



Introduction to Simple Accounting Technology for Traditional Market Traders in Rural Indonesia for Daily Financial Management

Pengenalan Teknologi Akuntansi Sederhana Bagi Pedagang Pasar Tradisional di Pedesaan Indonesia untuk Pengelolaan Keuangan Harian

M. Anton Fatoni^{1*}, Jenni Veronika Br Ginting², Iip Dyah Kusumaningati³, Elizabeth⁴, Ngurah Pandji Mertha Agung Durya⁵

Published online: 1 Desember 2024

ABSTRACT

This Community Service activity aims to improve the financial literacy of traditional market traders in rural Indonesia by introducing simple accounting technology. This program was carried out online using the Zoom platform and involved 50 participants who were market traders from several villages. The training includes material on recording daily transactions, using simple accounting applications, and preparing financial statements. Program evaluation was carried out through pre-tests and post-tests to measure the improvement of participants' understanding and questionnaires to assess satisfaction with the training. The results showed a significant improvement in the participants' skills, with the average pre-test score of 38% increasing to 80% in the post-test. In addition, 90% of the participants were satisfied with the training methods. Although online implementation is effective, internet connectivity challenges in rural areas must be considered. This program shows that a technology-based approach can be a solution to increase financial literacy among market traders. It has the potential to be implemented more widely in efforts to empower the economy of rural communities. This research is expected to be a model for similar programs.

Keywords: financial literacy, online training, market traders, accounting technology, community service

Abstrak. Kegiatan Pengabdian Masyarakat ini bertujuan untuk meningkatkan literasi keuangan pedagang pasar tradisional di pedesaan Indonesia dengan memperkenalkan teknologi akuntansi sederhana. Program ini dilaksanakan secara daring menggunakan platform Zoom dan melibatkan 50 peserta yang merupakan pedagang pasar dari beberapa desa. Pelatihan meliputi materi pencatatan transaksi harian, penggunaan aplikasi akuntansi sederhana, dan penyusunan laporan keuangan. Evaluasi program dilakukan melalui pre-test dan post-test untuk mengukur peningkatan pemahaman peserta dan kuesioner untuk menilai kepuasan terhadap pelatihan. Hasil penelitian menunjukkan peningkatan keterampilan peserta yang signifikan, dengan rata-rata nilai pre-test sebesar 38% meningkat menjadi 80% pada post-test. Selain itu, 90% peserta merasa puas dengan metode pelatihan. Meskipun pelaksanaan secara daring efektif, namun kendala konektivitas internet di pedesaan perlu diperhatikan. Program ini menunjukkan bahwa pendekatan berbasis teknologi dapat menjadi solusi untuk meningkatkan literasi keuangan di kalangan pedagang pasar. Pendekatan ini berpotensi untuk dilaksanakan secara lebih luas dalam upaya pemberdayaan ekonomi masyarakat pedesaan. Penelitian ini diharapkan dapat menjadi model bagi program serupa.

¹ Universitas Tama Jagakarsa

² Institut Teknologi dan Bisnis Indonesia

³ Politeknik Stibisnis

⁴ Universitas Budi Luhur

⁵ Universitas Dian Nuswantoro

*) *corresponding author*

M. Anton Fatoni
Universitas Tama Jagakarsa

Email: antonutama152@gmail.com

Kata kunci: literasi keuangan, pelatihan daring, pedagang pasar, teknologi akuntansi, pengabdian masyarakat

INTRODUCTION

The development of information and communication technology (ICT) has had a major impact on various aspects of life, including the world of education. ICT improves access to educational resources by providing information

that goes beyond the confines of traditional textbooks, allowing students to explore a wide range of relevant knowledge. Digital platforms also offer flexibility in learning, which can be tailored to different individual learning styles and preferences (Anastasopoulou et al., 2024). In addition, ICT integration encourages the implementation of active learning strategies, where students become the center of the educational process (Bajac & Fišer, 2024). Digital tools are used by educators to create interactive and engaging learning experiences, which are proven to improve student engagement and their academic outcomes (Jamal et al., 2024).

Furthermore, ICT also promotes inclusivity and equality in education. ICT-enabled assistive technology provides opportunities for students with disabilities to get support tailored to their needs. In addition, the potential of ICT in bridging the education gap in underserved areas shows its important role in expanding access and realizing educational equality (Anastasopoulou et al., 2024). Nevertheless, challenges such as the digital divide remain barriers, which can exacerbate inequalities in access to technology and resources. Therefore, it is important to address this problem in order to maximize the benefits of ICT in the world of education.

Nevertheless, challenges such as the digital divide remain barriers, which can exacerbate inequalities in access to technology and resources. Therefore, it is important to address this problem in order to maximize the benefits of ICT in the world of education (Smith et al., 2020). This condition shows the urgency of introducing and understanding cybersecurity in the educational environment.

Previous studies have discussed the importance of digital literacy and cybersecurity among educators and students. A study by Johnson & Brown (2018) highlights the low level of cybersecurity awareness in high schools, while another study by Wang et al. (2019) emphasizes the need for ongoing training for teachers in understanding cyber threats. In Indonesia, research by Pratama & Santoso (2021) found that there are still many teachers who do not have basic knowledge about digital data security measures. In addition, some previous community service programs focused more on digital literacy in general, without any special emphasis on cybersecurity aspects (Hidayatullah et al., 2020).

However, to date, there is still a significant research gap, especially in the context of systematic introduction of cybersecurity for teachers and students in Indonesia. Community service activities that integrate the introduction of cybersecurity with a practical approach that suits the needs of schools are still very limited. This article aims to fill this gap by presenting an introduction to cybersecurity program designed specifically for teachers and students.

The existence of this article is crucial because cybersecurity not only serves as a protector of personal and institutional data, but also as a foundation for creating a secure digital learning environment. With the increasing reliance on technology during the COVID-19 pandemic, the threat to cybersecurity among educators and students is increasingly evident (Rahmawati et al., 2021). Therefore, this program is expected to be the first step in building sustainable cybersecurity awareness.

The purpose of this article is to describe the implementation of community service activities that focus on the introduction of cybersecurity for teachers and students in Indonesia, as well as to evaluate the effectiveness of the approach used in improving their understanding of cyber threats and mitigation strategies. Thus, this article not only makes a practical contribution, but also enriches the literature in the field of digital literacy and cybersecurity in the education sector.

LITERATURE OR CONCEPTUAL REVIEW

2.1. The Importance of Financial Management for Traditional Market Traders

Traditional market traders play a critical role in the economic activities of rural communities in Indonesia. However, their financial management practices are often limited due to a lack of access to formal education and financial training. Effective financial management, including income tracking, expense management, and savings planning, is crucial for sustaining their businesses and improving their livelihoods. Studies have shown that poor financial management among small traders contributes to low profitability and financial insecurity, especially in rural areas (Apriani et al., 2024).

2.2. Technology in Supporting Financial Management

Advancements in technology provide opportunities for simplifying financial management for small-scale traders. Various digital tools and mobile applications are designed to assist in bookkeeping, expense tracking, and financial reporting. For instance, research by Kumar et al. (2023) highlights the benefits of user-friendly accounting software in improving the accuracy and efficiency of financial management among micro-enterprises. However, these tools are often underutilized by rural traders due to barriers such as digital illiteracy, language, and financial constraints.

2.3. Simple Accounting Technology for Rural Communities

Several studies emphasize the need for simple, low-cost, and culturally appropriate financial management technologies tailored to rural communities. A study by Kamau et al. (2023) demonstrates that visual-based, mobile-friendly accounting tools can significantly enhance the adoption rate among users with limited education. Features like transaction categorization, visual graphs, and automated calculations have been proven effective in helping traders track their daily financial activities.

2.4. Challenges in Technology Adoption

Despite the potential benefits, rural traders face numerous challenges in adopting accounting technology. Limited access to smartphones, unstable internet connectivity, and lack of awareness about the importance of financial tools remain key issues. Moreover, the traders' focus on daily survival often overshadows their interest in long-term financial planning (De Vries, 2010). To overcome these challenges, capacity-building programs and technology literacy training are essential for empowering traders to adopt and sustain the use of such tools.

2.5. The Role of Community-Based Interventions

Community-based interventions have proven successful in promoting the adoption of financial management technologies among rural populations. Training sessions, peer mentoring, and partnerships with local organizations can create a supportive ecosystem for technology adoption. For example, Morepje et al. (2024) report that participatory workshops and tailored training programs significantly improve the traders' confidence in using financial tools.

RESEARCH DESIGN

The Community Service Program (PKM), titled "Introduction to Simple Accounting Technology for Traditional Market Traders in Rural Indonesia for Daily Financial Management," is carried out systematically in several stages, from planning to article preparation. The first stage is activity planning, which begins with a needs analysis. An initial survey was conducted on traditional market traders in rural areas to understand the extent of their financial literacy and the obstacles faced in

daily financial records. Interview and questionnaire techniques identify specific challenges traders face (Charman et al., 2017), especially concerning the lack of knowledge about simple accounting technology. Based on the results of this needs analysis, the team compiled training modules tailored to traders' needs. This module focuses on the basic concepts of simple and easy-to-apply financial journaling, including how to use a handy mobile-based app.

After the planning, the activity enters the implementation stage, which is carried out online through the Zoom platform. The online method was chosen to overcome geographical limitations and ensure that traders in remote areas could participate without leaving their markets. Before the training began, the program was socialized through various media, such as WhatsApp groups, digital posters, and announcements in traditional markets to increase participation. The training was carried out for two days, lasting two hours per session. The training material interacted with lecture methods, practical demonstrations, and question-and-answer discussions. The participants were introduced to simple and easy-to-use accounting technology in this session, especially in recording their daily income and expenses.

To ensure that the participants understand and apply the material taught, practical mentoring is carried out for one week after the main training. This assistance was carried out through a WhatsApp group, where participants could ask the facilitator team directly about the obstacles they faced in applying accounting technology that had been studied. In addition, the team also provided examples of daily financial recording cases as an additional exercise. This mentoring aims to build consistent financial recording habits among traders so they can be more independent in managing their businesses.

Furthermore, the evaluation stage is carried out to assess the program's success. This evaluation includes pre-tests and post-tests to measure changes in participants' understanding of accounting literacy before and after training. The results of the pre-test and post-test were analyzed to see the extent to which this program improved participants' financial literacy. In addition, participant satisfaction questionnaires were collected to assess the effectiveness of the training methods used and get input on aspects that need to be improved. The team also made indirect observations through interactions in WhatsApp groups to see how traders applied the knowledge they had gained.

After completing all the activities, the last stage is documentation and article writing. All data obtained from pre-test, post-test, and questionnaire were analyzed comprehensively. The main findings of this program are then compiled into scientific articles ready to be submitted to the PKM Sinta 4 journal. This article includes sections such as introduction, methods, results, discussion, and conclusions that focus on the program's impact on improving traditional market traders' accounting skills. Before submission, the article is reviewed by a team of academics to ensure the quality of writing and conformity with journal standards. By writing this article, it is hoped that the PKM program can contribute to community service literature and provide inspiration for similar programs in the future.

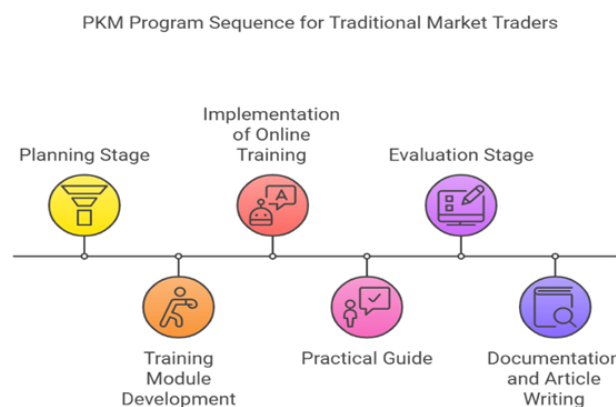


Figure 1. Steps to Implement the PKM Program

RESULTS

In this section, the results of the program "Introduction to Simple Accounting Technology for Traditional Market Traders in Rural Indonesia for Daily Financial Management" are presented systematically. Program evaluation is done by collecting data through pre-test, post-test, satisfaction questionnaire, and observation during training and mentoring sessions. The results obtained were analyzed quantitatively and qualitatively to see the impact of training on improving traders' accounting literacy.

4.1. Pre-Test and Post-Test Evaluation Results

To measure the effectiveness of the training, a pre-test is conducted before the program starts, and a post-test is performed after the training is completed. The data obtained showed a significant improvement in the participants' ability to record daily finances.

Table 1. Results of Pre-Test and Post-Test of Trader's Accounting Literacy

No	Assessed Aspects	Average Pre-Test Score	Average Post-Test Score	percentage Increased
1	Understanding transaction recording	45%	80%	35%
2	Simple use of accounting applications	30%	75%	45%
3	Preparation of simple financial statements	40%	85%	45%

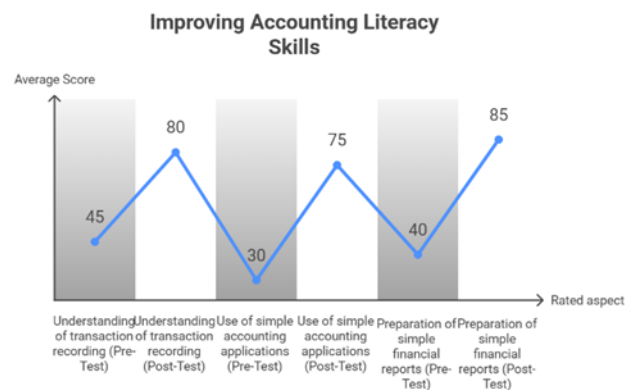


Figure 2. Results of Pre-Test and Post-Test of Trader's Accounting Literacy

The data above shows a significant increase in participants' understanding of recording daily transactions and preparing simple financial statements. Before the training, the average participant only had a 45% understanding of transaction recording, which increased to 80% after the training. This shows that training provided online via Zoom can help improve traders' financial literacy even though it is carried out virtually.

4.2. Analysis of Participant Satisfaction Questionnaire

After the training, a questionnaire was distributed to assess participants' satisfaction with the program. Some aspects evaluated include the clarity of the material, training methods, and the program's benefits.



Figure 3. Participant Satisfaction Level with Training Program

Based on the diagram above, most participants (90%) were satisfied with the training. They judged that the training materials were easy to understand and relevant to their needs as traders. This satisfaction shows that the interactive approach used in online training has provided an effective and meaningful learning experience for the participants.

DISCUSSION

The results of the evaluation showed that simple accounting training conducted online was able to improve the financial literacy of traditional market traders. This finding aligns with research conducted by Karadag (2015), which found that using technology in financial training can increase the effectiveness of financial recording among small business actors. Other research by Lusimbo & Muturi (2016) also shows that better financial literacy contributes to improved economic management and profitability of micro businesses.

However, online training has challenges, especially related to internet access constraints in rural areas. Based on observations, some participants had difficulty attending the full training due to unstable internet connections. This shows that although online training offers flexibility, adequate infrastructure support is still needed to achieve optimal results (Roddy et al., 2017).

From the results and discussion above, it can be concluded that this PKM program has succeeded in improving traders' ability to manage their finances through simple technology. The novelty of this program lies in the use of digital platforms that can be accessed in rural areas with limited resources. In addition, this program makes a practical contribution to traditional market traders in adopting technology for daily financial management, which can ultimately improve their well-being (Ascarya, 2022).

CONCLUSIONS

Based on the evaluation of the program "Introduction to Simple Accounting Technology for Traditional Market Traders in Rural Indonesia for Daily Financial Management", it can be concluded that online training is effective in improving the financial literacy of market traders. There was a significant improvement in participants' understanding of recording daily financial transactions and compiling simple reports after participating in the training, as evidenced by the

pre-test and post-test results. The program successfully introduces simple financial recording technology and improves financial management skills, which is expected to support the sustainability of traders' businesses.

However, online implementation faces several obstacles, especially regarding internet access in rural areas. This shows that digital infrastructure support still needs to be improved so that more micro-business actors in remote regions can utilize technology for their financial management. Overall, the PKM program successfully achieved its goals and showed that technology-based training can be an effective solution to increase the capacity of traditional market traders to manage their finances more efficiently and independently. The success of this program is expected to be a model for similar initiatives in the future to empower the community through financial literacy.

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