MSMEs showed inconclusive findings. Some research implied that mobile payment users in Norway exhibit reduced financial vulnerability (Seldal & Nyhus, 2022), but others indicate that digital payment systems lack a statistically significant correlation with the financial performance of SMEs in Kenya (Musa & Njeru, 2023). This discrepancy underscores the necessity for more extensive study across many nations and circumstances to comprehend the actual effect of digital payments on the viability of MSMEs.

The Effect of Peer-to-peer Lending on MSMEs Sustainability

By contract P2P lending showed no direct benefit for MSMEs sustainability with a P Value of 0.039 and a T-Statistics of 2,060. In addition, the results of F-Square test on influence of peer-to-peer Lending on the MSMEs sustainability was only 4.1 percent, demonstrating minimal practical relevance. Furthermore, the descriptive survey result showed that 69.4 percent of respondents do not utilize P2P lending and 70.8 percent have a lack of trust in P2P lending compared to traditional banks.

P2P lending does not substantially influence MSMEs sustainability for youth entrepreneurs may be due to trust and perceived risk issues. Despite expanding financial inclusion, P2P platforms often lack regulation and security (Ozili, 2018). Gen Z respondents reported knowledge of P2P but they do not adopt the platforms. They overwhelmingly rely on personal capital rather than accepting the high interest rates and associated risks of P2P platforms. The resistance is rooted in a fundamental lack of trust, stemming from perceived regulatory gaps, high penalties for late payments, and concerns regarding personal data security (Liu et al., 2019).

This is in line with research by Setyaningsih, et al. (2020) which found that peer-to-peer lending is not the main solution for MSMEs. Because MSME owners are afraid of future risks where they are unable to pay with high interest and the risk of personal data security. Musdalifa, et al. (2021) also stated that the use of P2P lending does not have a significant effect on financial performance because of the existence of mediating business capital.

However, P2P lending has emerged as a viable alternative for MSMEs to overcome obstacles to financial inclusion (Hamundu et al., 2023). Notably, although P2P lending presents potential advantages, conventional microfinance banks remain crucial in assisting MSMEs (Gora et al., 2023). This indicates that both P2P lending and conventional microfinance enhance the financial ecosystem that supports MSMEs. Nonetheless, the implementation of such technology necessitates meticulous evaluation of elements such as financial literacy and digital preparedness. According to Susan (2020), the financial literacy of MSME owners positively influences access to capital and growth. Consequently, measures to advance P2P lending must be paired with efforts to improve financial literacy and digital competencies among MSME stakeholders to guarantee sustainable growth and development.

Conclusion

The financial literacy level of Gen Z's MSMEs actors is categorized as well-literate, with a rate of 87.5%. This is evidenced by their financial knowledge, financial behavior, and financial attitudes. The digital payment substantially affects the viability of Gen Z MSMEs. The findings revealed that 88.2% of consumers prefer the digital payment as their predominant payment method over cash and debit options. Consequently, it is determined that the digital payment influences the sustainability of Gen Z MSMEs.

The implementation of peer-to-peer (P2P) lending on the sustainability of MSMEs indicates that P2P lending influences the sustainability of MSMEs. Nevertheless, according to the findings that 69.4% do not utilize P2P Lending for business or other purposes, with 70.8% citing a lack of trust in P2P Lending compared to traditional banks. Consequently, it was determined that P2P Lending does not influence the sustainability of Gen Z MSMEs. Financial literacy, digital payment, and Peer to Peer (P2P) Lending exhibit a determination coefficient of 90.7%, with the residual 9.3% ascribed to Gen Z's distrust in the data security of P2P Lending fintech and payment gateways. Research findings somewhat support the notion that P2P lending does not influence the sustainability of MSMEs. Consequently, it is determined that Financial Literacy and digital payment affect the viability of MSMEs. Simultaneously, Fintech P2P Lending does not influence the sustainability of MSMEs.

Gen Z MSMEs occupy a unique position, digitally motivated but financially vulnerable that lead to requirement for a new integrated framework that merges technological acceptance with capability development to achieve sustainability. The implication for this study is educational efforts transition from basic financial knowledge provision to targeted training that addresses financial attitude and behavior. This includes encouraging long-term financial planning, effective risk management specific to high-interest P2P lending and fostering prudent financial habits such as increasing savings and reliance on owner's equity. These initiatives increase the youth entrepreneurs' capacity building that can improve their decision-making and risk management competencies.

Governments can utilize digital finance to formalize the informal sector by integrating financial services with taxation systems, hence enhancing revenue and promoting financial inclusion. Thus, the governments must create frameworks to mitigate cybersecurity threats, safeguard data privacy, and protect consumers to maintain trust in digital financial systems. In terms of infrastructure investments, the governments must allocate resources to enhance digital infrastructure, including internet access and mobile networks, especially in rural and underserved areas to overcome the digital divide.

Limitation and Future Scope

Digital financial literacy, digital payment, and P2P lending are essential for the viability of MSMEs. Nonetheless, this research possesses

certain limitations and implications that require attention. The study focused on Gen Z that has no difficulties on the use of technology. Further studies should concentrate on MSMEs generally to examine whether digital divide become barriers to achieve sustainability of MSMEs. The investigation into digital payment resulted that it helps the operational efficiency for MSMEs. However, the result different from the previous research in other countries. This discrepancy underscores the necessity for more extensive study across many countries and circumstances to comprehend the actual effect of digital payments on MSME sustainability.

P2P lending has demonstrated potential in enhancing financial inclusion for MSMEs. However, this research resulted differently. Nonetheless, the long-term effects of P2P lending on MSME sustainability and its potential risks require additional scrutiny. The further study can examine the digital finance through other theory, such as costumer behavior and with other variable such as social influence and pricing value. Further study ought to rectify these shortcomings by doing longitudinal studies to evaluate the long-term effects of digital payment, P2P lending, and digital financial literacy on the sustainability of MSMEs. Furthermore, researchers ought to investigate the possible synergy among these components and their integration into holistic financial management methods for MSMEs. Ultimately, research should examine the influence of government policies and regulatory laws on the uptake of digital financial services and the enhancement of financial literacy among MSME owners to gain sustainability.

Declaration

Author Contribution
All authors contributed equally as the main contributors of this paper. All authors read and approved the final paper.

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Competing Interest
The authors declare that they have no conflicts of interest to report regarding the present study.

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