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Batik Go Digital: Transforming Msmes In Malang City Through Financial Literacy And Lamikro In The Indonesia Malaysia Partnership

Ratnawati¹⁾, M.Taufiq Noor Rokhman²⁾, Esy Suraeni Yuniwati³⁾, Ayu Agus Tya Ningsih⁴⁾, Tasnim Nikmatullah Realita⁵⁾, Norizah Mohd Mustamil⁶⁾

^{1,2,3,4),5)}Wisnuwardhana University, Malang, Indonesia ⁶⁾University of Malaya Malaysia

ABSTRACT

This community service program aims to improve the capacity of batik MSMEs in Malang to addres the challenges of the digital era. Through a cross-border collaborative approach, this activity focuses on financial literacy assistance based on the Micro Accounting Report (LAMIKRO) application as a simple, effective financial recording tool tailored to the needs of MSMEs. The strategic partnership between Indonesia and Malaysia serves as a catalyst for the exchange of knowledge, technology, and best practices in micro-enterprise management. One of the problems faced by MSMEs is a lack of knowledge regarding professional financial management therefore, so assistance on financial literacy is required. One focus of management is financial literacy, understanding the use of digital finance, which helps MSMEs learn to record digital financial transactions more easily and efficiently. The results of this activity indicate an increased understanding of MSMEs regarding the importance of financial recording as well as their readiness to utilize digital technology to expand market access and increase the competitiveness of local batik products. The implementation of financial digitalization is an effort to improve the financial performance of MSMEs Which can be measured so that it has an impact on their business development and financial stability

Keywords:	Financial literacy, Financial digitalization, MSMEs, LAMIKRO		
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INTRODUCTION

Micro, small, and medium enterprises (MSMEs) in Indonesia are vital components of a country or region's economy, and they also play a crucial role in driving the overall economy. One factor influencing the growth of MSMEs and their strong role in building the economy is significant flexibility. MSME empowerment must be implemented comprehensively, optimally, and sustainably through favorable

business climate change, which provides business opportunities, support, and protection, as well as facilitating the broadest possible business development. This will provide advantages for MSMEs because they will be able to focus on running their businesses and have national flexibility, low costs, and speed of innovation (Law Number 20 of 2008).

According to Shefrin (2010), financial behavior is the study of how psychological phenomena influence it. The financial behavior of MSMEs will broaden their horizons regarding various changes and innovations in financial technology, with various applications that can facilitate their activities. In the rapidly developing digital era information technology has triggered significant changes in the structure of life, ranging from social, cultural, and even economic activities (Ratnawati et al.,2025). The application of this digital basis occurs in the world of commerce, and society is now familiar with it. The development and use of financial technology may influence shopping behavior and fintech can change consumer behavior in purchasing or shopping in e-commerce.

In the digital era, digital financial literacy is likely to become an increasingly important knowledge component because several financial transaction services can be accessed digitally (Morgan et al., 2019; Natalia et al., 2022). A person's ability to manage and apply information about their finances is known as financial literacy. According to Humaira and Sagoro (2018) and, Ratnawati et al. (2023), financial literacy is a person's ability and confidence in understanding basic financial concepts and managing their personal finances effectively, including short and long-term financial planning to prepare for changing situations and life events. Several bookkeeping and accounting applications offer various digital menus to support transactions. Thus MSMEs must possess digital financial knowledge. Financial literacy is the ability to understand financial concepts, risks, and skills used to improve people's financial well-being (Ritonga et al., 2020).

A common problem faced by MSMEs in Indonesia is their inability to manage their businesses financially effectively. The National Strategy for the Digital Economy (Stranas) was created by the government to encourage the growth of the digital economy and the digitization of small and medium enterprises in Indonesia. This approach has four pillars: digital talent, research and innovation, digital and physical infrastructure, and supporting regulations and laws. Because MSMEs are unable to market their goods and services through digital technology, they face new challenges, at the core of the Indonesian economy. Furthermore, a lack of knowledge about digital technology, finance, and digital finance is a major obstacle to the digitization of MSMEs in Indonesia. https://selular.id/2021/01/literasi-digital-umkm-masih-kurang/

Batik from Malang City is one of the Micro, Small, and Medium Enterprises (MSMEs) which is a primary focus in the development of an export-oriented regional creative economy. Malang batik is not only a high-value artistic product but also a deeply rooted identity in the community because of its rich motifs that reflect local wisdom, such as cultural symbols, unique flora and fauna of Greater Malang. Malang batik MSMEs have demonstrated competitiveness through design innovation, the use of digital technology, and cross-industry collaboration ranging from education and tourism to exports. The local government and support groups continue to strive to improve the capabilities of batik entrepreneurs through training, promotional tools,

and business digitization, including platforms such as LAMIKRO. The majority of small and medium-sized business owners lack a basic understanding of financial bookkeeping and struggle to record their operational activities. This makes it difficult for them to maintain books and MSMEs to understand their business progress. Digital applications only allow financial recording, such as purchases, sales, expenses, cash, and bank accounts. Consequently, MSMEs pay little attention to proper and appropriate financial management during their business operations and for the future.

Malang City's batik MSMEs face numerous challenges in using technology to support sustainable growth. Digitalization is crucial for improving operational productivity, expanding the market reach, and enhancing the competitiveness of local products. However, many MSMEs struggle with digital applications, primarily because of high transaction costs and the long wait for sales revenue. These challenges not only hamper cash flow but also hinder Malang City's batik MSMEs from embracing the digital landscape. LAMIKRO, a digital solution for batik MSMEs, recognizes this need. By eliminating transaction costs and ensuring immediate payments, entrepreneurs can focus on production and marketing without worrying about financial issues. This is because MSMEs' financial management skills are still relatively weak, necessitating a simple and, transparent approach to foster the growth of a local based creative economy.

The role of the Department and Educational Institutions in addressing the problems and cases experienced by Malang City's Batik MSMEs requires entahelix collaboration to assist them. Training in digital bookkeeping and recording helps them gain confidence in implementing good and accurate records. Universities must assist Malang City's Batik MSMEs and the Department in preparing accounting financial reports. LAMIKRO, a simple and easy-to-use accounting financial reporting application developed by the Deputy for Human Resources at the Ministry of Cooperatives and SME enables micro businesses to track their SMEs' financial activities and allows users to create financial reports more quickly and efficiently.

Higher education institutions use the LAMIKRO application from the cooperative and SMEs service, which is easy and free to access via the website website. www.lamikro.com. This application can be used by batik MSMEs in Malang. They could use their Android phones anywhere and at any time. Owing to the wide range of user-based options, this application is highly flexible. Furthermore, this application can effectively replace conventional recording methods, which can be used in various budgeting procedures. The LAMIKRO application helps small and medium-sized businesses (MSMEs) calculate cash flow, costs, revenue, and profit. Furthermore, this application meets the accounting requirements of the Indonesian Institute of Accountants for Micro, Small, and Medium Entities (MSMEs). The application was free to use after downloading.

This condition is supported by providing assistance for financial management or recording using a digital model with the LAMIKRO application for the MSME actors. Batik MSMEs in Malang City. This is an initiative to provide assistance in the Community Service Program of Wisnuwardhana University of Malang in collaboration with the University of Malaya Malaysia by providing assistance facilities and training with the hope that MSMEs can use digital finance to manage their businesses, especially digital recording in terms of purchases, sales, costs, banks and

cash. The objectives of the service activities include increasing insight, knowledge, application of technology, and skills in digital finance with the LAMIKRO application in which MSMEs are given special training and guidance.

METHOD

Community service activities were conducted in Batik Blimbing, Malang City, with several batik MSMEs. Several stages of community service activities provided training in basic financial reporting using digitalization methods to MSMEs

a. Early stage

In the initial phase of the activity, a survey and direct interviews were conducted with batik MSMEs in Malang City during a visit to their association in July, focusing on financial management issues. The results showed that most MSMEs were unable to prepare financial reports manually, which became an obstacle to accessing financing from financial institutions. As a solution, an alternative to digitally preparing financial reports is offered. This training activity was attended by 12 MSMEs, with the implementing team consisting of five lecturers from Wisnuwardhana University Malang (Master of Management, Accounting and Psychology Study Program), one lecturer from the University of Malaya, and students who played a role in the mentoring and community service process.

b. Implementation Stage

The focus of the community service program is to provide training to batik micro, small, and medium enterprises (MSMEs) in Malang to improve their digital financial record-keeping skills. Participants were instructed on how to use the LAMIKRO application and were required to use the platform to perform simple accounting. Training was conducted in two phases. First, they receive technical instructions on how to use the LAMIKRO application, and second, they are helped to apply the principles of business professionalism through the creation of computer- or mobile-based financial reports.

c. Training Methods

Three events are used in the training process:

1. Provides an explanation in the form of an introduction to the LAMIKRO application for transparent, neat, and efficient financial record keeping. This study rovides insights into the importance of digital financial knowledge or literacy in financial record keeping patterns.

2. Question and Answer Method

This method provides participants (MSMEs from Malang City's batik industry) with the opportunity to consult, engage in Q&A sessions, and practice what they've learned about the LAMIKRO application. This method provides participants with the opportunity to gain as much knowledge as possible regarding digital finance applications.

3. Simulation Method

This method provides trainees with the opportunity to apply training material, making it crucial for MSMEs. We hope that trainees will learn basic accounting records using the LAMIKRO application throughout their business.

RESULTS AND DISCUSSION

Community service activities were implemented at Batik Blimbing, Malang City, from July to August 2025. The head of the PKM activity, Dr. Ratnawati, and her team explained several problems faced by MSMEs when running their businesses because their lack of knowledge of digital finance. One of the problems faced by MSMEs is their lack of financial records. This includes the problem of accounting records which are still carried out conventionally, namely by using incomplete financial notebooks. Consequently, they often neglect manual recording because they are busy with their work. Conversely, actors lack knowledge and training in using such applications. Based on our previous experience with community service activities, other community service teams (Dr. M.Taufiq Noor Rokhman, Dr.Tasnim Nikmatullah Realita, Dr. Esy Suraeni Yuniwati, Ayu Agus Tya Ningsih, SE, M.Akun from Wisnuwardhana University and Dr. Norizah Mohd Mustamil from the University of Malaya Malaysia) and students provided assistance and training to create easy and simple financial reports based on accounting digitalization using the LAMIKRO application, which can be downloaded for free from the Cooperatives and MSMEs Office.

Financial management in the MSME sector faces many obstacles, some of which include failure to record incoming and outgoing transactions, which cannot be presented in financial reports. In addition to these issues, MSME batik producers in Malang City also face another challenge: they lack accounting data recording applications on their smartphones. By using Android and iOS-based accounting applications, MSMEs can improve their financial management and grow their businesses. By increasing capital, they can meet loan application requirements by presenting company financial reports.

Alternative Solutions Provided

In response to the challenges faced by MSMEs, particularly in terms of financial recording, several solutions are offered including:

- Conduct an evaluation of the financial transaction recording system currently used by MSMEs.
- 2. Providing gradual training, starting from conventional recording methods, and then switching to a digital system by referring to the LAMIKRO manual.
- 3. Introducing the concept of digital bookkeeping through practical training on the use of the LAMIKRO application.
- 4. Provides information regarding the components and materials needed to prepare digital financial reports.
- 5. Train participants to understand and differentiate between various types of financial transactions in a basic manner.

6. Providing technical assistance in using the LAMIKRO application for effective accounting records for micro and small businesses.

Lamikro Application

The following are several LAMIKRO applications that have been mastered by mentoring and training participants that can be downloaded at https://play.google.com/store/apps/details?id=alcorp.aldian.akutansi_ukm&hl=id:

1. LAMIKRO Registration Process

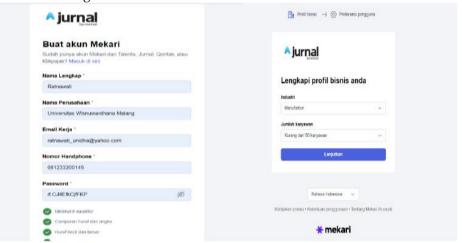


Figure 1. Application Registration Process

2. Production Features and Order Variants



Figure 2. Production Features and Order Fulfillment Features

3. Digital Cash & Bank Reports

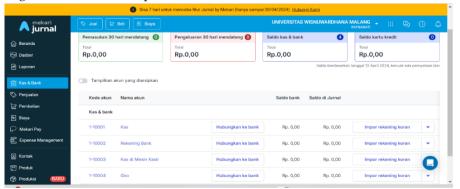


Figure 3. Example of Cash & Bank Report Application

4. Digital Sales Report

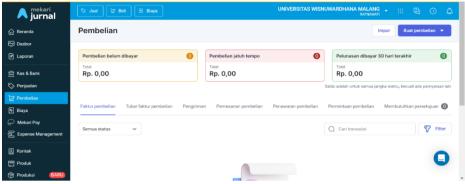


Figure 3. Example of a Purchase Application







Figure 4. Community Service Activities

Assistance with the use of the LAMIKRO application for batik MSMEs in Malang City had a positive impact on improving digital financial literacy. Through structured training, participants understood the importance of systematic transaction recording and began implementing simple digital-based bookkeeping. Most participants who were previously unfamiliar with financial recording have now shown progress in preparing their financial reports, both via computers and mobile phones. In addition

to improving technical skills, this activity encouraged a shift in the mindset of MSMEs towards more professional business management. Through simulations and hands-on practice, participants not only learned to use the LAMIKRO application but also understood the function and benefits of financial reports in business decision-making and access to financing. Mentoring is a strategic first step in strengthening the competitiveness of batik MSMEs through inclusive and sustainable digital transformation.

CONCLUSION

The conclusions of the LAMIKRO community service activities to provide assistance to Batik MSMEs in Malang City are as follow:

- 1. Digitizing financial records is a strategic step towards improving the professionalism and competitiveness of micro-enterprises. Through training and simulations, MSMEs have begun to understand the importance of structured financial reports as a basis for decision-making and access to financing. The implementation of the LAMIKRO application has been proven to simplify bookkeeping processes and provide a practical alternative for business owners previously unfamiliar with accounting systems.
- 2. Beyond its technical aspects, this mentoring program has also successfully raised awareness among MSMEs about the importance of digital financial literacy in the creative economy era. This activity not only provides skills but also encourages a shift in mindset toward more orderly and sustainable business management. With the support of academics across institutions and student involvement, this program exemplifies the synergy between higher education and community empowerment in driving the digital transformation of MSMEs based on local wisdom.

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