



Digital Financial Literacy, Financial Technology Adoption, And MSME Financial Management On Financial Well-Being With Financial Resilience As An Intervening Variable In Generation Z MSME Actors

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ABSTRACT

This study aims to analyze the influence of Digital Financial Literacy, Financial Technology Adoption, and MSME Financial Management on Financial Well-Being with Financial Resilience as an intervening variable in Generation Z MSME actors in Medan City. This study uses a quantitative approach with the Structural Equation Modeling-Partial Least Squares (PLS-SEM) method. The research population is Generation Z MSME actors in Medan City with an unknown population. The sampling technique used purposive sampling with a minimum of 200 respondents who met the research criteria. Data was collected through an online questionnaire using a Likert scale of 1–5. The results of the study show that digital financial literacy, financial technology adoption, and MSME financial management have a positive and significant effect on financial resilience. Furthermore, financial resilience and digital financial literacy have a positive and significant effect on financial well-being, while financial technology adoption and financial management of MSMEs do not have a significant direct effect on financial well-being. In addition, financial resilience has been shown to significantly mediate the influence of three independent variables on financial well-being. Improving the financial welfare of Generation Z MSME actors is not only determined by the ability to utilize financial technology, the level of digital financial literacy, and business financial management, but also by the ability to build financial resilience in the face of various economic risks and uncertainties.

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) have a strategic role in the structure of the Indonesian economy. Based on data from the Ministry of Cooperatives and SMEs (2024), the number of MSMEs in Indonesia is recorded at more than 65 million business units, contributing around 61% to the national Gross Domestic Product (GDP), and absorbing up to 97% of the national workforce. Especially in developing countries, MSMEs make a significant contribution to improving household welfare, job creation, and reducing poverty (Fomum & Opperman, 2023). Despite contributing greatly to the economy, MSME actors still face various challenges in managing business finances that have an impact on financial welfare, amid the rapid digitalization of the financial sector that is changing the way business actors access, use, and manage digital financial services.

Financial well-being can be understood as a condition where a person feels able to meet their current financial needs, has control over their finances, and feels secure in facing their financial future (Kasmir, 2019). Financial Well-Being has emerged as an important instrument in building resilience and sustainability for small business owners. Financial well-being plays an important role in ensuring the long-term survival and growth of businesses, given that business actors are highly dependent on their personal financial capacity in the midst of a rapidly changing business environment (Hooda, Singla, & Gupta, 2025). This condition is also increasingly recognized as an important indicator of the sustainability of small businesses, as small business owners are generally highly dependent on their personal financial capacity amid the ever-changing business landscape (Hooda et al., 2025). Research shows that financial well-being is influenced by various factors such as digital financial literacy, self-control, financial behavior, and the financial pressures they experience on a daily (Amelinda, Oktavini, Magdalena, & Anwar, 2025; Putri, Putranti, & Putra, 2026; Roseline, Djohan, Loly, & Chandra, 2025).

Ongoing developments and expected changes in the financial industry further emphasize the need to redefine the concept of financial literacy in a digital context (Kass-Hanna, Lyons, & Liu, 2022). Financial products and services are now increasingly digitized and accessible through various online platforms and applications (Choung, Pak, & Chatterjee, 2025). This condition requires business actors to have digital financial *literacy*, namely knowledge, skills, confidence, and competence in using digital-based financial services safely and being able to make the right financial decisions. Cross-country research shows that digital financial literacy contributes significantly to individual financial well-being, especially through increased financial knowledge and the ability to protect oneself from the risk of digital fraud (Choung, Chatterjee, & Pak, 2023)), and its effects have consistently been found on general life satisfaction (Choung et al., 2025). Strong financial literacy has also been shown to encourage households' ability to build financial resilience (Klapper & Lusardi, 2019) as well as strengthen confidence in participating in riskier investment instruments (Abreu, Mendes, & Santos, 2025).

Digital innovation in finance has driven the emergence of various financial instruments that are increasingly complex and innovative, such as digital wallets (digital wallets), cryptocurrencies (cryptocurrency), *peer-to-peer* lending (P2P lending), and artificial intelligence-based investment advisors (*robo-advisors*) (Choung et al., 2023; Isaia & Oggero, 2022; Zavolokina, Dolata, & Schwabe, 2017). Understanding digital instruments makes it easier for MSME actors to utilize application-based payment, financing, and financial recording services (Kurniasari & Lestari, 2024) while acting as a full mediator between the business experience and fintech adoption behavior of MSME managers (Zaimovic, Omanovic, Dedovic, & Zaimovic, 2025). Several previous studies have confirmed that fintech has a positive impact on the financial performance, revenue, profitability, and sales of MSMEs, while helping to overcome financing constraints (Gunibala, 2025). The adoption of fintech in Generation Z MSMEs is also influenced by user innovation factors and institutional support (Alvin & Arifin, 2023)), increasing financial literacy

skills will provide greater benefits when accompanied by the use of financial technology and the availability of access to financing sources (Kurniasari, Hamid, & Lestari, 2025)

Literacy and technology adoption alone are not enough to guarantee financial well-being if they are not accompanied by good financial management. Financial management is defined as all activities related to allocating funds to various forms of investment and fundraising efforts for efficient spending and financing (Sinambela, 2019). Financial management includes the activities of planning, recording, allocating, and controlling business funds efficiently so that businesses can grow sustainably (Indonesian Institute of Accountants, 2018). The limited resources owned by MSMEs often cause them to be unable to hire professionals to manage their business finances. Even when MSMEs use professional services in financial management, strategic decisions such as loan application, investment, and risk management remain in the hands of business owners (Moschella et al., 2023). Qualitative studies show that the effectiveness of financial planning, bookkeeping, reporting, and control in MSMEs is highly dependent on the level of financial literacy of their owners, and strong financial management in turn strengthens resilience and strategic decision-making of businesses. Unfortunately, many MSME actors in Indonesia still manage their business finances simply and have not separated personal finances from business finances, so they are vulnerable to financial pressure when there is an economic shock (KemenKopUKM, 2021).

Financial resilience has a very important role because it reflects the ability of households to manage various unexpected economic challenges (Clark & Mitchell, 2022; Sakyi-Nyarko, Ahmad, & Green, 2022). Financial resilience is defined as the ability of individuals or business actors to anticipate, survive, and recover from financial shocks by utilizing internal and external resources (Klapper & Lusardi, 2019). Good financial literacy has been shown to strengthen financial resilience through *wealth effect* and risk mitigation (Liu, Fan, Li, & Yue, 2024), while financial resilience in turn is one of the key determinants of achieving long-term financial well-being, both for individuals and for small businesses whose resilience is mediated by financial literacy and access to finance (Kumar & Sandhu, 2024). Business resilience has also been proven to mediate the influence of risk management and digital capabilities on the sustainability of small businesses. These financial capabilities then strengthen financial resilience in the face of various unexpected economic shocks, which ultimately improve perceived financial well-being (Kumar & Sandhu, 2024).

Although previous studies have examined the relationship between these variables separately in both households (Tan, Lu, & Kosim, 2024), young individuals (Xie, Ye, Huang, & Ye, 2021), and small business actors in various countries, studies that specifically examined these three factors simultaneously on *financial well-being* with *financial resilience* as an *intervening variable*, in the segment of Generation Z MSME actors in Indonesia, is still limited. In fact, this generation has different financial management characteristics and technology adoption patterns than the previous generation (Setiawan, Nugraha, Irawan, Nathan, & Zoltan, 2021), so it requires a more specific study.

LITERATURE REVIEW

The Theory of Financial Capability is a theory that explains that financial well-being is not only determined by the level of financial literacy, but also by the ability of individuals to utilize the opportunities, resources, and financial services available to make financial decisions effectively (Sherraden, 2013). Financial capability is formed by a combination of individual ability (ability to act), which includes financial knowledge, skills, and behavior, as well as opportunity to act, which is access to products, services, and financial systems that support financial decision-making. Thus, a person who has high financial literacy does not necessarily achieve financial prosperity if he does not have access to and the ability to utilize financial services optimally.

The Technology Acceptance Model (TAM) was developed by Davis (1989) to describe individual behavior in accepting and using a technology. TAM states that a person's intention to use technology is influenced by two main factors, namely perceived usefulness and perceived ease of use. The greater the benefits and convenience that a person feels towards a technology, the higher the tendency to adopt the technology. The technology in question is various financial technology services such as mobile banking, digital wallets, QRIS, internet banking, digital investment applications, and peer-to-peer lending which are widely used by Generation Z MSME actors. Digital financial literacy is a development of the concept of financial literacy that is adapted to the development of digital technology in the financial sector. Based on the Theory of Financial Capability put forward by (Sherraden, 2013), a person's ability to achieve financial well-being is not only determined by financial knowledge, but also by the ability to utilize various financial services available. The Alliance for Financial Inclusion (2021) defines digital financial literacy as the knowledge, skills, confidence, and competence to use digital financial products and services safely so that they are able to make the right financial decisions. Lyons and Kass-Hanna (2021) explain that digital financial literacy includes understanding finance, the ability to use digital technology, knowledge of digital financial services, and the ability to protect oneself from the risk of digital fraud. As services such as mobile banking, digital wallets, digital investments, and electronic payments develop, digital financial literacy is an important competency for MSME actors. (Choung et al., 2023) proves that digital financial literacy has a positive effect on financial well-being, especially through the ability to understand digital financial services and protect oneself from cybercrime. Therefore, the higher the digital financial literacy possessed by Generation Z MSME actors, the better their ability to utilize financial technology to support business management and improve financial welfare.

Financial Technology Adoption is the level of acceptance and use of digital technology-based financial services to support individual and business financial activities. This variable is based on the Technology Acceptance Model (TAM) developed by Davis (1989), which explains that a person will use technology if the technology is considered useful (perceived usefulness) and easy to use (perceived ease of use). Technological developments have given birth to various fintech services such as digital wallets, QRIS, mobile banking, peer-to-peer lending, crowdfunding, and digital investment applications that facilitate transactions and financial management (Isaiah & Oggero, 2022; Zavolokina, Dolata, & Schwabe, 2016). For MSME actors, the adoption of fintech not only increases transaction efficiency, but also expands access to financing, accelerates financial recording, and increases business competitiveness. (Gunibala, 2025) found that fintech adoption is able to increase the profitability, sales, and sustainability of MSMEs. In addition, (Kurniasari et al., 2025) stated that the benefits of fintech will be more optimal if supported by a good level of financial literacy.

Financial management is the process of planning, organizing, implementing, and controlling financial resources effectively and efficiently to achieve organizational goals. In the perspective of the Theory of Financial Capability, the ability to manage finances is an important part of financial capacity that determines a person's financial well-being (Sherraden, 2013). Sinambela (2019) defines financial management as all activities related to fund allocation, investment management, financing, and financial control. In MSMEs, financial management includes budget preparation, transaction recording, cash flow management, financial statement preparation, and separation of business and personal finance (Indonesian Institute of Accountants, 2018). Good financial management helps business actors make more appropriate business decisions, control operational costs, and prepare reserve funds when facing business risks. Moschella et al. (2023) explained that although some MSMEs have used professional services in financial recording, strategic decisions remain with business owners so that financial management skills are a factor that greatly determines the success of the business. Therefore, the better the financial management implemented by Generation Z MSME actors, the greater the opportunity for creating sustainable businesses and better financial welfare.

Financial resilience is the ability of individuals or business actors to anticipate, survive, adapt, and recover from various economic shocks and unexpected financial conditions. In the Theory of Financial Capability, financial resilience is seen as the result of a person's ability to manage financial resources effectively so that they are able to face financial risks (Sherraden, 2013). Klapper and Lusardi (2020) explained that financial resilience shows a person's ability to meet financial needs when facing emergency conditions without experiencing a significant decline in welfare. (Clark & Mitchell, 2022) adds that financial resilience reflects the ability to manage financial stress through savings ownership, liquid assets, insurance protection, and access to formal financial services. Research (Liu et al., 2024) proves that financial literacy increases financial resilience through increased income, saving behavior, risk management, and asset ownership. Meanwhile, (Kumar & Sandhu, 2024) found that financial resilience is a variable that mediates the influence of digital financial literacy on financial well-being.

Financial well-being is a condition when individuals are able to meet their current financial needs, have a sense of security in their financial condition in the future, and have freedom in making financial decisions to achieve their life goals. Based on the Theory of Financial Capability, financial well-being is the ultimate goal achieved through the ability of individuals to make optimal use of knowledge, skills, and access to financial services (Sherraden, 2013). The Consumer Financial Protection Bureau (2017) defines financial well-being as a condition when a person has control over their daily finances, is able to absorb financial shocks, is on track to achieve financial goals, and has the freedom to make choices that improve the quality of life. (Hooda et al., 2025) explains that financial well-being is an important factor for the sustainability of small businesses because business owners are highly dependent on their personal financial capacity in running a business.

METHODS

This study uses a type of quantitative research using the Structural Equation Modeling (SEM) method. The research population is all Generation Z MSME actors who are registered and unregistered and actively operating in the city of Medan, whose exact number is not known for sure (*unknown population*) considering the dynamics of MSME data collection in the field. Therefore, the determination of the number of samples using the Hair et al. formula (at least 5–10 times the number of research indicators) or the Lemeshow formula for the population is unknown, so that a sample of at least 200 respondents was obtained to meet the requirements of multivariate statistical analysis. The sampling technique used is **non-probability sampling** with *the purposive sampling method*, which is the selection of respondents based on certain criteria:

1. Business actors who are included in the MSME category according to Law No. 20 of 2008,
2. Aged 13–28 years (Generation Z) at the time of the study,
3. Domiciled and running a business in the City of Medan, and
4. Has been running a business for at least 6 months and has used at least one digital/fintech financial service in its business operations.

Data was collected in an online questionnaire to respondents who met the criteria, through a closed questionnaire with a Likert scale of 1–5 with a range of answers from 1 (strongly disagree) to 5 (strongly agree) to measure all research indicators. Hypothesis testing was carried out with *Structural Equation Modeling* based on *Partial Least Squares* (PLS-SEM), which is a multivariate analysis technique that is able to test the relationship between variables simultaneously, including latent variables formed by several indicators at once (Hair, Hult, Ringle, & Sarstedt, 2021).

The analysis was carried out through two stages: (1) evaluation of the measurement model (*outer model*), including convergent validity, discriminant validity, and composite reliability tests to test the validity and reliability of each indicator; and (2) evaluation of structural models (*inner*

models), including R-Square test, Q-Square predictive relevance, and path significance test through *bootstrapping* to test the direction and strength of influence between latent variables according to the research hypothesis.

RESULTS

Respondent Characteristics

The characteristics of the respondents in this study describe the profile of Generation Z MSME actors who are the research sample based on gender, age, education level, type of business, length of business run, business turnover, and use of financial technology services as a basis to describe the condition of the respondents before further analysis is carried out.

Table 1. Respondent Characteristics

Characteristics	Kategori	Frekuensi (Orang)	Persentase (%)
Jenis Kelamin	Laki-laki	84	42
	Perempuan	116	58
Usia	17–20 tahun	28	14
	21–24 tahun	96	48
	25–27 tahun	76	38
Pendidikan Terakhir	SMA/SMK	102	51
	Diploma	24	12
	Sarjana (S1)	72	36
	Pascasarjana	2	1
Jenis Usaha	Kuliner	68	34
	Fashion	36	18
	Jasa	42	21
	Perdagangan	30	15
	Lainnya	24	12
Lama Menjalankan Usaha	< 1 tahun	34	17
	1–3 tahun	96	48
	4–6 tahun	50	25
	> 6 tahun	20	10
Omzet per Bulan	< Rp5 juta	58	29
	Rp5–10 juta	76	38
	Rp10–25 juta	48	24
	> Rp25 juta	18	9
Platform Fintech yang Paling Sering Digunakan	QRIS	78	39
	Dompot Digital (GoPay, OVO, DANA, ShopeePay)	56	28
	Mobile Banking	42	21
	P2P Lending/PayLater	24	12

Source: Data Processed, 2026

Table 1. has met the need for descriptive analysis in the journal article, because it describes the profile of respondents based on demographic aspects, business characteristics, and the use of digital financial services that are relevant to the research variables. Furthermore, the narrative of the results can highlight the most dominant category in each characteristic, for example, the majority of respondents are 21–24 years old, female, educated in high school/vocational school, engaged in the culinary sector, have been running a business for 1-3 years, have a turnover of IDR 5-10 million per month, and use QRIS as a means of digital transactions the most.

Evaluation of the Outer Model (Measurement Model)

The evaluation of the outer model is carried out through three stages of testing with the following decision-making provisions. First, convergent validity is stated to be fulfilled if the outer loading value of each indicator is ≥ 0.70 (values of 0.60–0.70 are still acceptable in exploratory studies) and the Average Variance Extracted (AVE) value of each construct > 0.50 , indicating that the indicators consistently measure the same construct (Hair, Hult, Ringle, & Sarstedt, 2021). Second, discriminant validity is considered to be met if the square root of AVE of a construct is greater than its correlation with other constructs (Fornell–Larcker criteria), or if the Heterotrait-Monotrait Ratio (HTMT) value is below the threshold of 0.90, which indicates that each construct is completely empirically different from the other constructs in the model (Henseler, Ringle, & Sarstedt, 2015). Third, the reliability test was carried out by looking at Cronbach's Alpha and Composite Reliability (CR) values, which are declared reliable if the value is ≥ 0.70 (values of 0.60–0.70 are still acceptable in the early stages of the study), as an indication that the indicators that form constructs have adequate internal consistency (Hair et al., 2021). If one of the above criteria is not met, the researcher can issue (drop) the indicator with the lowest loading and retest until all the outer model criteria are achieved, before proceeding to the structural model evaluation stage (inner model).

Table 2. Outer Loading

	FR	FTA	FWB	LKD	MKU
FR1	0,757				
FR2	0,738				
FR3	0,687				
FR4	0,762				
FR5	0,743				
FR6	0,637				
FTA1		0,835			
FTA2		0,809			
FTA3		0,824			
FTA4		0,842			
FTA5		0,857			
FTA6		0,786			
FWB1			0,703		
FWB2			0,758		
FWB3			0,740		
FWB4			0,729		
FWB5			0,700		
FWB6			0,624		
FWB7			0,616		
LKD1				0,820	
LKD2				0,864	

	FR	FTA	FWB	LKD	MKU
LKD3				0,822	
LKD4				0,894	
LKD5				0,831	
LKD6				0,786	
MKU1					0,684
MKU2					0,742
MKU3					0,826
MKU4					0,762
MKU5					0,735
MKU6					0,800

Source: Data Processed, 2026

MSME Finance (MKU) has an outer loading value of > 0.60 with a value range of 0.616–0.894. This shows that all indicators have met the convergent validity criteria.

Table 3. Construct Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
FR	0,816	0,822	0,867	0,522
FTA	0,907	0,909	0,928	0,682
FWB	0,826	0,838	0,868	0,687
LKD	0,914	0,919	0,933	0,700
MKU	0,853	0,861	0,891	0,677

Source: Data Processed, 2026

Based on Table 3, the results of the Construct Reliability and Validity test showed that all research constructs had Cronbach's Alpha and Composite Reliability values above the minimum limit value of 0.70. Cronbach's Alpha value is in the range of 0.816–0.914, while the Composite Reliability value is in the range of 0.867–0.933, so that all variables of Financial Resilience (FR), Financial Technology Adoption (FTA), Financial Well-Being (FWB), Digital Financial Literacy (LKD), and MSME Financial Management (MKU) are declared reliable. In addition, the Average Variance Extracted (AVE) value of the entire construct was above 0.50, namely FR of 0.522, FTA of 0.682, FWB of 0.687, LKD of 0.700, and MKU of 0.677. The results show that all variables have met the criteria of convergent validity and construct reliability, so that the measurement model is declared feasible to continue at the structural model testing stage (inner model).

Table 4. Discriminant Validity- Heterotrait-Monotrait Ratio (HTMT)

	FR	FTA	FWB	LKD	MKU
FR					
FTA	0,561				
FWB	0,571	0,395			
LKD	0,372	0,354	0,437		
MKU	0,395	0,332	0,334	0,434	

Source: Data Processed, 2026

Based on Table 4, the results of the Discriminant Validity test with HTMT show that all HTMT values between constructs are below 0.90, with a value range of 0.332–0.561. This shows that all research variables have good discriminant validity and that each construct is able to measure different concepts.

Evaluation of Inner Model (Structural Model)

The internal evaluation of the model is carried out through four stages of testing with the following decision-making provisions. First, the R-Square value (R^2) is used to measure how much an exogenous variable is able to explain endogenous variables, with the criteria of 0.67 as strong (substantial), 0.33 as moderate (moderate), and 0.19 as weak (Chin, 1998, in Hair, Hult, Ringle, & Sarstedt, 2021). Second, effect size (f^2) is used to assess how much a particular exogenous variable contributes to endogenous variables in a structural model, with value thresholds of 0.02 (small), 0.15 (medium), and 0.35 (large) (Cohen, 1988). Third, predictive relevance (Q^2) is obtained through the blindfolding procedure and is declared to have predictive relevance if the value is greater than 0 ($Q^2 > 0$), with the categories 0.02 (weak), 0.15 (moderate), and 0.35 (strong) to show the model's ability to reconstruct observation values (Chin, 1998; Henseler, Ringle, & Sinkovics, 2009). Fourth, goodness of fit is assessed through Standardized Root Mean Square Residual (SRMR), where the model is declared fit when the SRMR value is below 0.10, or below 0.08 for more stringent criteria, as an indication of the suitability between the research model and the empirical data collected (Hu & Bentler, 1999; Henseler, Hubona, & Ray, 2016).

Table 5. Koefisien Determinasi (R^2)

	R Square	R Square Adjusted
FR	0,290	0,279
FWB	0,316	0,302

Source: Data Processed, 2026

Based on Table 5, the results of the determination coefficient (R^2) test showed that the Financial Resilience (FR) variable had an R^2 value of 0.290 or 29.0%, which means that the variables of digital financial literacy, financial technology adoption, and MSME financial management were able to explain the variation in financial resilience of 29.0%. Furthermore, the Financial Well-Being (FWB) variable has an R^2 value of 0.316 or 31.6%, which shows that financial resilience and its predictive variables are able to explain financial well-being by 31.6%, while the rest is influenced by other variables outside the research model.

Hypothesis Testing

Hypothesis tests were carried out to determine the influence between variables in the research model through the bootstrapping method in SEM-PLS by looking at the path coefficient, t-statistic, and p-value. The hypothesis is accepted if the t-statistical value > 1.96 and the p-value < 0.05 , which shows a significant influence between constructs.

Table 6. Direct Effect

	Original Sample (O)	T Statistics (O/STDEV)	P Values	Decision
FR -> FWB	0,351	4,405	0,000	Supported
FTA -> FR	0,391	6,154	0,000	Supported
FTA -> FWB	0,106	1,291	0,197	Not Supported
LKD -> FR	0,142	2,256	0,024	Supported
LKD -> FWB	0,228	3,392	0,001	Supported
MKU -> FR	0,162	2,378	0,018	Supported
MKU -> FWB	0,047	0,724	0,469	Not Supported

Source: Data Processed, 2026

Based on Table 6, the results of the direct effect test show that Financial Resilience has a positive and significant effect on Financial Well-Being. In addition, Financial Technology Adoption, Digital Financial Literacy, and MSME Financial Management have been proven to have a positive and significant effect on Financial Resilience. The results of the study also show that Digital Financial Literacy has a positive and significant effect on Financial Well-Being. On the other hand, Financial Technology Adoption and MSME Financial Management do not have a significant effect on Financial Well-Being. Thus, most of the direct influence hypotheses in this study are accepted, except for the hypothesis about the influence of Financial Technology Adoption and MSME Financial Management on Financial Well-Being which is rejected.

Table 7. Specific Indirect Effects

	Original Sample (O)	T Statistics (O/STDEV)	P Values	Decision
FTA -> FR -> FWB	0,137	3,459	0,001	Supported
LKD -> FR -> FWB	0,050	1,997	0,046	Supported
MKU -> FR -> FWB	0,057	1,975	0,049	Supported

Source: Data Processed, 2026

Based on Table 7, the results of the specific indirect effects test show that Financial Resilience is able to significantly mediate the influence of Financial Technology Adoption, Digital Financial Literacy, and MSME Financial Management on Financial Well-Being. These results show that increasing the adoption of financial technology, digital financial literacy, and financial management of MSMEs can improve Financial Well-Being through increasing Financial Resilience. Thus, all indirect influence hypotheses in this study are accepted.

DISCUSSION

Based on the results of the determination coefficient test, the Financial Resilience variable has an R^2 value of 29.0%, while Financial Well-Being has an R^2 value of 31.6%. These results show that digital financial literacy, financial technology adoption, and MSME financial management are able to explain almost one-third of the variation in financial resilience and financial well-being in Generation Z MSME actors in Medan City. The results of the study show that Financial Resilience has a positive and significant effect on Financial Well-Being. These findings show that the higher the ability of Generation Z MSME actors to deal with financial pressure and uncertainty, the higher the level of financial well-being they feel. Business actors who have an emergency fund, are able to manage business cash flow, have savings, and are able to survive when there is a decline in sales or uncertain economic conditions will feel more secure in meeting current needs and planning future financial goals. In line with the research of (Kumar & Sandhu, 2024) and (Hooda et al., 2025) which states that financial resilience is one of the main factors that shape financial well-being in small business actors.

This study also found that Financial Technology Adoption has a positive and significant effect on Financial Resilience. These results show that the higher the level of utilization of financial technology such as mobile banking, QRIS, digital wallets, internet banking, and digital financing applications by Generation Z MSME actors in Medan City, the higher their ability to deal with various financial risks. The use of fintech helps business actors gain faster access to transactions, more practical financial records, ease of obtaining financing, and efficiency in business management so as to be able to increase financial resilience when facing changing business conditions. These results support the research of (Gunibala, 2025) which states that the adoption of fintech increases the ability of MSMEs to maintain business continuity through increasing operational efficiency and access to financing.

However, Financial Technology Adoption does not have a significant effect on Financial Well-Being. The use of financial technology alone has not been able to directly improve the financial welfare of Generation Z MSME actors. In other words, the use of financial technology has not automatically improved financial conditions if it is not accompanied by the ability to manage business results wisely. This finding strengthens the results of research by Kurniasari et al. (2025) who explain that the benefits of fintech will be greater if followed by financial literacy skills and good financial management.

Furthermore, Digital Financial Literacy has been proven to have a positive and significant effect on Financial Resilience and Financial Well-Being. Generation Z MSME actors who have knowledge of digital financial services, understand the risks of digital transactions, and are able to use various financial applications appropriately have better abilities in managing the financial condition of their business. This knowledge helps business actors make more rational decisions in saving, investing, utilizing digital financing, and avoiding digital financial fraud. As a result, they have stronger financial resilience while also experiencing a higher level of financial well-being. In line with research by (Choung et al., 2023, 2025) which proves that digital financial literacy makes a positive contribution to financial well-being through improving individuals' ability to manage digital financial services safely and effectively.

The results of the next study show that MSME Financial Management has a positive and significant effect on Financial Resilience, but does not have a significant effect on Financial Well-Being. This condition shows that the ability of MSME actors to prepare budgets, manage cash flows, record transactions, and separate business and personal finances can increase business resilience when facing economic pressure. However, this ability has not directly improved the financial well-being felt by business actors. Most of the Generation Z MSME actors are still in the business development stage so that the profits obtained are more reallocated as business capital than to improve personal welfare. Thus, even though business financial management has been running well, the benefits to financial well-being cannot be felt directly.

An interesting finding in this study is that all indirect influences through Financial Resilience are proven to be significant. Financial Resilience is able to mediate the influence of Financial Technology Adoption, Digital Financial Literacy, and MSME Financial Management on Financial Well-Being. This shows that improving the financial welfare of Generation Z MSME actors in Medan City does not occur directly through the use of fintech or financial management, but is first formed through increasing the ability to deal with financial risks and pressures. In other words, business actors who have good digital financial literacy, are able to utilize financial technology, and implement effective financial management will find it easier to build financial reserves, manage business risks, maintain liquidity, and maintain business sustainability. This ability then becomes the main foundation in improving financial well-being.

Overall, the results of this study support the Theory of Financial Capability which explains that financial well-being is not only influenced by financial knowledge, but also by the ability of individuals to utilize financial technology, manage finances effectively, and build financial resilience. For Generation Z MSME actors in Medan City, the use of digital technology and increasing financial literacy need to be accompanied by disciplined financial management in order to create strong financial resilience. It is recommended that the MSME capacity building program not only focus on expanding the use of fintech, but also on strengthening digital financial literacy and financial management skills, so that the benefits of technology can be translated into financial resilience and ultimately improve the financial welfare of business actors in a sustainable manner.

CONCLUSION

Based on the results of the research, it can be concluded that Digital Financial Literacy, Financial Technology Adoption, and MSME Financial Management play an important role in

increasing the Financial Resilience of Generation Z MSME actors in Medan City. Furthermore, Financial Resilience has been proven to have a positive and significant effect on Financial Well-Being, so that the higher the ability of MSME actors to anticipate, face, and recover from financial pressure, the better the level of financial well-being felt. Digital Financial Literacy has also been proven to have a direct effect on Financial Well-Being, while Financial Technology Adoption and MSME Financial Management do not have a significant direct influence on Financial Well-Being. However, Financial Resilience is able to significantly mediate the influence of Financial Technology Adoption, Digital Financial Literacy, and MSME Financial Management on Financial Well-Being. These findings show that the improvement of the financial welfare of Generation Z MSME actors is not only determined by the ability to utilize financial technology, digital financial literacy, and direct business financial management, but also depends on their ability to build financial resilience in the face of various economic risks and uncertainties.

SUGGESTION

This study has several limitations that need to be considered in interpreting the research results. First, this research was only conducted on Generation Z MSME actors in Medan City so that the results of the research could not be generalized to all MSME actors in Indonesia who have different demographic characteristics, digitalization levels, and economic conditions. Second, this study uses a cross-sectional approach, so that it only describes the relationship between variables in a period of time and has not been able to explain changes in Financial Well-Being and Financial Resilience dynamically in the long term. Third, research data was obtained through a questionnaire using the self-reported method, so that respondents' answers have the potential to contain perception bias, social desirability bias, or errors in remembering actual financial conditions. Fourth, the value of the determination coefficient shows that there is still a proportion of variations in Financial Well-Being and Financial Resilience explained by other factors outside the research model, such as income level, business performance, access to financing, personality characteristics, government support, financial culture, and business environment that have not been analyzed in this study. Therefore, the results of this study need to be interpreted according to the scope of the study, and further research is suggested to use a wider area coverage, longitudinal research design, and add other variables to be able to provide a more comprehensive explanation of the factors that affect the Financial Well-Being of MSME actors.

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5. **Use of Artificial Intelligence (AI):**

The authors used ChatGPT to assist with improving grammar and translating the text. All AI-generated output was thoroughly reviewed and edited by the authors. The authors take full responsibility for the content of the article.

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