



Utilization of Financial Re-engineering for the Development of MSMEs in Malang Regency

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ABSTRACT

The Utilization of Financial Re-engineering for the Development of MSMEs in Malang Regency
Financial re-engineering is a way to maximize the management system of MSMEs. The implementation of introducing financial re-engineering to MSMEs includes debt restructuring, cash optimization, and the use of technology for financial bookkeeping. From the results of the mentoring implementation, there has been an increase in the use of technology for financial bookkeeping and cash optimization, such as making purchases with deferred payments and providing incentives/flexibility in payments to buyers

INTRODUCTION

Utilization of Financial Re-engineering for the Development of SMEs in Malang Regency is a way to maximize the management system of MSMEs. The implementation of financial re-engineering introduction to MSMEs includes debt restructuring, cash optimization, and the use of technology for financial bookkeeping. From the results of the mentoring implementation, there has been an increase in the use of technology for financial recording and cash optimization, such as making purchases with deferred payments and providing incentives/payment flexibility to buyers . The use of technology is something that cannot be avoided by MSMEs in order to develop and is widely used by the accommodation and food service business sectors (Handayani et al., 2021). Micro, Small, and Medium Enterprises (MSME) in Indonesia are vital to the Indonesian economy. According to data from the Ministry of Cooperatives and Small and Medium Enterprises (KUKM), SMEs in 2024 contributed more than 61% of Indonesia's GDP and employed around 97% of the non-agricultural workforce (KUKM, 2024). With a total of 65.4 million business units, they can absorb 123.3 thousand workers. This proves that the impact and contribution of MSMEs are very significant in reducing the unemployment rate in Indonesia. Thus, the expansion of MSMEs is very important to drive national economic growth and create more jobs. Although their contribution is quite significant, MSMEs still face various obstacles, especially in terms of effective financial management.

One of the most common problems encountered by many MSME actors is the lack of knowledge and ability in managing the company's finances. Most MSME actors still use financial recording methods that are not sophisticated and not always well-organized. As a result, they have a poor understanding of their company's financial health and struggle with financial planning and data-driven decision-making. For example, many MSME actors cannot obtain financing from conventional financial institutions due to their inability to present clear and credible financial records.

For that reason, financial re-engineering in MSME businesses becomes very important. Financial re-engineering implies an action that involves the adoption and simulation of interrelated fields of study (especially re-engineering, computing, and mathematics) to solve problems related to finance. The development of financial re-engineering is inevitably linked to the advancement of other fields of study that serve as tools for financial interaction, manipulation, simulation, determination, and decision-making (Okunlola & Aregbeshola, 2024). The financial re-engineering referred to here is the implementation of a more structured and technology-based financial management system to help SMEs improve the efficiency of their financial management (Endah Setyowati, 2024; Kudus & Re-engineering, 2021). Through the application of information technology in transaction recording, budget planning, and financial reporting, MSMEs can more easily monitor their financial condition and optimize the use of existing resources (Sienatra et al., 2024). Several studies show that the proper application of financial re-engineering can enhance the competitiveness of SMEs

in the market and increase their chances of obtaining funding from various sources (Reni, 2018).

In this context, the community service being conducted aims to provide training to MSME actors, especially MSMEs in the Malang Regency area, on how to manage their business finances using simple and affordable technology and financial re-engineering methods. It is hoped that with a better understanding of business finance, MSMEs will be more capable of surviving and thriving amidst increasingly fierce competition. This program also aims to encourage MSME actors to be more innovative in utilizing digital technology to improve operational and administrative efficiency.

METHODS

This activity is conducted with intensive guidance both online and offline in introducing technological tools that can be used with online tutorials and offline assistance. This activity was attended by a total of 24 assisted MSMEs in Malang Regency, which are being mentored in Pakis District. Of the total 24 SMEs, they operate in various fields such as food, beverages, crafts, and services. Before conducting the mentoring activities, participants were observed to find out what financial re-engineering practices had already been implemented by the SMEs.

Table 1. Pre-Test Financial Re-Re-engineering by MSMEs

No	Financial Re-Re-engineering Form	Before	After
1	Pre-Test Financial Re-engineering by MSMEs Selling unused old assets	3	21
2	Using technology like Excel for record-keeping	0	24
3	Using loans to increase capital	7	17
4	Pawning items for capital	1	23
5	Negotiating a deferral of debt payment	2	22
6	Offering flexible payment methods	5	19

From the results of the pre-test implementation, it was found that the majority of participants had never engaged in financial re-engineering practices, particularly the use of technology such as Excel for record-keeping, as none of the participants had used it. Then, the most common form of financial re-engineering practiced is using loans to increase capital in their business. In the process of implementing the mentoring, it begins with several stages:

1. Brief observation of the business profile of each MSME
2. Conduct a pre-test on financial re-engineering that has been done
3. Provision of material on financial re-engineering
4. Evaluation of material understanding with a case study on financial re-engineering
5. Mapping the results of financial re-engineering utilization that can be used

RESULT AND DISCUSSION

In carrying out activities, MSME actors are observed regarding the financial engineering activities they have carried out and the use of technology to support their businesses. The observation results show that there are still few MSMEs that carry out financial engineering and use technology. Observations are made to determine training materials that can be used to help MSMEs. In conducting training on financial re-engineering material, an understanding of the objectives of financial re-engineering is provided, namely:

1. Operational Efficiency: Reducing financial waste and increasing profitability.
2. Risk Management: Minimizing financial risk with a healthier plan.
3. Business Growth: Creating financial capacity for business development, whether through expansion or innovation.
4. Business Sustainability: Enhancing the company's resilience to external challenges such as economic crises.

From the objectives of financial re-engineering, it then continues with the elements of financial re-engineering that can be taught to MSMEs, as shown in the following figure 1.



Figure 1. Elements of Financial Re-engineering

Practical examples of financial re-engineering elements that can be implemented by MSME actors are as follows:

1. Debt Restructuring: Renegotiating debt obligations to reduce interest burdens or extend payment terms.
2. Cash Flow Optimization: Restructuring income and expenses to ensure liquidity sustainability.
3. Use of Technology: Integrating technology systems for efficient financial reporting and monitoring.
4. Reformulation of Funding Strategy: Switching to more affordable or flexible financing methods, such as crowdfunding or fintech.



Figure 2. Assistance in Using Technology for Bookkeeping

One form of financial re-engineering training is by using technology in the form of Microsoft Excel with templates provided in the Microsoft Excel application. The activity begins with questions to the participants about the challenges they face, such as recording transactions, calculating profits, and creating simple reports. During the session mentoring process, the mentors taught the basics of Excel: how to create tables, use simple formulas like SUM and AVERAGE, and utilize the graphing features for data visualization. During the mentoring sessions, the mentors taught the basics of Excel: how to create tables, use simple formulas like SUM and AVERAGE, and utilize the graphing feature for data visualization. In the process before creating bookkeeping using Microsoft Excel, several things were taught for SMEs to pay attention to: In the process before creating bookkeeping using Microsoft Excel, several things are taught for the attention of MSMEs:

1. Separate Personal and Business Finances: ensure that personal finances do not mix with business finances. Create a separate bank account for the business to make it easier to monitor cash flow.
2. Record All Transactions: using simple tools like a cash book or applications like Microsoft Excel to record daily income and expenses. This helps track cash flow and identify spending patterns.
3. Create Simple Financial Reports: create financial reports such as daily expenses and income
4. Financial Analysis: use data from the financial report to evaluate business performance. Identify areas that need improvement, such as reducing operational costs or increasing production efficiency.
5. Plan the Budget: create a monthly budget to control expenses and ensure sufficient funds for operational needs and investments.

In the mentoring process, there are several difficulties encountered in providing support for financial re-engineering, especially in the use of technology:

1. MSMEs tend to be very cautious in conducting financial re-engineering such as using debt, providing payment relief to increase sales, and making purchases on credit.

2. MSMEs have difficulty separating business assets from personal property.
3. MSMEs have difficulty using formulas in Excel such as the SUM, SUM IF, and Average formulas.

CONCLUSION AND RECOMMENDATION

From the implementation of this community service activity, there are several things that can be found. First, knowledge of financial re-engineering is rarely heard of, but its application is very simple and can be done by SMEs. Second, one of the financial re-engineering practices, namely the use of technology, needs to be implemented, especially in bookkeeping, because it provides benefits where SMEs can distinguish between personal assets and business assets. Third, the use of technology that can help, such as financial bookkeeping using Excel applications, is important because it can prove the existence of an MSME and make it easier to obtain loans. In the future, there needs to be incentive-based assistance, especially in exploring various possibilities of financial re-engineering that can be implemented by MSMEs. And also create financial report templates based on the types of MSME sectors to make it easier for MSMEs to input each transaction according to its category.

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