

UTILIZATION OF “LOKACELLA” STOCK MANAGEMENT PLATFORM FOR COOPERATIVES IN YOGYAKARTA

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Abstract. Cooperatives are essential to the economy's sustainability and are Indonesia's mainstay, especially in Yogyakarta. Currently, 1.677 cooperatives are accommodating 724.492 members in the Special Region of Yogyakarta (DIY). Until now, cooperatives still operating continue to develop, adapt, and increase their competitiveness amid an era that continues to change. The problems cooperatives face are difficulties in monitoring inventory in real-time; this is because there are still many cooperatives that manage manually, so they cannot provide real-time monitoring which can hinder accountability for rapid changes in demand or market conditions. The following problem cooperatives face is employees who are not well trained in recording inventory, so they face difficulties in recording which has been done manually, and challenges in ensuring data accuracy. The methods used consist of preparing operator and technical management, assisting and implementing cooperatives that pass curation, and evaluating the implementation of the results of assistance. Through mentoring activities to cooperatives through the use of the Lokacella platform, the implementation of Appropriate Technology Activities, namely the use of a stock management platform for cooperatives in the Special Region of Yogyakarta, has been carried out to achieve 100% progress to help overcome the limitations faced by cooperatives through the activities that have been carried out.

Keywords: Cooperative, Lokacella, Information System, Inventory

INTRODUCTION

Cooperatives are essential to the economy's sustainability and are Indonesia's mainstay, especially in Yogyakarta. Currently, 1.677 cooperatives are accommodating 724.492 members in the Special Region of Yogyakarta (DIY). Until now, cooperatives still operating continue to develop, adapt, and increase their competitiveness during an era that continues to change. The role of cooperatives is not only limited to improving the welfare of members but also as a means to build solidarity, justice, and strong cooperation. Some of the problems faced are: Government attention to cooperatives is still considered lacking, which can be seen in the lagging adoption of information technology in cooperatives compared to MSMEs, so several common problems faced by cooperatives, especially in stock management, are owned. Conventional stock management is considered still unable to overcome several issues in stock management, including:

1. Cooperatives in Yogyakarta face limitations in terms of technology used for stock management, so they cannot accurately provide inventory information. The data they have needs to be more accurate.
2. Using manual systems or outdated technology can hinder efficiency and accuracy in managing inventory.
3. Cooperatives have difficulty monitoring inventory in real-time because many cooperatives still manage manually, so they cannot provide real-time monitoring, which can hinder responsiveness to rapid changes in demand or market conditions.

4. The following problem cooperatives face employees who are not well trained in recording inventory, so they face difficulties in recording, which has been done manually, and problems in ensuring data accuracy.

Stock management is an effort to find inventory information and determine effective and efficient control methods (Listiani, 2019). Stock management applications allow automatic and real-time inventory management. This can reduce human error in recording stock, speed up the data input process, and facilitate tracking of goods. Increased operational efficiency can save time and costs for cooperatives. With a stock management application, every transaction can be appropriately recorded and traced back if necessary. This increases accountability and transparency in stock management, which is crucial in maintaining the trust of cooperative members and related parties. Stock management applications are usually equipped with reporting and data analysis features. Accurate and up-to-date data helps management make better decisions regarding procurement of goods, stock management, and sales strategies. This can help cooperatives optimize inventory and reduce unnecessary costs.

The application that the team successfully developed was the Lokacella platform, a stock management platform to help cooperatives in Indonesia. By using the Lokacella platform, the benefits that cooperatives can feel include:

1. Offering a digital platform service solution to help cooperatives throughout Yogyakarta record efficiency.
2. Helping cooperatives overcome management and administration problems that have often been carried out manually and are less structured so that they can avoid potential incidents that are sometimes undetected.
3. Minimizing the risk of fraudulent actions and supporting asset recording in inventory that can be used as a basis for submitting financing to financial institutions.
4. Adopt Lokacella as an online and user-friendly inventory recording system so that it is easy for cooperative managers in Yogyakarta to operate and lighten the workload for members in recording inventory.

Currently, the Lokacella prototype can perform essential functions, namely recording the entry and exit of various types of merchandise and the final amount of stock and presenting information on the goods that will expire. Therefore, the Lokacella application development plan is to improve the capabilities of its features, which consist of:

1. The ability to display analytics such as the best-selling & least-selling merchandise.
2. Displaying notifications to users.

The development of the Lokacella platform will involve lecturers and partners. Their active participation is crucial to achieving the objectives of this activity, namely the availability of the Lokacella application

RESEARCH METHOD

The methods used in community service related to the use of the Lokacella Application as stock management consist of:

1. Preparation of operator and technical management;
2. mentoring and implementation of cooperatives that pass the curation;
3. evaluation of the implementation of mentoring results.

The methods used in the operator and technical management preparation stage are as follows:

- a. Infrastructure Preparation
Hardware: make sure hardware such as computers and printers are available and compatible with the application. Network and Connectivity: Make sure the internet connection is stable, and the local network functions properly to support the application.
- b. Training for Mentoring Students

We provide basic training to mentoring students on using the application, including login, data input, interface navigation, and more complex features, such as report analysis and notification settings.

c. Appointment of 20 Cooperatives

The appointment of cooperatives was carried out through a request for accuracy to the DIY UMKM and Cooperative Service, and the results of interviews were conducted related to the readiness of the Infrastructure owned by the cooperative in running the Lokacella application.

Furthermore, the mentoring stage was carried out with two methods, namely:

- a. Piloting the use of the Lokacella platform for the designated cooperatives, namely 20 cooperatives.
- b. The team socialized the Lokacella platform for the designated cooperatives in stages.

In the final stage, a structured and systematic method is needed to conduct a comprehensive evaluation of the implementation of the Lokacella stock management platform, namely through surveys and questionnaires. The purpose is to collect feedback from platform users (operators and cooperative administrators) regarding their experience in using Lokacella. The questionnaires' distribution covers various aspects such as ease of use, satisfaction, and feature effectiveness.

1.1. Result and analysis

Community service activities are carried out in 3 stages, namely:

1. Preparation of operator and technical management.
2. Mentoring and implementation of cooperatives that pass the curation.
3. Evaluation of the implementation of the mentoring results.

In community service activities, the team carries out activities according to the predetermined plan; for that, the discussion will review the stages that have been implemented as follows:

1.1.1. Preparation of operator and technical management.

In the digital era, cooperative stock management technology is becoming increasingly important. The appropriate use of technology will impact increasingly effective and efficient stock management. Efficient stock management can increase productivity, reduce costs, and ensure availability. For this reason, the Preparation of operator and technical management of stock management applications is crucial.

Infrastructure preparation is an essential aspect of Preparation for operator and technical management. These preparations include the Preparation of hardware infrastructure and network and connectivity infrastructure. In this case, Preparation is carried out by ensuring that hardware such as computers and printers are available and compatible with the Lokacella application. Network and connectivity preparation is carried out by ensuring that the internet connection is stable and the local network is functioning correctly to support real-time application use so that the Lokacella application can be accessed quickly.

The following Preparation is training for cooperative mentor students on using Lokacella. This training is designed in stages and systematically to ensure that mentor students can master aspects of the Lokacella application well. Training activities are carried out by providing essential training to mentor students on using the application, including logging in, adding merchants, inputting data, and navigating the interface. In addition, it also provides training related to more complex features, such as report analysis and notification settings, to assist in data-based decision-making.

The final Preparation is the appointment of 20 Cooperatives in the Special Region of Yogyakarta. The appointment of the cooperatives was carried out through a request for accuracy to the DIY UMKM and Cooperative Service. This process involves interview activities related to the readiness of the infrastructure owned by the cooperatives to run the Lokacella application. This aims to ensure that the 20 cooperatives that pass the curation can utilize optimal technology so that the Lokacella platform can be implemented and that cooperative stock management can run effectively and efficiently.



Fig. 1. Socialization of the Use of Lokacella for Cooperatives.

Cooperatives that have passed the infrastructure preparation curation from the DIY UMKM and Cooperatives Service participated in socialization with the theme "Using Lokacella Digital Warehouse to Manage Stock Effectively and Efficiently for Cooperatives in the Special Region of Yogyakarta", which aims to introduce the Lokacella application in managing cooperative inventory. The head of the DIY Cooperatives and UMKM Service attended this socialization and gave a speech regarding the importance of modernizing cooperatives with digitalization. Then, the development team presented the features available in Lokacella and demonstrated how the stock recording system works, monitors stock movements in real-time, accurately displays inventory reports, and displays expired dates, which are Lokacella's advantages. This activity also includes an interactive session because participants can try the Lokacella application directly through a prepared simulation.

1.1.2. Mentoring and implementation for cooperatives that pass the curation

Mentoring is carried out using various methods, such as training, guidance, and coaching. The team in conducting product knowledge also uses materials and approaches that have been proven successful in various mentoring activities, providing a solid foundation for the program's effectiveness. Explanations about product knowledge, benefits, and how to use the Lokacella application platform are also included in the mentoring field. It is very important for this activity to get support from various parties, including the government, especially the Cooperatives Office and academics, practitioners, and students. The Independent Campus Program (MBKM) provides students with direct access to field activities or the real world of work so as to provide valuable benefits and experiences. The students involved are 10 students from the Public Sector Accounting study program, the Information Systems study program, and other related study programs from UGM and other interested universities.



Fig. 2. Assistance to Cooperatives.

1.2. Evaluation of the implementation of the mentoring results

Evaluation of the implementation of the mentoring results of the Lokacella stock management platform is critical in ensuring that the platform's objectives and benefits are achieved. The background to this Evaluation includes various aspects that influence the success and impact of platform implementation on cooperatives that pass the curation. The Evaluation of the implementation of the mentoring results of the Lokacella stock management platform has a solid and diverse background, including measuring effectiveness, identifying obstacles, increasing operational efficiency, measuring economic impact, and ensuring compliance with regulations.

The Lokacella implementation mentoring activity was carried out in each cooperative that had passed the curation. The DIY Cooperative Service actively monitored this process. During the activity, the cooperatives were guided in the implementation of the Lokacella platform. The mentoring process proceeded smoothly and according to plan. The cooperatives, as users of the Lokacella platform, have been able to recognize and operate the existing features well. A significant improvement has been the shift from manual to real-time inventory recording, which has automatically enhanced the accuracy of cooperative inventory data.



Fig. 3. Visit by the Lokacella support team to the cooperative.

The features presented in the Lokacella platform are designed to provide convenience for cooperative users. In evaluating the implementation of inventory recording by cooperatives, the inventory entry and exit system can be classified based on the recorded transaction status so that the recorded inventory can be confirmed as received by the warehouse. Through this feature, cooperatives can find out the warehouse's inventory status and inventory still in the shipping process. Proof of transactions or purchase and sales invoices can be printed anytime. Other information generated by Lokacella is also considered very helpful, including information related to product warnings approaching their expiration date, which is also considered very helpful in managing remaining stock. Cooperatives can choose the right sales strategy to avoid losses due to damaged and unsalable inventory. Through a comprehensive evaluation, cooperatives can ensure that the Lokacella platform provides maximum benefits and supports the growth and sustainability of their operations.

CONCLUSION

The implementation of Appropriate Technology, namely the utilization of a stock management platform for cooperatives in the Special Region of Yogyakarta, has been carried out with 100% progress to help overcome the limitations faced by cooperatives through the activities that have been carried out.

From the results of the research that has been carried out, there are the following suggestions:

- a. It is crucial that we continue to support The cooperative digitalization assistance activity, ensuring that all cooperatives with trading business units can benefit from this initiative.
- b. Cooperating with the Ministry that manages Cooperatives in implementing the Lokacella platform to benefit cooperatives throughout Indonesia

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