



Implementation of a Web-Based Production-Cycle Accounting Information System for the Culinary MSME RM Pawon Selaras, Minahasa Regency

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Abstract: This community service program aims to assist RM Pawon Selaras, a culinary micro, small, and medium-sized enterprise (MSME) located in Perum Unima, Minahasa Regency, in digitalizing its production management through a web-based Accounting Information System (AIS). The program adopted a participatory mentoring approach implemented from April to June 2026 through six stages: planning, needs analysis, system design, implementation, testing using Black Box Testing, and system deployment with maintenance. Program evaluation was conducted qualitatively through semi-structured interviews, observations, and documentation to assess system usability and partner capacity development. The resulting web-based application provides integrated features for raw material management, menu and recipe management, production planning, quality control, waste recording, inventory updating, and the generation of production and cost of goods manufactured reports. The program produced two major outcomes: the successful implementation of a functional digital information system and enhanced partner capacity in managing production records and operational information. The partner transitioned from intuitive, memory-based practices to structured, integrated, and data-driven documentation that supports pricing decisions and business performance evaluation. These findings suggest that the digital transformation of MSMEs can begin by addressing internal operational and record-management needs rather than focusing solely on digital marketing, and that sustained mentoring plays a critical role in facilitating technology adoption. Further evaluation using quantitative performance indicators is recommended to assess improvements in operational efficiency and waste reduction.

Article History:

Received: 01-06-2026
Reviewed: 09-07-2026
Accepted: 28-07-2026
Published: 20-08-2026

Key Words:

Accounting Information System; Production Cycle; Culinary MSME; Participatory Mentoring; Technology Adoption.

How to Cite: Pesak, P. J., Evinita, L. L., Moroki, F. O., Tangkau, J. E. M., & Lonto, M. P. (2026). Implementation of a Web-Based Production-Cycle Accounting Information System for the Culinary MSME RM Pawon Selaras, Minahasa Regency. *Jurnal Pengabdian UNDIKMA*, 7(3), 865-877. <https://doi.org/10.33394/jpu.v7i3.21396>

 <https://doi.org/10.33394/jpu.v7i3.21396>

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Introduction

Micro, Small, and Medium Enterprises (MSMEs) constitute a strategic sector that underpins the structure of the Indonesian economy. The position of MSMEs cannot be regarded as merely complementary because they dominate almost the entire national business population. The Indonesian Chamber of Commerce and Industry (KADIN) records that MSMEs account for approximately 99% of all business units in Indonesia, with around 30.18 million MSME units registered as of 31 December 2024. This figure does not yet include all MSMEs in the agricultural and fishery sectors, so the real scale of MSMEs in Indonesia can be understood to be far larger than the recorded number. In addition, the accommodation, food, and beverage sector comprised approximately 6.4 million registered business units.



These data indicate that the food and beverage sector is one of the largest MSME sectors and is closely tied to the everyday needs of society.

The large number of culinary MSMEs carries an important consequence: business actors cannot rely solely on their skill in producing food but also require stronger business management capabilities. In a culinary business, the production process runs quickly, repeats every day, and depends heavily on the availability of raw materials. Unlike service businesses whose products are not easily perishable, culinary businesses face the risks of spoiled raw materials, unsold menu items, damaged products, and changing customer demand. Statistics Indonesia (BPS) records that food and beverage service businesses in Indonesia numbered 5.28 million in 2024, competition in this sector is extremely high and requires business actors to be more efficient in managing production, costs, and selling prices.

The main problem frequently faced by culinary MSMEs is weak production recording. Many business actors still record transactions manually in a simple cash book, and some keep no records at all. Such recording usually notes only general income and expenditure, without separating raw-material costs, raw-material usage, the number of menu items produced, the number of menu items sold, damaged products, and remaining stock. As a result, owners find it difficult to determine precisely how much it costs to produce a single portion of a menu item. When the cost of goods manufactured is not known accurately, the selling price tends to be determined merely on the basis of estimation, market habit, or the owner's intuition. This condition risks setting the selling price too low, thereby reducing profit, or too high, thereby lowering competitiveness (Cahyani et al., 2025; Pramesti & Sharasanti, 2026; Rahmawati & Astuti, 2026).

The urgency of this community service activity is further strengthened by the fact that MSME digitalization has become an important government agenda. The Ministry of Communication and Digital Affairs has stated that in 2024 Indonesia targeted 30 million MSME actors to adopt digital technology, while approximately 27 million MSMEs had already done so. However, MSME digitalization should not be understood merely as the use of social media, marketplaces, or digital payments. Digitalization must also reach the internal side of the business, particularly accounting records, inventory control, production-cost calculation, and the preparation of simple reports. Without digitalization of the internal side, an MSME may appear advanced in terms of marketing yet remain weak in cost control and business decision-making (Gumelar & Nurajijah, 2025; Hakim et al., 2024).

Accounting digitalization becomes an important solution because it is able to transform manual recording into recording that is more structured, faster, and easier to trace. Anjarwati (2023) explains that accounting digitalization has the potential to increase efficiency, reduce costs, accelerate data processing, and produce financial reports that are more accurate and effective for MSMEs. In the context of a culinary business, these benefits become highly relevant because every production decision requires fast and precise information. The owner needs to know the available stock of raw materials, the most frequently produced menu items, the best-selling menu items, the number of damaged products, and the cost of goods manufactured as the basis for setting selling prices (Dewi et al., 2024; Sofa & Wicaksono, 2025).

Rumah Makan (RM) Pawon Selaras is a culinary MSME located in Perum Unima Block A, Minahasa Regency that has operated since 2025. The business offers a variety of menu items, including meatballs (bakso), chicken noodles (mie ayam), lalapan, ayam geprek, and gado-gado. In its daily operations, RM Pawon Selaras serves customers both directly and through orders. The production process is carried out every day, adjusting to the volume of



demand and the availability of raw materials. The business management structure is still simple, in which the owner is directly involved in supervising raw-material procurement, the production process, sales, and business recording. This condition shows that the owner holds many functions simultaneously, so production recording is often not yet carried out in a detailed and systematic manner.

Based on the initial observation, recording at RM Pawon Selaras was still carried out manually using a cash book or daily notes. The recording in use had not separated raw-material purchases, raw-material usage, the number of menu items produced, menu items sold, damaged menu items, and the calculation of the cost of goods manufactured. The raw-material purchasing process was also not yet supported by adequate stock cards, so the availability of materials was still checked through physical observation. In addition, the number of menu items produced each day was still determined on the basis of experience and an estimate of the number of customers, rather than on historical sales data or documented stock data. This condition placed the partner at risk of overproduction that leads to waste or underproduction that results in lost sales potential.

This problem is not merely a technical recording issue but also concerns business sustainability. If raw-material usage is not recorded, the owner finds it difficult to control production costs. If the number of damaged menu items or production leftovers is not recorded, the owner cannot calculate production losses objectively. If the cost of goods manufactured is not calculated systematically, the owner has no sound basis for setting selling prices. In the long term, this weakness can make it difficult for the business to know which menu items are profitable, which raw materials absorb the most cost, and which part of production needs improvement. Therefore, this community service activity is important in order to help the partner move from manual recording toward more integrated digital recording.

An Accounting Information System (AIS) is an appropriate approach because an AIS functions not only as a recording tool but also as a system that connects operational activities with accounting information. Romney (2018) explains that an AIS collects, records, stores, and processes data to produce information for decision-making. In the context of RM Pawon Selaras, this means a documented production flow, better inventory control, clearer waste recording, and production reports that can be used for decision-making. Accordingly, this activity does not merely produce an application; it also builds a new habit in business management, the habit of recording, reading data, and using accounting information to improve business efficiency. The new element in this community service program is that production planning, raw-material inventory, recipe and menu management, quality control, waste recording, and cost-of-goods-manufactured reporting are handled in a single accounting information system designed around the day-to-day operations of RM Pawon Selaras. Bringing these functions into one system matters because management accounting systems that provide timely, relevant financial and non-financial information in combined form have been found to support managerial decisions and performance (Pedroso & Gomes, 2024). Most community service programs for small businesses deliver bookkeeping training, digital marketing assistance, or off-the-shelf accounting software as separate interventions. This program takes a different route by linking the partner's daily production work directly to its accounting records. The choice is supported by recent findings that successful digital adoption among SMEs depends on more than access to technology; organizational readiness, human resources, management support, and a workplace culture open to digital tools all contribute (Faiz et al., 2024). The system was also built with the partner rather than for them.



The owner and staff helped identify operational problems, define what the application needed to do, test its functions, and assess its usability. User involvement of this kind has been shown to build positive attitudes toward, and willingness to take part in, organizational digital change (Abhari, 2025). What the program delivers is therefore more than an installed application. The partner gains a way of managing the business on the basis of its own recorded data, which improves its ability to control costs, cut production waste, and operate more efficiently, and gives its decisions a stronger factual footing.

The main objective of this activity is to assist RM Pawon Selaras in digitalizing its production cycle through the development of a web-based Accounting Information System application. Specifically, this activity aims to document the partner's production flow, help the partner manage raw materials and menu recipes, support production planning, record both good and damaged menu items, calculate the cost of goods manufactured in a more structured manner, and improve the partner's ability to use accounting information as the basis for setting selling prices and evaluating business performance. Through this mentoring, culinary MSMEs are expected not only to survive competition but also to grow through business management that is more efficient, accountable, and data-based.

Method

The implementation method for this community service activity was arranged on the basis of the stages involved in developing the Accounting Information System application for the production cycle applied at the MSME RM Pawon Selaras. This activity used a participatory mentoring approach because the team was involved not only in developing the application but also in mentoring the partner from the stage of problem identification through to the implementation and use of the system (Hermann et al., 2024; Wacnik et al., 2025). This approach was chosen so that the resulting application would match the partner's operational needs and could be applied directly in daily business activities. In general, the stages of the activity comprised planning, needs analysis, system design, implementation, testing, and maintenance. These stages are consistent with the principles of community service, which emphasize the aspects of planning, implementation, assessment, supervision, and control of the activity.

The first stage was planning. At this stage, the team carried out an initial identification of program needs, prepared the activity schedule, and determined the resources required in the application development process. The planning stage was conducted to ensure that the community service activity had a clear direction and did not focus solely on building an application, but also on solving the problems faced by the partner. At this stage, RM Pawon Selaras was designated as the partner of the activity because the business had a real need related to recording its production cycle. The activity was carried out from April to June 2026 at RM Pawon Selaras. The focus of the activity was directed toward digitalizing the production process, ranging from raw-material management and menu input to production recording and the preparation of production reports.

The second stage was Needs Analysis. At this stage, the team conducted direct observation, document collection, and interviews at RM Pawon Selaras. The observation was carried out to obtain a real picture of the ongoing production process, ranging from the provision of raw materials, menu processing, and sales recording to the simple reporting used thus far. In addition, existing documents owned by the partner, namely the menu list along with the selling prices, were collected as supporting data. Meanwhile, the interviews were conducted with two informants, namely the two owners of RM Pawon Selaras, using a semi-



structured interview guide developed by the team. The guide covered questions on the recording of raw materials, production volume, menu items sold, damaged products, remaining stock, and the calculation of the cost of goods manufactured, allowing the team to explore the various obstacles faced by the partner in these areas. The results of the analysis showed that the partner still used a manual recording system and did not yet have an integrated system. Therefore, the application developed was directed toward meeting the partner's main needs, namely raw-material management, menu management, production planning, a production queue, quality-control input, sold-stock updating, production reports, and waste reports.

The third stage was system design. At this stage, the team designed the system on the basis of the needs that had been identified through observation and interviews. The system design included the preparation of the production flow, the application flowchart, the entity relationship diagram (ERD), the database structure, and the user interface design. This stage was an important part because the application developed had to be able to represent the partner's business process in a simple, systematic, and easy-to-operate manner. The application flow was designed so that users could begin with the login process and then manage raw-material data, input menus and recipes, prepare production plans, record production output, perform quality control, update sold stock, and access reports. The interface design was made as simple as possible so that it could be easily understood by the owner and the operational staff who would use the application.

The fourth stage was implementation. At this stage, the system design that had been prepared was translated into a web-based application. Implementation was carried out through a coding process using the predetermined tools and programming language. The application was developed to support the main activities in the production cycle of RM Pawon Selaras, such as raw-material input, menu input, production planning, recording of production output, quality control, recording of damaged products or waste, and the preparation of production reports. At this stage, a database was also built to store raw-material data, menu data, recipe data, production data, quality-control data, waste data, and report data. The development of a web-based application was chosen because it is more easily accessible and able to serve as a recording medium that is tidier, more systematic, and more efficient than manual recording.

The fifth stage was testing. The evaluation instrument was a Black Box Testing checklist covering login, raw material management, menu and recipe input, production planning, quality control, waste recording, and report generation. Each scenario documented the input, expected output, actual output, and pass/fail status. The results were analyzed descriptively by comparing the actual and expected outputs. Any failed feature was corrected. Testing was carried out using the Black Box Testing method to ensure that all application features functioned in accordance with user needs. This method focuses on testing the application's functions based on the correspondence between the input and the output produced, without examining the internal structure of the program code. This approach was chosen because the main purpose of testing was to ensure that the application could truly be used by the partner in supporting operational activities. Several testing scenarios included user login, raw-material input, modification of raw-material data, menu and recipe input, production-plan creation, quality control, production reports, waste reports, and cost-of-goods-manufactured reports. If errors or features not yet functioning as expected were found, the team carried out improvements before the application was handed over to the partner. The use of Black Box Testing was considered relevant because this method can be used to test the



conformity of the system with functional specifications, input validation, input boundaries, and input combinations (Jailani & Yaqin, 2024; Uminingsih et al., 2022).

The sixth stage was deployment and maintenance. After the application was declared to function in accordance with the needs, the team carried out the installation and handover of the application to RM Pawon Selaras. At this stage, the partner was also given training in the use of the system so as to be able to operate the application directly, with an introduction to the application's main features, ranging from login, raw-material management, menu input, production planning, recording of production output, and input of sellable and damaged menu items, to the reading of production and cost-of-goods-manufactured reports. In addition to the training, the team also provided documentation on the use of the application as a guide for the partner. Maintenance was carried out by providing space for the partner to convey obstacles and suggestions after using the application, so that the system could continue to be adjusted to the operational needs of the business.

Result and Discussion

Analysis of the Partner's Initial Conditions

Before the activity was carried out, the production-recording process at RM Pawon Selaras was still conducted manually through simple notes that could not clearly separate the data on raw-material purchases, material usage, production volume, menu items sold, damaged products, and remaining stock. This condition made production-cost information difficult to obtain accurately, so the calculation of the cost of goods manufactured had not been carried out systematically. As a result, daily production decisions still depended heavily on experience and estimation. In the context of a culinary business, this condition has the potential to create inefficiency, both in the form of overproduction that triggers raw-material waste and underproduction that leads to lost sales opportunities. This finding is consistent with the view that digital bookkeeping and structured recording systems play an important role in improving the quality of business information in MSMEs (Hakim et al., 2024; Herman et al., 2025).

Web-Based AIS Development and Core Features

One of the main results of this activity is the establishment of a more systematic and documented production-cycle recording flow. Together with the partner, the team mapped the business process that had previously been run on the basis of habit and then translated it into the application flow, ranging from user login, raw-material management, menu and recipe input, production planning, recording of production output, quality control, and recording of sellable and damaged products, to stock updating and the presentation of reports. This result indicates a change in the partner's organizational capacity, namely from a work process that was previously not fully documented into a process that can be recorded, traced, and evaluated. Within the framework of community service, such a change is important because it shows that the intervention does not stop at the provision of technology but also improves the partner's operational governance (Arinal et al., 2026; Ramadani et al., 2025).

In terms of technical results, the application developed contains a number of main features, namely raw-material management, menu and recipe management, production planning, recording of production output, quality control, waste recording, stock updating, and production and cost-of-goods-manufactured reports. Representative displays of the main interface of the application implemented at RM Pawon Selaras are presented in Figure 1 and Figure 2. The raw-material management feature helps the partner record material names, units, prices, initial stock, and stock changes in a more structured manner. Previously,



inventory information was largely known through physical observation, which is relatively simple but inadequate when the variety of materials increases and the frequency of production rises. With this feature available, the partner began to have clearer inventory data, which can subsequently be used as the basis for planning material procurement and calculating production costs. This result is in line with the finding that a web-based inventory control system can improve recording accuracy, ease of stock monitoring, and operational-management efficiency in small and medium enterprises (Adhiyatunnisa et al., 2024; Fahrizal & Azhar, 2025; Wulandari et al., 2025).

The menu and recipe management feature also makes an important contribution. Each menu item in a culinary business has a different composition of raw materials. Therefore, recipe documentation serves not only as a production guide but also as the basis for calculating material requirements and production costs per menu item. Through this feature, the partner can link each menu item with the raw materials used. When the planned production quantity is entered, the system can help estimate material requirements based on the recipe that has been input. The main interface of this module, which is used to input menu, recipe, and production data, is shown in Figure 1. This result indicates an improvement in the partner's technical skills in carrying out record-keeping, which was previously based on memory and is now based on a system. From the perspective of an information system, the accuracy of cost information is strongly determined by the precision of recording production components (Cahyani et al., 2025; Pramesti & Sharasanti, 2026).

NAMA BAHAN	STOK	SATUAN	HARGA/UNIT	AKSI
Tabung Gas	12	Kg	Rp228.000	
Gula Pasir	14.84	Kg	Rp17.000	
Jeruk Peras	10	Kg	Rp15.000	
Teh Celup/Bubuk	10	Kotak	Rp8.000	
Kopi Bubuk	20	Kg	Rp40.000	
Air Mineral 600ml	48	Botol	Rp3.000	
Saus Sambal	10	Pouch	Rp18.000	
Kecap Manis	10	Pouch	Rp22.000	

Figure 1. Main interface of the web-based AIS: menu, recipe, and production input module implemented at RM Pawon Selaras

The production planning feature is another result relevant to the objective of the activity. Before the system was applied, the daily production quantity was largely determined based on the basis of intuition, experience, or an estimate of demand. After the application was used, production planning began to be linked with the availability of raw materials and the menu data that had been recorded. If the material stock is insufficient, the user can immediately recognize that the production plan needs to be adjusted. This condition indicates a change in the partner's decision-making process, from one that was initially intuitive toward decisions that are more data-based. This change supports the main objective of the activity, namely building a production system that is more orderly, efficient, and measurable.



Another important result is the availability of the quality-control and waste-recording features. Before this activity, damaged products or production leftovers had not been specifically recorded, so the potential for production losses was difficult to identify. After these features were applied, the partner could distinguish between products that are sellable and products that fall into the damaged or waste category. This shows an increase in the partner's knowledge and awareness of the importance of identifying production losses, rather than merely recording production output that was successfully sold. In a culinary business, damaged products still contain raw-material costs and processing costs, so waste recording becomes an important part of internal control. Documented waste data can also be used to evaluate production efficiency and the quality of processed output.

In the aspect of reporting, the application produces production reports, waste reports, and cost-of-goods-manufactured information, as shown in Figure 2. The presence of these reports shows that the partner no longer merely performs administrative recording but begins to have access to information that can be used as the basis for business evaluation. Previously, the selling price tended to be determined on the basis of habit and estimation. After the system was applied, the partner began to have a stronger basis for understanding the relationship among raw materials, the production process, and the costs attached to each menu item. Accordingly, the application functions not only as a recording tool but also as a managerial instrument. This finding is consistent with various studies stating that digital accounting and the use of information technology can support improvements in the quality of business management and the performance of MSMEs (Dewi et al., 2024; Herman et al., 2025; Sofa & Wicaksono, 2025).

TANGGAL	MENU	BIAYA BAHAN	BOP (20%)	TOTAL BIAYA	HASIL BAIK	HPP / UNIT
01/06/2026	Ayam Goreng Lalapan	Rp145.200	Rp29.040	Rp174.240	3	Rp58.080
25/05/2026	Ayam Geprek	Rp39.480	Rp7.896	Rp47.376	11	Rp4.307
08/05/2026	Ayam Geprek	Rp98.700	Rp19.740	Rp118.440	30	Rp3.948
08/05/2026	Ayam Geprek	Rp39.480	Rp7.896	Rp47.376	10	Rp4.738
08/05/2026	Ayam Goreng Lalapan	Rp544.500	Rp108.900	Rp653.400	15	Rp43.560
08/05/2026	Ayam Goreng Lalapan	Rp36.300	Rp7.260	Rp43.560	1	Rp43.560
08/05/2026	Kopi	Rp9.120	Rp1.824	Rp10.944	8	Rp1.368
08/05/2026	Ayam Geprek	Rp3.290	Rp658	Rp3.948	1	Rp3.948
07/05/2026	Ayam Geprek	Rp111.400	Rp22.280	Rp133.680	19	Rp7.036
07/05/2026	Ayam Goreng Lalapan	Rp363.000	Rp72.600	Rp435.600	10	Rp43.560

Figure 2. Cost-of-goods-manufactured report page generated by the web-based AIS at RM Pawon Selaras

Evaluation of the Partner's Capacity Building

In addition to the technical results, this activity also shows changes in the aspects of the partner's knowledge, skills, and participation. Through training and mentoring, the partner was introduced to the application's usage flow, ranging from raw-material input, menu input, recipe preparation, production-plan creation, recording of production output, and recording of damaged menu items, to the reading of reports. From this process, it is evident that the partner did not merely receive the application as a final product but was also involved in the learning process regarding the importance of orderly production recording. This change



can be categorized as an increase in the partner's capacity, because the partner began to understand that recording is not merely an administrative task but part of cost control and business sustainability. From the perspective of technology adoption, this result also shows that acceptance of a digital system tends to be better when the technology introduced is relevant to the real needs of the user and is accompanied by adequate mentoring (Gumelar & Nurajijah, 2025).

Thus, when linked to the objective of the activity, the results obtained show a fairly good level of conformity. The main objective of this community service is to help the partner shift from manual recording to a production-recording system that is more structured, integrated, and supportive of decision-making. The implementation results show that this objective began to be achieved through the availability of a web-based system, the formation of a more systematic recording flow, and the partner's increased understanding of the importance of production data. In other words, this activity not only produced a technological innovation but also encouraged a transformation in the way of working at the operational level of the business.

Nevertheless, the implementation of the activity was not free from a number of challenges. The first challenge was the partner's habit of still being accustomed to manual recording. The shift toward a digital system required a process of adaptation, particularly in terms of consistency in inputting data. The second challenge was the need for accurate and complete initial data, such as data on raw materials, material prices, menus, and recipes. Inaccuracy in the initial data has the potential to affect the quality of the information produced by the system. The third challenge was adjusting the implementation time to the operating hours of the restaurant because the processes of observation, training, and trial should not disrupt the service provided to customers. These challenges show that the implementation of technology in MSMEs is not merely a matter of software but is also related to user behavior, data readiness, and the operational context of the business.

These various challenges were addressed through a participatory mentoring approach. To overcome resistance to change, the team provided training directly and explained the benefits of each feature with examples close to the partner's daily experience, such as the amount of material for one menu item, the number of damaged menu items per day, and the stock needed for the next day's production. To address the issue of initial data, the team helped the partner input data gradually and verified important data before it was used more widely. Meanwhile, to adjust to the operational activities of the restaurant, the mentoring was carried out flexibly according to the time available to the partner. This approach shows that the success of the community service activity is determined not only by the quality of the technology produced but also by the facilitation and communication strategies used during implementation.

The findings of this activity demonstrate that the digitalization of MSMEs does not always have to begin with digital marketing. In many cases, attention to digitalization is more often directed at social media, marketplaces, and digital payments. However, the experience of RM Pawon Selaras shows that the fundamental issue actually lies in the internal recording of the business, particularly in the aspects of raw materials, production, waste, and the cost of goods manufactured. This reinforces the view that the digital transformation of MSMEs needs to begin with the most fundamental needs that are closest to the daily operational process. Once the internal system is well organized, development toward other aspects such as marketing and business analysis will be easier to carry out (Pratama et al., 2025; Tamam et al., 2025).



Although the results of the activity show positive achievements, this activity also has limitations. The evaluation carried out is still descriptive and functional in nature, namely assessing success based on the availability of the application, the functioning of the main features, and the partner's increased understanding of its use. This activity has not yet produced more detailed quantitative measures, for example the percentage reduction of waste, the increase in cost efficiency, or the change in business profit after the application has been used. Therefore, further development requires a follow-up evaluation that uses quantitative indicators so that the impact of the program can be measured more objectively.

Overall, this community service activity shows that the application of a web-based AIS for the production cycle can be a relevant solution for culinary MSMEs that still face the problem of manual recording. The results of the activity show changes in the system aspect as well as in the partner's knowledge, skills, and capacity for managing production information. In addition, the discussion also shows that the success of the implementation is influenced by the conformity of the system with the partners' real needs, intensive mentoring, and the ability to translate technical concepts into practices that are easy to understand. Accordingly, this activity makes a real contribution to encouraging the strengthening of MSME production governance based on data and technology.

Conclusion

This community service activity successfully developed and implemented a web-based Accounting Information System (AIS) application for the production cycle at MSME RM Pawon Selaras. The resulting application is able to help the partner record raw materials, manage menus and recipes, plan production, record production output, control waste, and prepare production and cost-of-goods-manufactured reports. These results show that the program has achieved its objective, namely improving the partner's production-recording and control system. In addition, this activity also had an impact on increasing the partner's understanding and skills in managing production information in a more orderly, integrated, and data-based manner.

Recommendation

Based on the results of this community service program, the recommendations are structured into three categories as follows:

First, recommendations for the partner (RM Pawon Selaras). The partner is expected to commit to a clear allocation of roles in the daily operation of the application. The owner acts as the person primarily responsible for ensuring the consistent use of the application, including supervising daily data entry covering raw materials, production volume, menu items sold, damaged products, and remaining stock. In addition, the partner is advised to carry out scheduled data maintenance, for example through weekly data verification and monthly data archiving, so that the information generated by the application remains accurate and reliable as a basis for calculating the cost of goods manufactured and for business decision-making.

Second, recommendations for future community service teams. Follow-up assistance should be designed as a structured mentoring program with an ideal duration of three months, consisting of an intensive phase in the first month, in which the team accompanies the owner directly in operating the application, followed by periodic monitoring and evaluation visits in the second and third months to ensure that the application has been fully adopted in daily operations. Future teams are also encouraged to replicate this program for other micro, small,



and medium enterprises with similar characteristics, to integrate more advanced accounting features into the application, such as sales analytics, profit and loss reporting, and tax modules, and to enhance the data backup and security systems so that the partner's business data is better protected.

Third, recommendations for local stakeholders and government agencies. The results of this program can serve as an input for local governments and related agencies in aligning similar assistance programs with regional SME digitalization initiatives, where relevant. Collaboration between universities, local governments, and business associations is recommended so that the digitalization of recording and reporting systems, as implemented at RM Pawon Selaras, can be scaled up and sustained among other SMEs in the region.

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