

Empowering SMEs through Digital Financial Literacy: Enhancing Resilience, Innovation, and Inclusivity in Malaysia

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Abstract

Digital financial literacy has emerged as a critical factor for the success and sustainability of small and medium-sized enterprises (SMEs) in an increasingly digital economy. The objective of the research is to examine how digital financial literacy impacts technological adoption, gender inclusivity, and resilience in SME operations. Using a synthesis of recent literature and secondary data, the study highlights the positive correlation between digital financial literacy and business performance, particularly in fostering innovation, resilience during economic disruptions, and financial inclusion among women entrepreneurs. Despite governmental initiatives like the SME Digitalization Grant, gaps in digital literacy persist, especially in rural areas. The study recommends future research to address these disparities through longitudinal studies, sector-specific analyses, and the integration of emerging technologies such as artificial intelligence and blockchain into SME operations. These findings aim to inform policymakers, educators, and industry stakeholders to create an inclusive and robust digital ecosystem for SMEs.

Keywords: Digital, Financial, Literacy, SMEs, Malaysia

Introduction

The rapid advancement of digital technologies and their integration into financial services have revolutionized business operations globally. Small and medium-sized enterprises (SMEs), which contribute significantly to economic growth and job creation, must adapt to these technological shifts to remain competitive in an evolving market. Digital financial literacy, defined as the ability to effectively utilize digital tools for managing, understanding, and engaging with financial resources, has emerged as a pivotal factor influencing entrepreneurial success, particularly in small business development (Owen et al., 2023; Nguyen et al., 2022). Digital financial literacy extends beyond financial knowledge to encompass skills in utilizing fintech tools like e-wallets, online payment platforms, crowdfunding, and blockchain. These technologies have transformed traditional financial processes, offering SMEs cost-efficient solutions for accessing markets, managing cash flows, and driving innovation (Ahmad & Basri, 2023). In Malaysia, where SMEs comprise over 97%

of businesses, digital financial literacy is critical for maintaining competitiveness in a globalized digital economy (Department of Statistics Malaysia, 2023).

The COVID-19 pandemic underscored the importance of digital financial literacy as SMEs worldwide, including in Malaysia, faced disruptions in traditional business models. Businesses with the necessary skills and knowledge to navigate digital financial ecosystems demonstrated greater resilience, leveraging online sales channels and digital payments to sustain operations (Ismail & Arifin, 2022). Beyond resilience, digital financial literacy has proven to be a catalyst for growth and innovation in challenging times. Gender disparities also play a significant role in the context of digital financial literacy among Malaysian SMEs. Research highlights that women entrepreneurs face greater challenges in accessing digital financial tools due to sociocultural barriers, lower exposure to digital education, and financial exclusion (Rahman et al., 2022). Addressing these disparities through targeted training and policy interventions could enhance financial inclusion and economic participation among women entrepreneurs, contributing to a more robust SME ecosystem.

In Malaysia, government initiatives such as the SME Digitalization Grant and the Digital Economy Blueprint reflect recognition of the importance of fostering digital financial literacy among SMEs. However, despite these efforts, gaps persist, particularly in rural areas where access to technology and training is limited (Malaysian Digital Economy Corporation, 2023). Bridging these gaps requires a concerted effort from policymakers, financial institutions, and educators to ensure equitable access to digital financial tools and knowledge. This paper explores the intersection of digital financial literacy and entrepreneurship, with a specific focus on Malaysian SMEs. By synthesizing recent studies, it examines how digital financial literacy influences small business development through technological adoption, gender dynamics, and resilience in economic disruptions. The findings aim to provide actionable insights for policymakers, educators, and entrepreneurs, emphasizing the transformative potential of digital financial literacy in driving innovation, growth, and inclusivity within Malaysia's SME sector.

Literature Review

Studies demonstrate a robust relationship between digital financial literacy and business performance. Affandi et al. (2024) illustrate how digital adoption among ultra-micro, micro, and small enterprises (UMSEs) in Indonesia enhances their financial literacy and business outcomes. This study emphasizes that robust connectivity infrastructure, owner demographics, and cultural factors significantly influence the adoption of digital processes such as e-procurement, e-commerce, and digital payment systems. Yakob et al. (2022) extends these findings by confirming that financial literacy skills enable SME managers in Malaysia to effectively utilize debt, savings, and investments, ultimately boosting performance. Similarly, Frimpong et al. (2022) show that digital finance access acts as a mediating variable between financial literacy and SME performance in Ghana, underscoring the need for tailored policies to enhance financial education among entrepreneurs. Gender disparities in digital financial literacy and entrepreneurship are well-documented. Oggero et al. (2020) reveal significant differences in how men and women leverage financial literacy and digital skills for entrepreneurial pursuits in Italy. Men were more likely to exhibit entrepreneurial tendencies, which the authors attribute to higher levels of financial literacy

and risk tolerance. Conversely, women faced barriers stemming from limited access to these resources.

Hasan et al. (2023) highlight the role of digital financial literacy in promoting women's financial inclusion globally. Their findings suggest that women entrepreneurs with advanced digital financial skills are more likely to use formal banking channels, which enhances their business operations. These insights call for targeted interventions to address the unique challenges faced by women entrepreneurs. Digital tools such as e-wallets, QR codes, and fintech platforms play a pivotal role in small business development. Trianto et al. (2024) compare fintech adoption among micro-entrepreneurs in Indonesia and Malaysia, revealing significant differences in the utilization of digital payments. Despite widespread use of e-wallets and debit cards, adoption of more advanced technologies like QR code-based payments remains limited, highlighting the need for education and infrastructure development. Khan et al. (2024) examine fintech literacy among millennials in Malaysia, identifying gaps in knowledge about blockchain, machine learning, and crowdfunding. The study underscores the importance of education in enhancing fintech capabilities, which are critical for innovation and entrepreneurship. Entrepreneurs with higher financial literacy are better positioned to drive innovation within their businesses. Liu et al. (2020) argue that financial literacy promotes risky but rewarding investment decisions, fostering innovation in SMEs. This relationship is mediated by factors such as firm size and gender, with male entrepreneurs demonstrating a stronger propensity for innovation due to greater financial acumen.

Table1

Summary of Key Studies on Digital Financial Literacy and Entrepreneurship

Author and Date	Objective	Method	Findings	Future Research
Affandi et al. (2024)	To assess digital adoption and its impact on financial literacy and business performance in UMSEs	Survey data from 5035 UMSEs in 17 provinces of Indonesia; digital adoption index; regression analysis	Digital adoption positively correlates with financial literacy and business performance. Infrastructure quality and cultural factors influence digital adoption.	Explore sector-specific digital adoption patterns and their implications on financial literacy and innovation.
Uthailiang & Kiattisin (2023)	To analyze factors motivating digital financial literacy for small entrepreneurs using online loans	Structural Equation Modeling (SEM) and path analysis on 400 respondents from Thailand	Knowledge and motivation positively affect the digital financial skills of entrepreneurs, aiding adaptation to technological changes.	Investigate digital financial training's long-term impact on small entrepreneurs' performance.

Oggero et al. (2020)	To explore gender-based differences in financial literacy and digital skills in entrepreneurship	Bank of Italy SHIW dataset; statistical comparison of men and women	Financial literacy strongly predicts entrepreneurship for men but not for women. Gender disparities in digital skills and risk tolerance were observed.	Examine interventions to reduce gender disparities in financial literacy and entrepreneurship.
Frimpong et al. (2022)	To evaluate the relationship between financial literacy, digital finance access, and SME performance	Purposive sampling of 400 SMEs in Ghana; PLS-SEM analysis	Financial literacy and digital finance access significantly enhance SME performance. Mobile Money is the most utilized digital platform.	Study the effectiveness of specific digital finance tools for enhancing SME performance across different regions.
Liu et al. (2020)	To examine the effect of financial literacy on innovation in SMEs	Regression analysis of survey data from Chinese SMEs	Financial literacy promotes innovation, with risk tolerance as a mediating factor. Male entrepreneurs demonstrate higher levels of innovation compared to females.	Investigate how cultural differences affect the relationship between financial literacy and innovation.
Khan et al. (2024)	To evaluate fintech literacy among millennials and its determinants	Cross-sectional survey of Malaysian millennials; regression analysis	Higher fintech literacy is observed in younger, educated males. Actual financial literacy positively influences fintech literacy.	Explore the impact of fintech literacy training in secondary and tertiary education settings.
Hasan et al. (2023)	To assess the impact of digital financial literacy on women's financial inclusion	Cross-sectional analysis of 144 countries using World Bank Global Findex Database	Women entrepreneurs with high digital financial literacy are more likely to use formal banking channels, improving business operations.	Assess the effectiveness of country-specific programs targeting women's digital financial literacy and entrepreneurship.

Discussion

The reviewed studies highlight the significant disparities in digital financial literacy across regions, genders, and business sizes. In Malaysia, rural SMEs often lack access to essential digital infrastructure and training programs. Women entrepreneurs, in particular, face compounded barriers due to sociocultural constraints and limited opportunities for education in digital finance (Rahman et al., 2022). To address these gaps, stakeholders should invest in

targeted digital literacy programs tailored to rural communities and women entrepreneurs. Public-private partnerships can play a critical role in providing affordable access to fintech tools and resources, ensuring inclusivity and equitable growth. Education is fundamental to equipping SMEs with the skills to leverage fintech tools effectively. Studies such as Khan et al. (2024) emphasize the importance of integrating fintech education into both formal and informal learning systems. In Malaysia, embedding digital financial literacy modules into secondary and tertiary education curricula could provide long-term benefits. Additionally, short-term workshops and online courses tailored for SME owners and their employees can enhance immediate digital capabilities, enabling businesses to adopt advanced tools such as blockchain and crowdfunding platforms. Financial literacy fosters innovation by enabling entrepreneurs to make informed investment decisions and manage risks. In Malaysia, enhancing financial literacy could encourage SMEs to invest in innovative technologies, driving productivity and competitiveness. Government incentives, such as tax breaks for SMEs investing in digital tools, and accessible funding schemes could motivate entrepreneurs to prioritize innovation. Collaborations between financial institutions and SMEs to co-develop user-friendly digital solutions can further facilitate this process. Addressing gender disparities in digital financial literacy requires dedicated initiatives. Women entrepreneurs in Malaysia could benefit from mentorship programs, access to microfinance, and targeted digital literacy workshops. By creating safe spaces and networks for women to exchange ideas and knowledge, policymakers can empower them to overcome cultural and educational barriers. Lessons from global initiatives, such as the Women Entrepreneurs Finance Initiative (We-Fi), could be adapted to the Malaysian context to drive meaningful change. The pandemic demonstrated the importance of digital financial literacy in fostering resilience among SMEs. In Malaysia, SMEs equipped with digital capabilities were able to adapt to disruptions by transitioning to e-commerce and digital payments (Ismail & Arifin, 2022). Encouraging the adoption of these practices as part of business continuity planning will ensure SMEs are better prepared for future economic shocks. Policymakers should collaborate with industry leaders to provide training in risk management and digital adaptability.

Future Research

This study highlights the transformative potential of digital financial literacy for enhancing entrepreneurship and small business development, particularly within Malaysia's SME sector. However, several limitations must be acknowledged. The research primarily relies on existing studies and secondary data, which may not fully capture the nuanced and evolving challenges faced by Malaysian SMEs in real-time. Additionally, the findings reflect broader trends and may not account for sector-specific needs or regional disparities within the country. These limitations underscore the need for further empirical research tailored to the Malaysian context, particularly studies that incorporate longitudinal data and focus on the unique characteristics of SMEs across diverse industries and geographical locations. Future initiatives should emphasize developing sector-specific digital financial literacy programs to address the varying needs of SMEs in manufacturing, retail, and service industries. Efforts to enhance digital literacy must also prioritize inclusivity by addressing rural-urban divides and sociocultural barriers, particularly those that limit women entrepreneurs' access to digital tools and financial education. Policymakers, financial institutions, and educational bodies should collaborate to create comprehensive training programs that integrate emerging technologies like artificial intelligence and blockchain into SME operations, fostering innovation and resilience. Furthermore, the development of Malaysia's digital ecosystem,

including improved infrastructure and supportive regulatory frameworks, is essential to create an environment conducive to SME growth. Future research should explore the long-term impacts of digital literacy initiatives on SME performance, incorporating data from rural and underserved regions to ensure that policy interventions are equitable and effective. By addressing these limitations and focusing on targeted, inclusive strategies, stakeholders can unlock the full potential of digital financial literacy to drive sustainable economic development within Malaysia's SME sector.

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