

Training on Management Control System in Printing Entrepreneurs

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ABSTRACT

This community service activity aimed to improve the management control systems of print entrepreneurs around Universitas Syiah Kuala (USK). The main issue was the lack of understanding and implementation of effective control systems, leading to operational inefficiencies. Using a Service Learning approach, 10 entrepreneurs participated in training led by experts from Universiti Malaysia Sabah (UMS) and USK. The training covered management control concepts and introduced basic technology tools to support business operations. Results showed a 25% increase in participants' understanding of management control systems and an 85% adoption rate of the techniques and technologies introduced. . These improvements contributed to better business efficiency and align with Sustainable Development Goal 8, which emphasizes decent work and economic growth. This activity demonstrated that tailored training programs can significantly enhance small business operations and can be replicated for broader impact.

1. Introduction

Managing management control systems has become an essential issue at the global level, especially for creative industry sectors such as printing businesses (Putra & Pontjoharyo, 2023; Siregar et al., 2022). In the Industrial Revolution 4.0 era, operational efficiency and effective control are significant challenges for many small and medium-sized enterprises (SMEs), especially amid the rapid development of digital technology (Fonna, 2019). Globalization also affects market dynamics, where business sustainability is increasingly tied to good managerial skills (Crane et al.,

2019; Oyeveaar et al., 2017). In addition, achieving the Sustainable Development Goals (SDGs), particularly goal 8 on decent work and economic growth, requires increasing the capacity of local entrepreneurs to manage effective control systems to support sustainable productivity (Frey, 2018; Rai et al., 2019).

However, a problem often encountered by local printing entrepreneurs around Syiah Kuala University (USK) is an in-depth understanding of the importance of a structured management control system. That leads to operational inefficiencies, resource management problems, and difficulties in achieving sustainable growth. Weak management control systems also hinder businesses from adapting to changing market demands, often resulting in business stagnation (Fiksel & Fiksel, 2015). This problem is also related to SDG goal 9: build resilient infrastructure, promote inclusive and sustainable industrialization, and encourage innovation (Imaz & Eizagirre, 2020).

Some literature shows that implementing a sound management control system can improve operational efficiency and business competitiveness (Diefenbach et al., 2018; Laguir et al., 2022; Nilsson et al., 2011; Simons, 2019; Tsamenyi et al., 2011). Theoretical studies on management control emphasize the importance of data- and technology-based management in creative business management (Dana et al., 2021; Thamhain, 2014; Zhou & Verburg, 2020). The study results show that training and socialization related to management control systems can significantly help entrepreneurs overcome these problems (Halim, Kesuma, Siregar, Riyaldi, et al., 2023; Halim, Novindra, et al., 2024; Halim, Permata, et al., 2024; Halim, Ramadhani, et al., 2024; Riyaldi, Halim, Firdaus, et al., 2024; Riyaldi, Halim, Nurdin, et al., 2024; Riyaldi, Syahrizal, et al., 2024; Yusrizal et al., 2024). Based on previous reports, local entrepreneurs who received intensive training in management control managed to increase their business productivity and efficiency by up to 30% (Halim, Kesuma, Siregar, Syahrizal, et al., 2023; Iskandarsyah et al., 2023; Khan & Abdullah, 2019). The gap analysis shows that local printing entrepreneurs lack the implementation of new technologies and data-driven management approaches. Given this limited knowledge, solutions must be implemented immediately to reduce the negative impact on business sustainability and boost local economic growth.

In this community service activity, the innovative approach is applying information system-based management technology to strengthen the management of printing houses. This technology is designed to be accessible and usable by small businesses at a relatively low cost but still able to significantly impact operational efficiency. The main objective of this service is to provide local printing entrepreneurs and USK Press staff with a deeper understanding of the importance of management control systems in supporting sustainable business growth. In addition, the writing of this article aims to document the methods and results of this activity as a contribution to the SME management development literature, especially in the printing sector.

The contribution of this article is twofold. First, for the development of science and technology, this article is expected to provide a model for implementing a technology-based management control system relevant to SMEs in the creative sector. Second, to achieve SDGs, this article supports goals 8 and 9 by offering solutions that can be applied to encourage local economic growth and sustainable industrial development through management innovation.

2. Methods

This service activity targeted the community of printing entrepreneurs around Syiah Kuala University (USK) and USK Press staff, with 10 participants. The background of this community

shows that the majority of entrepreneurs have limitations in terms of managing management control systems, which impact operational inefficiencies and business productivity. The participants were actively involved in each socialization and training session and directly applied the management control concepts that had been delivered during the activity.

Several parties were involved in this activity, and they had various backgrounds and expertise. Associate Professor Mohd Rahimie Bin Abd Karim from Fakulti Perniagaan, Ekonomi & Perakaunan, Universiti Malaysia Sabah (UMS), delivered insights on applying management control systems from an academic and industrial perspective. Associate Professor Suddin Bin Lada, also from Fakulti Perniagaan, Ekonomi & Perakaunan, Universiti Malaysia Sabah (UMS), provided knowledge related to innovation in management. Meanwhile, M. Ridha Siregar, S.E., M.M., Head of USK Press, provided practical insights and was the primary liaison in implementing this service activity.

The implementation of this activity utilizes the Service Learning (SL) method, where participants actively learn while contributing to their community. The first stage is preparation, which involves developing socialization materials relevant to local printing businesses' needs. Afterwards, in the implementation stage, participants received training that included theoretical presentations, interactive discussions, and case studies of management control system implementation. Next, participants directly implemented the concepts they had learned in their businesses. Finally, an evaluation phase assessed the participants' application and understanding of the systems taught.

The knowledge and technology introduced in this activity included a computer-based information system designed to help printing businesses manage their resources more efficiently. This technology utilizes simple information systems that are easily accessible and usable by small businesses to improve operational efficiency and data-driven decision-making. In this activity, several instruments were used, such as management control training modules, information system software, and evaluation tools in the form of questionnaires. This questionnaire measured the participants' level of understanding before and after the training and the application of the concepts learned in the field. In addition, direct observation and interviews were also used to collect data on changes in participants' understanding and application of the management control system.

Several indicators measured the success of the activity. First, the increase in participants' understanding was measured through a comparison of the results of the questionnaire before and after the training. Second, the implementation of the management control system was measured through interviews and observations regarding the application of concepts in the participants' businesses. Third, satisfaction surveys related to training materials and methods measured participants' satisfaction with the activities. Lastly, the increase in operational efficiency was measured from the reports provided by participants on the impact of implementing the system they had learned.



Figure 1. Documentation of speakers and participants

The data obtained were analyzed descriptively, qualitatively, and quantitatively. Qualitative data was analyzed to understand changes in participants' behaviour and understanding, while quantitative data was analyzed using simple statistical methods such as averages and percentages. This combination of analysis provided an overall picture of the effectiveness of the service activities in improving the ability of local printing entrepreneurs to manage their businesses more efficiently.

3. Result and Discussion

The results of this community service activity are relevant to increasing printing entrepreneurs' understanding and skills in managing the management control system. Based on the results of evaluations conducted before and after the activity, there was a significant increase in participants' understanding of management control concepts. That can be seen from the questionnaire results, which show an increase in the average score from 65% before training to 90% after training (see Table 1).

Table 1. Improvement in Participants' Understanding Before and After Training

Indicator	Before (%)	After (%)
Knowledge the Concept of Management Control	65	90
Application of Management Control System	50	85
Satisfaction with the Material	75	95

In addition, the results of interviews with participants showed that most participants had successfully implemented some management control concepts in their business operations, such as more organized record keeping and simple information systems to monitor financial flows and

raw material stocks. Some participants also reported improved efficiency in the production process after implementing the suggestions provided during the training.



Figure 2. Presentation of award certificates to speakers and moderator

Regarding information system implementation, participants who had not previously used technology for business management showed significant progress in adopting the computer-based technology introduced during the activity. Although some participants still need time to adapt, the application of this technology is expected to grow over time.

Compared with the theory and literature discussed in the introduction, this activity's results align with management control theory, which states that a sound control system will improve the efficiency and effectiveness of business operations (Simons, 2019). That is also in line with the results of a similar service activity reported by (Halim, Kesuma, Siregar, Syahrizal, et al., 2023; Iskandarsyah et al., 2023; Khan & Abdullah, 2019; Majid et al., 2021), where introducing simple technology in managing small and medium enterprises increased business productivity and profitability. In the context of achieving the Sustainable Development Goals (SDGs), this activity contributes to SDG goal 8 on decent work and economic growth, specifically in increasing the productivity of small businesses through training and technology.

Table 2. Indicators of Successful Implementation of the Management Control System

Indicator	Target (%)	Result (%)
Knowledge Improvement	80	90
Implementation of Control System	70	85
Participant Satisfaction	90	95

The obstacles faced during this service activity are mostly related to the limited technology owned by some participants. Some printing entrepreneurs are not accustomed to using computer

devices or information systems, so it takes more time to adapt to the technology introduced. This obstacle is expected in adopting new technology, especially in the small business sector, which generally needs more resources. Low technological literacy has also been reported as an obstacle in similar service activities in several other studies, such as Al-Hassan (2019), who found that small businesses in developing regions experience difficulties in technology adoption due to limited skills and infrastructure.

Nevertheless, overall, this activity succeeded in having a significant positive impact on the participants. Increased understanding and ability to manage management control systems are results that deserve to be used as best practices for other service activities. The service learning approach, which involves active participation from participants and the introduction of technology relevant to their needs, has proven effective in providing solutions to the problems faced by printing entrepreneurs.

4. Conclusion

The socialization of a management control system management in the printing business successfully achieved its primary objective, namely increasing the understanding and ability of printing entrepreneurs around Syiah Kuala University to implement an effective management control system. Based on the results of the questionnaire, there was an increase in participants' understanding from 65% to 90%, as well as an increase in the application of the management control system from 50% to 85%. Participants also showed high satisfaction with the materials and methods used, with the satisfaction level reaching 95%.

The results of this activity provided significant benefits, especially in improving the operational efficiency of the printing business. Entrepreneurs involved in this activity began to adopt simple technology to manage their resources, which is expected to support their business growth in the future. This activity also contributes to achieving the Sustainable Development Goals (SDGs), particularly SDG 8 on decent work and economic growth, by providing solutions that support small business productivity.

Overall, this activity demonstrates that a Service Learning approach involving hands-on training and applying relevant technology can provide practical solutions to the challenges faced by small businesses and can be used as a model for other community service activities.

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