

LOCAL COMMUNITY-BASED INFRASTRUCTURE INTERNET UTILIZATION AND DIGITAL FINANCIAL INCLUSION

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Abstract

Due to the Covid-19 pandemic, there has been a significant increase in internet penetration in Indonesia, as in 2023 internet users in Indonesia amounted to 78.19% of the total population. In addition, there has been a change in behavior in internet use, one of which is behavior in accessing financial services. The activity of accessing financial services and products via the internet above is evidence of developments in information and communication technology that have revolutionized the landscape of the financial industry, where now financial services can be accessed in a more efficient, cheaper way, and there is no need to come in person. However, although increasing access to technology is often associated with wider use of digital financial services, there is various empirical evidence that also points to obstacles to sustainable digital financial inclusion, such as poor network connectivity and low levels of digital literacy. Despite Indonesia's growing internet infrastructure and services, the challenge of the digital divide is still a real problem. This is especially felt by people who live in rural and remote areas. This study aims to explain the utilization of local community-based internet infrastructure in the form of a digital literacy program conducted by Common Room for its digital financial inclusion beneficiaries. This study uses a mixed method, where quantitative data is analyzed through descriptive statistics and multiple linear regression, and qualitative analysis aims to confirm the quantitative findings. The results of this study are that digital literacy can mediate financial inclusion towards digital financial inclusion. However, digital literacy has not been able to mediate financial literacy toward digital financial inclusion. Therefore, a financial literacy education program is needed as a complement to the existing digital literacy program.

Keywords: *Digital Financial Inclusion; Digital Literacy; Community development; Rural Community; Internet-based Community.*

Introduction

The Covid-19 pandemic has resulted in an immense rise in internet usage and dependency for many people in the world (Li et al., 2021). As of April 2023, internet user ranks grew to 5.18 billion (64.6% of the global population) from 4.1 billion in 2019. In

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2020, approximately 466 million individuals were utilizing the Internet for the first time, representing a 10.3% increase in penetration. Indonesia also.

has experienced rapid growth in internet penetration due to the COVID-19 pandemic. This increase correlates to the 2019 completion of the Palapa Ring "sky highway" initiative, a national fiber-optic cable network utilizing USO funds. The initiative connects 90 regencies/cities throughout Indonesia with the Internet. The Sky Highway is also intended to provide internet access to 3T (underdeveloped, foremost, outermost) areas in Indonesia which are in line with President Joko Widodo's (Jokowi) development policy, namely "building from the periphery". Currently, internet penetration in rural communities has reached 79.79% and internet contribution has reached 35.43%.

There has been a change in behavior in internet use in Indonesia, one of which is behavior in accessing financial services. The activity of accessing financial services and products via the internet above is evidence of developments in information and communication technology that have revolutionized the landscape of the financial industry, where now financial services can be accessed in a more efficient, cheaper way, and there is no need to come in person.

Enabling more people to have access to the financial services they need is the ultimate goal of financial inclusion, especially for those in vulnerable and low-income groups. President Joko "Jokowi" Widodo has established a target of 90% financial inclusion in Indonesia by 2024. The current financial literacy index for Indonesia is 49.68%, while the financial inclusion index is 85.10% (Saskia et al., 2023). The 3T (Forefront, Outermost, and Disadvantaged) communities are the financial literacy and inclusion priorities for 2023.

Financial inclusion is a fundamental component of socioeconomic development, as acknowledged by the UN's goal of achieving universal financial access by 2025 (Gupta & Kanungo, 2022). Nevertheless, approximately 1.4 billion adults remain unbanked, with 54% of the unbanked (740 million individuals) residing in only seven economies. Indonesia, with 100 million, has the next-largest population of unbanked. The primary obstacles to achieving financial inclusion are the lack of geographic access, the high cost of utilizing financial products and services, the absence of appropriate financial products, and financial illiteracy.

Helms (2006); Demirguc (2008); Beck (2009) Provide numerous examples of the significance of technology's influence in facilitating access to the financial system for the most vulnerable and underserved communities. Digital financial inclusion has become an extension of financial inclusion where all financial operations are carried out in a non-cash mode (Arun & Kamath, 2015).

However, although increasing access to technology is often associated with wider use of digital financial services, there is various empirical evidence that also points to obstacles to sustainable digital financial inclusion, such as poor network connectivity and low levels of digital literacy (Aziz & Naima, 2021); (Ozili, 2018);(Eton et al., 2021). The

Indonesian context itself is very interesting for conducting studies on improving financial services by utilizing technology, especially for vulnerable and/or unbanked groups.

Despite Indonesia's growing internet infrastructure and services, the challenge of the digital divide is still a real problem. This is especially felt by people who live in rural and remote areas. School of Community Networks, which was initiated by the Common Room Networks Foundation seeks to fill the gap that occurs by contributing to the acceleration of digital transformation projects in Indonesia, where Common Room and SCN operate directly and together with beneficiaries at the local/rural level.

It is widely believed that financial inclusion plays a role in ensuring that all nations have access to and make utilization of financial goods to achieve economic advantages. This is based on the belief that financial inclusion plays a role. According to the Zulkhibri, (2016), "financial inclusion" refers to the percentage of individuals and businesses that make use of financial services. According to Yahaya (2018), the condition known as "financial inclusion" is one in which no one is prevented from gaining access to fundamental financial services for the sake of efficiency.

Shofawati (2019); Jaya (2019) Research has shown that having digital access to financial services has a significant amount of potential to speed up the financial inclusion process. According to Naveed (2019), there is empirical evidence to suggest that technology has a positive impact on increasing access to the financial system for the most vulnerable groups of the population. Because of this, it is necessary to have not only financial literacy but also digital literacy.

The capacity to use digital technology to access information securely and acceptably, manage information, interpret information, integrate information, communicate information, assess information, and produce information for work, good jobs, and entrepreneurship is the definition of digital literacy. According to the OECD Survey of Adult Abilities, 15% of adults lack fundamental digital abilities. Furthermore, according to the OECD Survey of Adult Skills (International Telecommunication, half of the world's population still does not have access to the Internet.

Research Methods

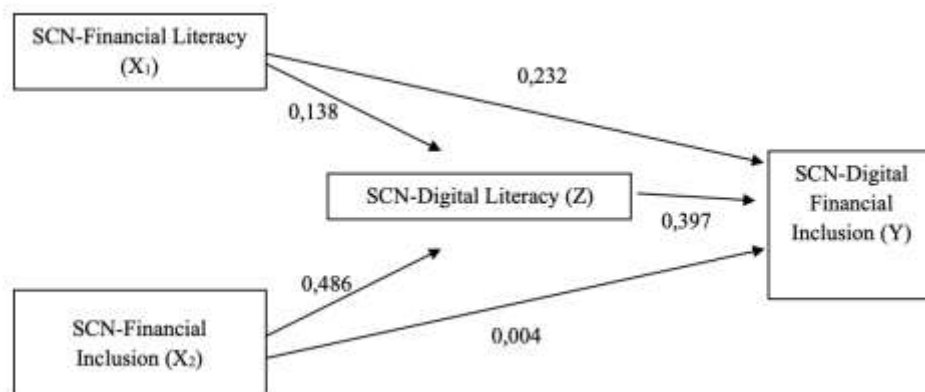
This research adopts a mixed-method approach. The collection and analysis of research data is a combination of quantitative and qualitative methods. Quantitative data collection was obtained through a face-to-face survey using a questionnaire. Qualitative data collection was obtained through unstructured interviews and observation.

The main respondents of this study were participants from the School of Community Networks and non-participants and/or residents in Sukadana Village, North Lombok, aged 15-75 years. Quantitative analysis uses descriptive statistics and regression analysis measurements. While qualitative analysis is used to analyze the results of interviews and confirm the results of quantitative analysis.

Results and Discussion

Based on our analysis it is known that Financial Literacy does not have a significant influence on Digital Literacy, whilst Financial Inclusion has a significant influence on Digital Literacy. However, financial literacy has a significant influence on Digital Financial Inclusion, whilst Financial Inclusion does not have a significant influence on Digital Financial Inclusion.

In addition, Digital Literacy has a significant influence on Digital Financial Inclusion. Thus, we make a path analysis regarding financial literacy to digital financial inclusion through digital literacy and financial inclusion to digital financial inclusion through digital literacy below.



From the test results above, the effect of the mediating variable has a smaller effect value than the direct effect. so it can be concluded that the mediating variable is not capable enough to influence the significance value of Financial Literacy on Digital Financial Inclusion. Whilst the mediating variable has a greater effect value than the direct effect. so it can be concluded that the mediating variable is quite capable of influencing the significance value of Financial Inclusion on Digital Financial Inclusion.

Based on the findings, we proposed a financial education module as a complimentary to the existing digital literacy program to increase the financial literacy of the beneficiaries. Because being included does not mean being literate. The following is a financial education module proposed:

Module 1: Obtaining Financial Resources

This two-week session focuses on the fundamentals of financial literacy, including managing one's personal finances and budgeting for a small business. Developing interviewing skills and guiding micro and small businesses are examples of grouping learning activities.

Module 2: Economic Ecosystem

This three-week session investigates the roles of the key actors in the financial system, and their relationships, including how they are controlled and how they affect the Indonesian economy. Group learning activities include building a financial service for

an underserved community and generating a visual representation of Indonesia's financial ecosystem.

Module III: Finance as a Sustainable Development Tool

This three-week program examines the major barriers to sustainable development in Indonesia from the perspective of the country's underserved people, as well as how finance may be used as a tool to achieve the SDGs.

Conclusion

Based on the findings, digital literacy is capable of mediating financial inclusion and digital financial inclusion. The Common Room should add a financial education program as a complement to existing digital literacy programs, to increase the financial literacy level of SCN participants. Because being included does not mean having a well-literate level of literacy.

BIBLIOGRAPHY

- Arun, T., & Kamath, R. (2015). Financial inclusion: Policies and practices. *IIMB Management Review*, 27(4), 267–287.
- Aziz, A., & Naima, U. (2021). Rethinking digital financial inclusion: Evidence from Bangladesh. *Technology in Society*, 64, 101509.
- Beck, T., Demirgüç-Kunt, A., & Honohan, P. (2009). Access to Financial Services: Measurement, Impact, and Policies. *World Bank Research Observer*, 24(1).
- Demirguc-Kunt, A. (2008). *Finance, financial sector policies, and long-run growth*.
- Eton, M., Mwosi, F., Okello-Obura, C., Turyehebwa, A., & Uwonda, G. (2021). Financial inclusion and the growth of small medium enterprises in Uganda: empirical evidence from selected districts in Lango sub-region. *Journal of Innovation and Entrepreneurship*, 10, 1–23.
- Gupta, S., & Kanungo, R. P. (2022). Financial inclusion through digitalisation: Economic viability for the bottom of the pyramid (BOP) segment. *Journal of Business Research*, 148, 262–276.
- Helms, B. (2006). *Access for all: Building inclusive financial systems*. World Bank Publications.
- Jaya, I. (2019). The impact of financial inclusion on public financial services education through financial technology in Sleman Regency, Indonesia. *Esensi: Jurnal Bisnis Dan Manajemen*, 9(2), 155–174.
- Li, Y., Sun, Y., Meng, S., Bao, Y., Cheng, J., Chang, X., Ran, M., Sun, Y., Kosten, T., & Strang, J. (2021). Internet addiction increases in the general population during COVID-19: Evidence from China. *The American Journal on Addictions*, 30(4), 389–397.

- Naveed, R. T., Irfan, M., Aslam, H. D., Anwar, B., & Ayub, A. (2019). The effect of general banking information technology system on customers' satisfaction with the moderating effect of customer trust: an empirical study from Pakistani commercial (Islamic) banks. *Al-Qalam*, 24(1), 387–401.
- Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review*, 18(4), 329–340.
- Saskia, W., Putri, A. A., Hismawati, H., Nurjalal, A. M., Ishak, I., & Razak, L. (2023). The Influence of Financial Inclusion, Financial Literacy and Financial Behavior on Company Performance in MSMEs in Makassar City. *International Journal of Economic Research and Financial Accounting (IJERFA)*, 1(4).
- Shofawati, A. (2019). The role of digital finance to strengthen financial inclusion and the growth of SME in Indonesia. *KnE Social Sciences*, 389–407.
- Yahaya, M. H., & Ahmad, K. (2018). Financial inclusion through efficient zakat distribution for poverty alleviation in Malaysia: Using fintech & mobile banking. *Proceeding of the 5th International Conference on Management and Muamalah*, 15–31.
- Zulhibri, M. (2016). Financial inclusion, financial inclusion policy and Islamic finance. *Macroeconomics and Finance in Emerging Market Economies*, 9(3), 303–320.

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