

Optimization Of Women's Cooperatives By Implementing The E-Cooperative System

Isti Fadah, Yudha Alif Auliya, Yustri Baihaqi, Mohammad Zarkasi

Abstract: Ambulu Village is a village located in Sumberasih District, Kab. Probolinggo. The majority of the population works as farmers and breeders. Some people in Ambulu Village cultivate catfish on a home industry scale and have not yet developed it professionally. UMKM "catfish PANTURA" is an initiation of proposers through community service programs. In 2018 the proposer carried out community service activities and focused on the main problem in "Pantura Catfish", namely diversification of processing and innovation in organic catfish cultivation. UMKM "catfish PANTURA" still has several problems, the first is the lack of power of women. Only men involved in cultivating marketing. The second problem is the increasing number of other village people who develop catfish cultivation so that the "PANTURA catfish" UMKM requires diversification of processed products to increase the selling price of catfish. The third problem is that marketing is still done manually by selling directly to middlemen or peddling around the Sumberasih sub-district. Seeing the problems and potentials of the catfish group "PANTURA", a women's cooperative called "PUTRI PANTURA" was initiated. Cooperatives are intended for mothers who have been unproductive. The concept of a cooperative that is formed is not only a savings and loan cooperative but also manages the management of cultivation, products, and marketing. To support the operation of women's cooperatives, product diversification training is also given to increase the selling value of organic catfish products. To facilitate cooperative management and product marketing, an e-cooperative system was designed. The e-cooperative system has collaborated with the E-Commerce system that has been developed previously.

Index Terms: E-Cooperative, Women Cooperative, Organic Catfish

1 INTRODUCTION

Ambulu village is a village located in Sumberasih sub-district, Kab. Probolinggo. The majority of Ambulu villagers are farmers and breeders. Some communities cultivate catfish. Cultivation is carried out on a household scale. The "PANTURA" catfish farmer group is a group that focuses on developing organic catfish cultivation. Catfish are cultivated using natural feed and probiotics that are made by the UMKM "Lele Pantura" [1]. In the umkm "Lele Pantura" there are women who are powerless in terms of economy. The woman in question is a family member of the "Lele Pantura" UMKM. So far, these women are only housewives. Seeing the background of the problems with partners, namely the economic power of women partners, the women's cooperative "Putri Pantura" was initiated. Cooperatives were formed to increase women's participation and improve the economy. the "PANTURA catfish" group still has several problems, the first is the lack of power of women in PANTURA partners [2]. Because only men were active in cultivation and marketing. The second problem is the increasing number of other village communities developing catfish farming. This requires "PANTURA Lele" to require diversification of processed products to increase product selling prices. The third problem is that marketing is still carried out directly to middlemen or selling around the Sumberasih sub-district. Seeing the problems and potentials of the "Lele PANTURA" group, a women's cooperative called "PUTRI PANTURA" was initiated. This cooperative is intended for unproductive women. The concept of a cooperative that is formed is not only for savings and loans but also for managing cultivation, product, and marketing management [3]. To support the operation of women's cooperatives, product diversification training is also given to increase the selling value of organic catfish products. So far, the products sold are

only fresh catfish. The processed diversified products chosen are processed products that are durable and can be marketed online. Based on the results of discussions with partners it was agreed that the products made were: catfish crackers, catfish sauce, and catfish shredded. The processed products are attractive, thus increasing the selling value of the products produced. The E-cooperative system was initiated to help manage cooperative management. Apart from managing the cooperative management, the system also has a feature to market diversified organic catfish products. The marketing system uses the concept of e-commerce which has an attractive appearance to attract customer interest. This integrated system is expected to increase productivity and assist partners in selling their products. The system that will be built will use the docker container concept in the hosting panel which guarantees security and speed in accessing the webserver. The previous docker concept has also been implemented by research members [4].

2 E-COOPERATIVE

Women's cooperatives are a solution to empower women "lele Pantura" who have been unproductive. The women's cooperative that was formed was not only used as a savings and loan cooperative but also to manage the manufacture of product diversification and market the products. Making an E-cooperative information system that is integrated with the e-commerce system [5]. One of the obstacles in the formation and implementation of the women's cooperative "Putri Pantura" is the difficulty of managing cooperative financial data [6]. The second obstacle is the difficulty of managing product stocks. The third obstacle is the difficulty in managing the distribution of products for each group of farmers. Based on these problems, an E-cooperative system was initiated that was able to manage product management and financial management to facilitate transactions carried out by the women's cooperative "Putri Pantura" [7]. The E-cooperative system that is built is integrated with the e-commerce system, making it easier for partners to market catfish cultivation products and catfish-processed diversified products [8]. Catfish cultivation products include: selling organic catfish

198

- First author is lecturer in faculty of economics and business, University of Jember, E-mail: jstifadah1961@gmail.com
- Second author is lecturer in faculty of computer science, University of Jember, E-mail: yudha.alif@unej.ac.id
- Third author is lecturer in faculty of Agribisnis, University of Jember
- Forth author is lecturer in faculty of economics, University Moch. Sroedji Jember, E-mail: budyuswanto1961@gmail.com

feed, organic catfish probiotics, and live catfish. Diversified products that are sold are catfish crackers, catfish sauce, and catfish shredded. The expected output is the creation of a website-based cooperative management information system that is integrated with the e-commerce system.

3 PRODUK DIVERSIFICATION

Diversification of processed products is necessary to increase the selling price of catfish products. Because all this time "Lele Pantura" only sells live catfish whose price is very dependent on middlemen. The selected diversified products are the result of discussions with partners. The products chosen were catfish crackers, catfish chili sauce and catfish shredded. The product was chosen because it has high economic value and is durable so it is possible to sell it outside Probolinggo using the e-commerce system. The output produced is a diversified product processed by catfish, namely: catfish crackers, chili sauce, and catfish shredded quality and has attractive packaging. It is hoped that the diversification of the "Pantura catfish" welfare product will increase [9].

4 METHODOLOGY

This research was conducted for 1 year. To optimize time, and results, it is divided into 3 stages, namely: the pre-activity stage, the activity implementation stage and the post-activity stage.

4.1 Pre-Activity Stage

The pre-activity stage is an activity carried out at the beginning by forming cooperative management. Several activities were carried out before the system design process, namely: observation, data collection, socialization of community service programs, and the realization of the women's cooperative "Putri Pantura". The pre-activity stage can be seen in Fig 1.

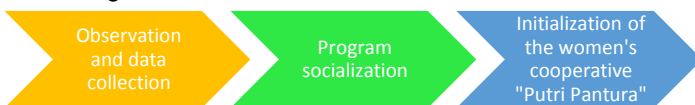


Fig. 1 Stage of Pre-Activity

2.1 Stage of Activity

Functional requirements of the system. System analysts must know user requirements, user desires, and environmental conditions before designing the system. User needs can be identified by conducting interviews and questionnaires to the user. The correct data collection technique will produce data that has high credibility. The stages of data collection must be carried out carefully with the right method. Socialization of community service programs. Discussions and socialization were carried out between researchers, members of the "Putri Pantura" cooperative, and village officials. Discussions were held to disseminate and equate perceptions about the concept of a women's cooperative to be formed and plans for the development of an e-cooperative system. Initializing the formation of the women's cooperative "Putri Pantura". The initialization of the formation of women's cooperatives was carried out by providing socialization and providing training and holding group discussion forums to determine the concept of a women's cooperative to be established. The complete activity stages can be seen in Fig. 2

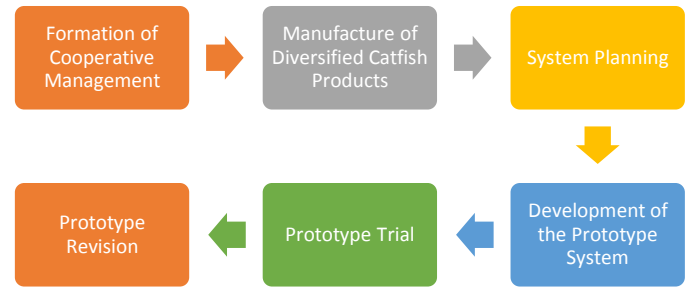


Fig. 1 Activity Stage

The formation of cooperatives is carried out by means of deliberation and consensus so that the elected cooperative management has a commitment to developing the cooperative and "Lele Pantura". Product diversification is made to increase the selling value of catfish products. Because so far, organic catfish is only sold in living conditions to collectors. The processed diversified products chosen are durable and not easily damaged. The next stage is planning, namely designing the village design system according to the functional and non-functional requirements that have been obtained. system design is made with UML diagrams. Complete features of the e-cooperative system can be seen in the use-case diagram in Fig. 3.

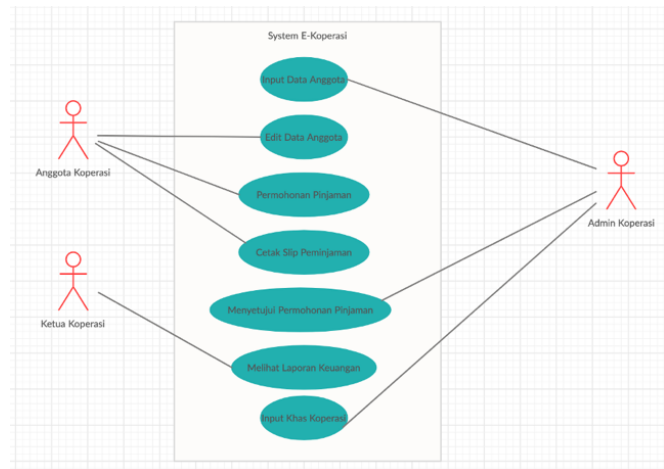


Fig 3. Usecase Diagram of E-Cooperative System

The system prototype is based on the design that was made previously. Based on the results of observations, this study uses a prototype model. The prototype model was chosen because it is more flexible and allows for making improvements according to the user's wishes. The prototype model used can be seen in Fig 4.

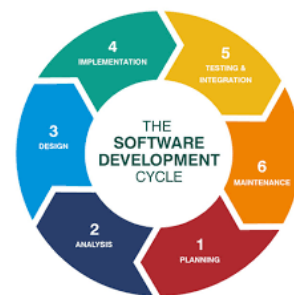


Fig 4. Flow of Prototype System Design

The SDLC prototype stage starts from the initial requirements, then it repeats the design process, prototyping, customer evaluation, review, and updating. After the customer approves, the stages are continued in the development, testing, and maintenance process. The initial prototype trial was a testing phase by running several test cases which were carried out directly by the management of the "Putri Pantura" cooperative. The test results will later become a reference in revising the developed e-cooperative system. Prototype revision is a system refinement process based on the results of the test cases that were carried out at the initial prototype trial stage. It is hoped that the prototype that has been tested can help cooperative managers in managing cooperatives, product management, and product marketing.

2.1 Post-Activity Stage

The post-activity stage consists of several activities that focus on evaluating the implementation of community service. In more detail, the post-activity stages can be seen in Fig 5

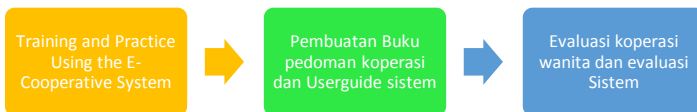


Fig 5. Post-Activity Stage

on practice is very useful as a knowledge transfer forum with "Putri Pantura" partners. The cooperative handbook was created to make it easier for partners to carry out cooperative activities which include: savings and loans, catfish farming management, product management, and product marketing. The evaluation stage is classified into 2 parts, namely evaluating the operation of women's cooperatives and evaluating the use of the system. A cooperative evaluation is carried out to find out whether women's cooperatives can manage themselves (Hatsari, 2014). If there are still problems at this stage a briefing will be carried out so that the process can run smoothly. Evaluation of system use is carried out to see whether the application and use of features in the system can be maximally utilized (Mutiarini, 2017).

5 RESULT AND DISCUSSIONS

Based on the observations and implementation of the e-commerce system, a significant increase in soft skills was obtained. Increased partner soft skills in the form of increasing awareness in developing businesses, increasing the amount of diversification of products produced, and increasing the ability of partners in marketing products. Based on observations it is known that the establishment of a women's cooperative and implementation E-Cooperative system increases partner income. The increase in partner income can be seen in Fig. 6

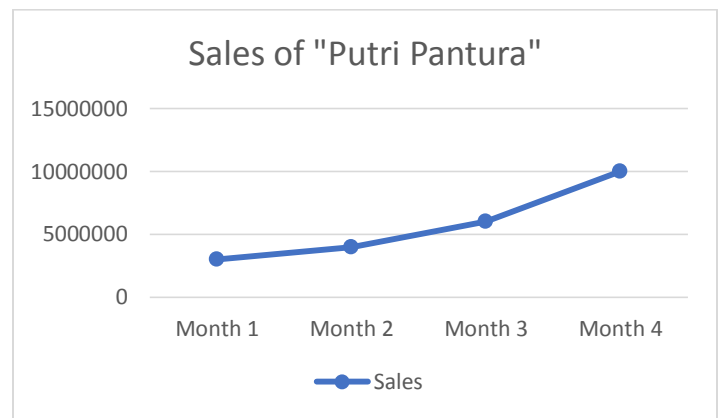


Fig. 6 Graph of Increased Sales

Increased partner soft skills in terms of marketing increases this can be seen from the ability of partners to use the e-commerce system. Based on the marketing results for 4 months, the average sales turnover of partner members increased from 3 million per month to 10 million per month. The E-Cooperative system was developed using the prototype live cycle development software. With the prototype user method in this case the partners can provide input to the developed system. When developing the system, it was done 2 times to improve the prototype. features that get improvements are payment features and product management features. Based on input from the user the payment feature only accommodates proof of payment so partners can check whether the payment has been made correctly. Product management features have also improved, that is, each partner can enter criteria and a large number of photos to convince consumers to buy partner products. E-cooperative system display can be seen in Fig. 7.

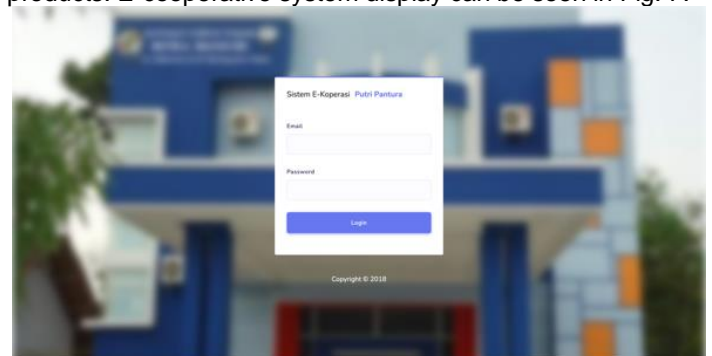


Fig. 7 Implementation E-Cooperative System

6 CONCLUSION

Based on the dedication activities that have been carried out, there has been an increase in income and skills obtained by "Putri Pantura". Increased partner skills regarding product standardization and cooperative management using the E-cooperative system. The income of "Lele Pantura" has increased significantly with the support of the cooperative "Putri Pantura". product standardization and the use of technology assist partners in managing and marketing their products.

ACKNOWLEDGMENT

The author would like to thank the University of Jember institutions and all the lecturers who helped carry out this research. we don't forget to thank the Lele Pantura partners

who have played an active role in developing and running a community service program.

REFERENCES

- [1] Fadah I., Auliya Y. A., Baihaqi Y., and Yuswanto I. B.. 2018. Soft Skill Improvement of Catfish Farmers Society Towards "Kampoeng Lele Organik" Through Innovation, Diversification and Utilization of E-Commerce in Ambulu Village, Probolinggo Regency (IJSDR), Vol 3, No 11, hal 400-402
- [2] Setyowati T., Fadah I. 2016. Diferentiation Competitive Strategy in Winning Smes Advantage at Creative Industry in Jember. International Journal of Scientific & Technology Research, Vol 7, No 2, Hal 168-169
- [3] Auliya Y. A, Nurdiansyah Y., and Wulandari D.A.R. 2018. Performance Comparison of Docker and LXD With ApacheBench. Journal of physics: Conference Series, Vol 1211, Conf 1
- [4] Yuswanto I. B., Bhayangkara W.D., Fadah I. 2017 (a). Performance Improvement Strategic Home Based Manufacturer Tahu and Tempe Groups Based in District of Jember. Internasional Journal of Scientific & Technology Research. Vol 6, No 4, Hal 23-27
- [5] Hatsari F.K. 2014. Evaluasi Sistem dan Prosedur Penyaluran Kredit Konsumtif Dalam Upaya Mendukung Pengendalian Intern pada Koperasi (Studi Kasus Pada Koperasi Karyawan Primkoppos Kota Malang. Jurnal Administrasi Bisnis, Vol 11 No 1)
- [6] Mutiarni R. 2017. Impelementasi Electronic Data Processing Pada Koperasi Wanita. Jurnal Riset Ekonomi dan Bisnis. Vol 12 No 2
- [7] Alannita N. P., Suaryana I. G. N. A. 2014. Pengaruh Kecanggihan Teknologi Informasi , Partisipasi Manajemen, Dan Kemampuan Teknik Pemakai Sistem Informasi Akuntansi Pada Kinerja Individu. E-Journal Akutansi Universitas Udayana. Vol 6, No 1
- [8] Gaol C. J. L. 2008. Sistem Informasi Manajemen Pemahaman dan Aplikasi. Grasindo. Hal 1-426
- [9] Yuswanto I. B., Bhayangkara W.D., Fadah I. 2016 (b). Identification of Problems and Strategies of The Home Based Industry in Jember Regency. Intenational Conference on Food, Agriculture, and Natural Resources (IC-FANRES 2015)