302-Article Text-366-1-10-20240925.pdf

Unika Soegijapranata1

Document Details

Submission ID
trn:oid:::28973:96965414

Submission Date
May 21, 2025, 11:48 AM GMT+7

Download Date
May 21, 2025, 11:51 AM GMT+7

File Name
302-Article Text-366-1-10-20240925.pdf

File Size
426.7 KB

7 Pages

3,049 Words

17,112 Characters

6% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

Filtered from the Report

- Bibliography
- Small Matches (less than 8 words)

Exclusions

- 3 Excluded Matches

Match Groups

15 Not Cited or Quoted 6%
Matches with neither in-text citation nor quotation marks

0 Missing Quotations 0%
Matches that are still very similar to source material

1 Missing Citation 1%
Matches that have quotation marks, but no in-text citation

0 Cited and Quoted 0%
Matches with in-text citation present, but no quotation marks

Top Sources

5% Internet sources
3% Publications
1% Submitted works (Student Papers)

Integrity Flags

0 Integrity Flags for Review

No suspicious text manipulations found.

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.

Match Groups

15 Not Cited or Quoted 6%
Matches with neither in-text citation nor quotation marks

0 Missing Quotations 0%
Matches that are still very similar to source material

1 Missing Citation 1%
Matches that have quotation marks, but no in-text citation

0 Cited and Quoted 0%
Matches with in-text citation present, but no quotation marks

Top Sources

5% Internet sources
3% Publications
1% Submitted works (Student Papers)

Top Sources

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

1	Internet	chwcentral.org 3%
2	Internet	eprints.unm.ac.id <1%
3	Internet	documents.wfp.org <1%
4	Publication	B J Maspaitella, A Susanty, R Purwaningsih. "Waste transportation route garbage ... <1%
5	Submitted works	Laureate Higher Education Group on 2012-12-18 <1%
6	Submitted works	Universitas Katolik Indonesia Atma Jaya on 2022-05-20 <1%
7	Internet	library.oapen.org <1%
8	Internet	lifescifi.com <1%
9	Internet	rassweb.org <1%

An Analysis of the Potential Implementation of MSME Ecoefficiency through Cost Identification Assistance

Stephana Dyah Ayu Ratnaningsih[1], *Stefani Lily Indarto*[2*], *Emilia Ninik Aydawati*[3], *Ekawati Marhaenny Dukut*[4]

[1,2]Department of Accounting, Faculty of Economics and Business, Soegijapranata Catholic University, Indonesia
[3,4] Department of English, Faculty of Language and Arts, Soegijapranata Catholic University, Indonesia

Abstract. Abstract. This study focuses on how to help MSMEs identify costs and find alternative methods so that they can implement eco-efficiency. This is done to help MSMEs support environmental sustainability better. The object of research and service carried out is MSMEs located in the Semarang area of Indonesia. The method used was service learning. In this method, student participants learn to understand the concept of cost in actual business practice by doing community service in MSMEs. The results of this research and service showed that although cost identification can be done, the identification process is quite difficult due to the lack of financial records carried out by MSME owners. In addition, the results of service-learning show that only a few MSMEs have great potential to implement ecoefficiency because the focus on human resources hampers them and the cost leadership strategies implemented by MSMEs.

1 Introduction

Micro, Small, and Medium Enterprises (MSMEs) play an important role in community empowerment. They not only contribute to the economy but also have significant social impacts, such as how MSMEs can help improve the economic welfare of individuals and families through technical, managerial, or entrepreneurial skills and even provide opportunities for marginalized or underserved groups, including people with disabilities, to participate in economic activities and improve their quality of life [1]. MSMEs that can produce goods and services that are unique and regionally distinctive can have a competitive advantage and support local cultural identity. MSMEs are often a source of innovation and creativity, developing new products and services that meet the needs of regional and global markets. The ability of MSMEs to adapt quickly to changing market and economic conditions allows them to keep growing and contribute to positive economic dynamics. Strong MSMEs contribute to the development of a healthier and more competitive business ecosystem, which can attract investment and create new business opportunities.

One of the learning models that combines academic learning with service to the community is service learning. This learning model is a very effective means to have a positive impact, both on students and on MSMEs themselves [2]. With service learning, students will gain practical experience and application of theory in the real world, develop their professional skills, such as the ability to communicate, collaborate, and problem solve, and increase empathy and social responsibility. As for the MSMEs themselves, this service learning helps them to get innovative solutions and technical assistance, as well as gain new perspectives from students, so that it helps them to plan better business strategies and manage

finances more efficiently. MSMEs can identify areas where they can reduce expenses and improve operational efficiency [3].

Service learning in these MSMEs has great potential to create eco-efficiency and environmental sustainability by providing the knowledge, skills, and resources needed to adopt more sustainable business practices, which not only reduces costs but also improves its environmental image [4].

With effective collaboration between academia and businesses, MSMEs can transform into entities that are not only economically profitable but also help MSMEs become more efficient and sustainable in their businesses. Communities can also experience social and economic benefits. With good collaboration and a structured approach, these activities can generate significant positive impacts for MSMEs and their surrounding communities. In addition, this collaboration supports sustainable development goals and promotes responsible business practices.

2 Methodology

In the research and service carried out, there are several stages carried out in order to achieve the expected goals. The stages carried out are as follows:

2.1 Preparation:

2.1.1 Identifying courses that can be used to achieve activity objectives.

The current learning process is based on the learning outcomes expected by the study program. Therefore, in determining the courses that will be used in this research and service, the team first reviews the expected learning outcomes of the courses offered. This research and service were carried out by involving students of the accounting and Englishpreneurship departments at Soegijaparanata Catholic University. The activity period was the even semester of FY 2023–2024. The review results show that two courses are appropriate for use in this activity, namely cost accounting courses and understanding accounting. The cost accounting course is offered by the Department of Accounting at the Faculty of Economics and Business. At the same time, the Understanding Accounting course is provided by the Faculty of Language and Arts (FLA).

2.1.2 Revising the Semester Learning Plan

The next step is to revise the semester learning plan that will be applied during the semester. This is done in order to achieve the objectives of the research and service carried out. The revision of the semester learning design was carried out on cost accounting courses and understanding accounting courses. Changes made to the learning method are not on the topic of the material or the expected learning outcomes in the course. Changes were made to the assignments given, namely by including elements of cost identification and ecoefficiency analysis.

2.1.3 Participant Team Formation and Activity Design

The next stage is to form a team involving the two classes that are used as participants in this research and service. After the team is formed, each team is expected to develop an activity design. The design includes the stages of activities they will carry out related to the assignment given and timelines for each activity.

2.2 Implementation

The implementation stage is carried out after the preparation is complete. In this implementation process, students first get material related to the assignment. The material associated with the implementation of service learning is the subject matter related to costs

and financial reporting carried out by business actors. After understanding the concept of cost, they carry out the mentoring process for MSME owners.

Using observation and interview methods, they learn to identify costs in a real business. This will help them understand the concept of cost better. After costs can be identified, the next step is to analyze the eco-efficiency that can be achieved in the assisted MSMEs.

2.3 Reflection

The end of the service-learning process is the reflection process. This reflection process is an important stage in service learning. In this process, participants are expected to give meaning to the service-learning process that they completed.

3 Results and Discussion

3.1. Preparation

After the service team had completed the preparation of stages 1 and 2 related to lecture support, they carried out stage 3, namely the formation of the participant team and the implementation of activities. The team then carried out several stages related to the formation and coordination of the participant team, consisting of students in cost accounting classes and those who understand accounting classes. Sub-stage 3 in preparation is described as follows:.

Phase 1: Public lecture on the theme of cost and eco-efficiency

The service team facilitated the formation of participant groups by introducing prospective participants from different study programs. The facilitation was in the form of a public lecture class, which discussed costs and eco-efficiency. The public lecture class was attended by students taking cost accounting and understanding accounting courses.

3.1.1. Stage 2: Group Formation

This service-learning activity is not mandatory. Thus, in the general lecture, the service team offered the choice to participate or not to participate in this activity. Students who want to participate are then referred to as participants. In the lecture, the team guided students who were willing to become participants to form groups. Each group was formed based on existing class dynamics, not the formation of the service team. From the results of the class dynamics, seven participant groups were formed. Each team consists of 6-7 students who come from two study programs, namely the study program.

3.1.2. Stage 3: Selection of MSME

Table 1. Business fields of assisted MSMEs

Participants	Business Field	Products	Lokasi
Group1	Food production	*Martabak and Kue Bandung*	North Semarang Subdistrict
Group2	Craft production	Bouquet	Banyumanik Subdistrict
Group3	Food production	Coconut ice and *sempolan*	Banyumanik Subdistrict
Group4	Food production	*Risol mayo*	West Semarang Subdistrict
Group5	Food production	*Batagor*	Gajahmungkur Subdistrict
Group6	Food production	*Siomay*	Banyumanik Sub-district
Group7	Food production	Pastries	Central Semarang Subdistrict

The service team provides several alternative MSMEs that can be used as a place of service. The service team gave each participant team the freedom to choose MSMEs from the alternatives provided or find the MSMEs that they wanted to assist. The participant team

was given one week to determine the choice of MSMEs they tried to assist. After conducting observations, interviews, and discussions with the service team, each group of participants was finally able to determine the MSMEs that were targeted for service. The MSMEs selected as partners are spread across five sub-districts in Semarang city. The majority of the chosen MSMEs are located in the Banyumanik sub-district. This is because the MSMEs are located close to the location where the participant group lives. Details of the types of target MSMEs can be seen in Table 1 below.

3.1.3. Stage 4: Coordinate activities.

The participant team then coordinated with the assisted MSMEs. The service team assisted so that the process of communication and coordination between the participant group and the MSMEs targeted for assistance could run smoothly. The participant team is responsible for designing time and activity arrangements and coordinating with existing MSMEs.

3.2.Implementation

The participants had two primary assignments to carry out. The first assignment was to identify the costs incurred by MSMEs in the production process. Meanwhile, the second assignment was to analyze strategies that MSMEs can implement to become more eco-efficient. Each group of participants determined detailed activity stages and schedules related to these activities. In general, the mentoring process went smoothly. The main difficulty faced by the participant groups was the schedule. This is because the learning system at SCU allows students to choose which classes to take each semester. The impact is that each child tends to have a different schedule from one another. In addition, MSMEs often have sudden activity schedules, such as when they are participating in organizing bazaars or family activities. However, with a family approach, schedule problems can always be appropriately resolved.

3.2.1. Cost Identification

Table 2. Identification of Costs in MSMEs Using the Order Costing Method

Participants	Production characteristics	Weaknesses of Cost Calculation by MSMEs	The role of the participant group	The method of calculating COGS is considered appropriate by the group.
Group 2	Products are made to order. Each product is unique according to customer demand.	The bouquet orders received vary significantly in content and shape. Raw materials are purchased in bulk, but not every time there is an order. This makes it difficult for the owner to determine the production cost for each order.	The team helped create a calculation table to facilitate the calculation of the cost of each order. The team also helped identify existing production costs.	Cost of Goods Ordered
Group 4	Products are made to order. Customers can modify the contents of the products they want to order.	MSME owners initially do not take into account labor costs or overhead. costs such as auxiliary materials, gas, and electricity because the production process is carried out at home.	The participant team helps identify costs. that should be charged to the production process.	Cost of Goods Ordered

Group 7	Products are made according to the order. Customers can modify the contents or packaging of the products they want to order.	MSME owners initially did not calculate labor costs. On some special packaging requests, owners often do not take into account the difference in packaging costs.	A team of participants helps identify the costs that should be charged for the product.	Cost of Goods Ordered

As previously explained, the first assignment is student research using the observation method, which is to identify the production costs of MSMEs. Participants are expected to help MSMEs identify business costs and calculate the cost of goods. The participant team identified weaknesses in the cost calculation process in each MSME and enabled them to record correctly. The different characteristics of the production process led to different methods of calculating the cost of the goods manufactured. Two methods are used to calculate the cost of goods, namely process-based and order-based. The results of the first assignment can be seen in Table 2 and Table 3 below.

Table 3. Identification of costs in MSMEs with the process costing method

Participants	Production characteristic	Weaknesses of Cost Calculation by MSMEs	Role of Group Participants	The method of calculating COGS that the group feels is appropriate.
Group 1	Products are made in accordance with existing standards.	Production costs can be identified well, but owners have difficulty identifying costs with fixed assets used.	The team helps identify costs correctly.	Batch/process cost of goods
Group 3	Products are made in accordance with existing standards.	The owner does not take into account the labor costs used because he himself carries out the manufacturing and sales processes.		Batch/process cost of goods
Group 5	Products are made in accordance with existing standards.	The owner never records or keeps receipts for the purchase of materials.		Batch/process cost of goods
Group 6	Products are made according to existing standards. .	The owner does not take into account labor costs and BOP because the production process is carried out by the owner himself at his home. Products are then entrusted to local food vendors. The owner has also not calculated the loss of goods that are not sold.		Batch/process cost of goods

Groups 2, 4, and 7 concluded that the right method is used for calculating the cost of products based on orders. On the other hand, groups 1, 3, 5, and 6 consider that the right cost calculation process is process costing.

3.2.2. Eco-efficiency analysis

The identified costs are then analyzed to find alternative strategies that can be used so that MSMEs can implement eco-efficiency. All the suggestions given are good and can be realized, but there are some obstacles to the implementation of ecoefficiency. The results of the analysis for each group can be seen in Table 5 below.

Table 5. Ecoefficiency Analysis

Participants	Products	Ecoefficiency Strategy	Barriers to Implementation
Group 1	*Martabak* and *Kue Bandung*	Using eco-friendly packaging	The price is not competitive.
Group 2	Bouquet	Using eco-friendly bouquet materials	Materials required vary significantly according to the order, and not all are eco-friendly items.
Group 3	Coconut ice and *sempolan*	Managing product residues into economically valuable goods	-
Group 4	*Risol mayo*	Using digital marketing to replace paper advertisements.	-
Group 5	*Batagor*	Using washable glass plates in sales to reduce plastic waste and lower costs	This is not applicable when the stall is busy because no one can wash the dishes and glasses.
Group 6	*Siomay*	Replacing Styrofoam with other environmentally friendly packaging	-
Group 7	*Pastries*	Using digital marketing and digital order platforms to minimize paper usage.	-

3.3.Reflection

The closing stage of the service-learning process is the reflection process. In this process, the participants reflect on the activities carried out. The results of the reflection can help them evaluate and think of methods that should be used so that the results of the activity process can be better. In this reflection process, participants can be expected to give meaning to the service-learning process that they do.

4 Conclusions

This service shows that service learning can integrate the university's primary three higher education responsibilities: teaching, research, and community service. The results of research on MSME financial records show the weak ability of MSMEs to identify production costs. The service team and the participant team improved this by helping to conduct training and accompanying cost calculations. The obstacle faced at this stage is the low financial literacy of MSME owners, so training and mentoring must be done repeatedly. The eco-

efficiency strategy proposed by the participant team can be used as an alternative for MSME development in the future.

Acknowledgments

The writing team is grateful to the students of the Cost Accounting and Understanding Accounting courses who have been willing to become participants and participate in research and service. The team is also grateful for MSMEs that have been willing to be a place for students to learn.

References

[1]. Hukama, La Diadhan, & Zainal Zawir Simon. (2017). Pelatihan Pendampingan dan Pemasaran Berbasis Toko Online Bagi UKM Herbal Sari Sehar Multifarm, Tegalwaru Ciampea Kabupaten Bpgor. International Journal of Community Service Learning, Vol. 1 (3), 118–120.

[2]. Noriska, Ni Komang Septia, & Yohanes Wien Tineka. (2023). Pendampingan UMKM Dalam Pembuatan Laporan Keuangan dan Strategi Dalam Sumber Dana Pembiayaan UMKM di Kota Surakarta Jawa Tengah. Jurnal Abdi Masyarakat Indonesia (JAMSI), Vol. 3, No. 4, July 2023, hal. 1089–1100. https://jamsi.jurnal-id.com

[3]. Setyowati, Lis, Nur Aini Anisa, Kurniawati, Syamsul Arifin, Barhul Anam, Lia Kartika. (2023). Optimalisasi Produktivitas UMKM Melalui Go-Digital dan Go-Legal di Kampung Pengerajin Tas Gdukan Utara Morokrembangan Surabaya. Service Learning: Jurnal Pengabdian Kepada Masyarakat, Vol. 2, No. 1, April 2023, Hal. 33–42, e-ISSN: 2964–6391. http://servicelearningjurnalpkm.com.

[4]. Waqfin, Mohammad Saat Ibnu, Enggri Yani Ristanti, Muhammad Fahmi Cholqi, Septi Dwi Andini. (2023). Pendampingan Pemasaran Produk UMKM Menggunakan Digital Marketing. Ekonomi: Jurnal Pengabdian Masyarakat, Vol. 4, No. 1, April 2023, Hal. 1-4, e-ISSN: 2774-6755.