

# Empowerment of Village Owned Enterprises (VOEs) Through E-Commerce Information Technology to Increasing Economy

Muhammad Rais Rahmat Razak, Kamaruddin Sellang, Rifni Nikmat Syarifuddin, Muhammad Rohady Ramadhan, Aksal Mursalat \*, Muh. Irwan, Reza Asra, Muhammad Bibin, Sunandar Said, Andi Riska Andreani, Adam Latif, Sofyan B, Syaiful Bahri Syam, Muhammad Aksan

<sup>1</sup> University of Muhammadiyah Sidenreng Rappang, Indonesia

\*Corresponding Author: [aksalmursalat@gmail.com](mailto:aksalmursalat@gmail.com)

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## ABSTRACT

**Background:** Village-Owned Enterprises (VOEs) is a tool for using the local economy. Since the Covid-19 pandemic, digital-based modern markets have become the heart of buying and selling economic activities.

**Contribution:** This activity improves the welfare of the people of Sipodeceng Village through e-commerce information technology.

**Method:** The method of this activity includes Socialization of the implementation of activities, Counseling by explaining the e-commerce information technology marketing model (BUMDES Sipodeceng Store), training and mentoring the use of information technology for VOEs partner groups, carrying out assistance, as well as monitoring and evaluation.

**Results:** Training and mentoring activities based on pre-test and post-test data analysis have positive implications for 3 parameters: knowledge from 42.14 to 89.14%, skills from 35.9% to 90.12%, and motivation from 63.2% to 93.2%. From these data, an analysis of the effectiveness of these 3 parameters is carried out, the values of which are knowledge at 81%, skills at 85%, and motivation at 79%. These three numbers indicate that community service activities are effective because the value is above 50%.

**Conclusion:** From these activities, it can be concluded that e-commerce information technology at VOEs Padaidi Sipodeceng is still very much needed to increase the role of BUMDES in community empowerment.

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## INTRODUCTION

Information technology development is growing rapidly, especially in mastering the application of e-commerce information system technology [1]. The rapid development of e-commerce information system technology can be utilized by the community in various fields of life, especially for the activities of Village-Owned Enterprises (VOEs) in marketing their products. Innovation is what large and small industries must do to survive technological changes and developments [2].

Village-Owned Enterprises (VOEs) is a tool for using the local economy of various types of potential [3]. Utilization of this potential is primarily aimed at improving the economic life of the community in the village through the development of community-based economic enterprises. BUMDES or Village Owned Enterprises (VOEs) are organizations adapted to institutions that aim to improve the economy of rural communities because they function as a centralized forum for various activities First, the financial sector includes sectors that include raising and distributing funds through loans and risk management. Second, the non-financial services sector includes savings and loan management consulting, education and training, accounting and auditing, and business facilities, and auditing. Third, other business developments such as the development of transportation, communication, and other service business units [4].

Sipodeceng Village is one of the innovative villages in the development of the people's economy which is carried out through the establishment of BUMDES which is still operational today. Sipodeceng Village which is in the Sidenreng Rappang Regency area has quite extensive local potential. However, the Covid-19 pandemic attack has changed the lives of the people in Sipodeceng Village, the impact of which has been the difficulty for BUMDES to market their products directly. In addition, price fluctuations that occur have resulted in losses for the community.

Therefore, digital marketing innovation is considered very feasible to be developed by village communities, especially the people of Sipodeceng Village. In addition, today's consumers are prioritizing online purchases compared to conventional purchases. This condition is an implication of the prolonged Covid-19 pandemic. Not only that, the lack of public knowledge about digital-based marketing results in product distribution not being optimal [5]. So that the community needs assistance in increasing digitalization knowledge which is the current trend [6].

Since the Covid-19 pandemic, digital-based modern markets have become the heart of buying and selling economic activities. The majority of people in the current pandemic era are more inclined to buy and sell online through available shopping applications. This application is now starting to grow very rapidly in all regions of Indonesia, including in Sidenreng Rappang Regency, South Sulawesi Province. Muhammadiyah Sidenreng Rappang University as a digital campus has given birth to various online buying and selling applications to help the community, the application is called VOEs Sipodeceng Store which the Team has prepared. This application has been used by the people of Sidenreng Rappang Regency and its surroundings, especially in Sipodeceng Village to assist in marketing the products produced to improve the community's economy.

One of the assistance programs is carried out through the Sipodeceng Village-Owned Enterprise (VOEs), which has previously been observed and researched by a lecturer at

Muhammadiyah University Sidenreng Rappang. In this study, it was found that the role of BUMDES Sipodeceng in Empowering the Sipodeceng Village Community was 49.32% [7].

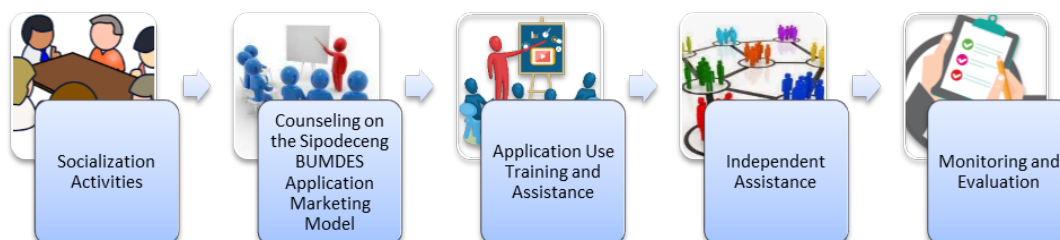
The above is in line with the results of research which states that increasing community participation and income which has an impact on improving social life can be realized by optimizing the functions of BUMDES through strengthening partnerships and institutions as well as technological approaches [8]. The utilization of marketing applications has an important role in increasing the income of farming communities in general because it can facilitate the distribution of products to consumers [9]. It is hoped that efforts to empower BUMDES can be increased through the use of the BUMDES Sipodeceng Store application in marketing products which in turn can have a positive effect on improving the community's economy, especially in partner communities, namely Sipodeceng Village. From the results contribution of this community service it was found that the role of VOEs specifically includes: Improving the village economy, village original income, managing village potential according to community needs, and village community economic growth.

## METHOD

The implementation method used is a participatory method where in this service the Village community and BUMDES are proactively directly involved in carrying out activities, by offering socialization and training in the use of e-commerce information technology and conducting evaluations to see the effectiveness of the socialization program and whether the implementation is efficient. The executor of this service activity was carried out at the Sipodeceng Village Hall for 2 weeks. Carrying out this community service activity also involves various stakeholders not only from the BUMDES team and group but involves other academics from Muhammadiyah Sidenreng Rappang University such as students in solving priority problems in partner groups. This synergy is carried out to achieve the goals and objectives of the program to be implemented. The stages in the implementation of community service activities are as follows:

1. Socialization of the implementation of VOeS Empowerment activities through E-commerce Information Technology in Improving the Economy of the Sipodeceng Village Community. This socialization is carried out at the village level so that all village officials and community leaders understand the intent and purpose of implementing partner group empowerment.
2. Counseling by explaining the e-commerce information technology marketing model (BUMDES Sipodeceng Store). In this activity, the implementing team held material presentations regarding the e-commerce information technology marketing model to provide insight into improving the economy of the people of Sipodeceng Village.
3. Training and assistance in the use of information technology for BUMDES Padaidi partner groups, especially the use of the BUMDES Sipodeceng Store Application. This method is carried out by providing training on IMAGE EDITING, product input, and product marketing using e-commerce information technology, the BUMDES Sipodeceng Store application.
4. Carrying out mentoring until it can be independent, mentoring is carried out every day for 2 weeks until those who are trained can apply the knowledge from the training properly and independently.
5. Monitoring and evaluation are carried out to determine the level of success of the community service program which is carried out based on pre-test and post-test analysis and is followed by an analysis of effectiveness.

From the stages of community service activities, it is hoped that this can expand the marketing segment of BUMDES products not only locally, but increase to between villages, sub-districts, districts, and even at the national level. The method of implementation that will be carried out to realize this community service is presented in [Figure 1](#).



**Figure 1.** Stages of implementation of community service activities

## RESULTS AND DISCUSSION

Padaidi Sipodeceng Village Owned Enterprise (BUMDES) is a business entity owned by Sipodeceng Village, Sidenreng Rappang Regency. The BUMDES is essentially established as a forum for the welfare of the community. The village community as a regional unit that hierarchically has high brotherhood in religious, social, cultural, and also economic aspects is a big capital that should be organized to give birth to a new economic power through BUMDES. To achieve this idea, the community is needed as a knowledgeable, skilled, and highly motivated partner. The role of the community is very important in realizing this idea. Therefore, knowledge as a basic aspect of economic development must be increased so that other factors such as skills and motivation also increase. The level of entrepreneurial knowledge is the initial capital in entrepreneurship [10]. Design and use of e-commerce information technology in the business sector will have positive implications because access to orders for products is wide open [11]. Therefore, this service activity, which is oriented towards optimizing the role of Bumdes in community empowerment through the use of e-commerce information technology, can help people earn their income and foster economic independence. The activities carried out in the implementation of community service include:

### 1. Socialization of Activities

This activity is the inaugural activity that aims to introduce an activity program that will be carried out by the team in Sipodeceng Village, Sidenreng Rappang Regency. The targets of this activity are the village head and village apparatus as well as the management of the Padaidi Village-Owned Enterprise (BUMDES) which is domiciled in the village and is part of the village government program. This activity also provides an opportunity for the team to examine various problems faced by BUMDES while carrying out their business, especially those related to marketing. The socialization activities can be seen in [Figure 2](#).

### 2. Counseling on E-commerce Information Technology Marketing Models

Information Technology E-commerce is one of the technologies that is much needed, especially in the era of the Covid-19 pandemic which limits people's space for movement. With e-commerce, people in buying and selling transactions do not have to meet face to face and spend energy just buying and selling [12]. This condition certainly has a very big influence on *Empowerment of Village Owned Enterprises (VOEs) Through E-Commerce Information Technology to Increasing Economy (Muhammad Rais Rahmat Razak et al)*

the various businesses run by the village community, whether engaged in individual, group, or organized business or incorporated in certain institutions. The limited knowledge of the community about this technology, in principle, will have implications for people's incomes which tend to decrease, especially in the last two years. This problem should receive special attention in order to ease the economic burden on the village community. Recognizing the potential for doing business through e-commerce in the millennium and digitalization era as it is today is very important to capture the potential of the world market online, which has become the primary need of the global community in accessing information and knowledge quickly [13].



**Figure 2.** Socialization of activities

This activity is a series of service programs that aim to introduce the e-commerce information technology marketing model to the people of Sipodeceng Village. This activity is oriented towards increasing the village community's knowledge of this technology. This activity was preceded by providing detailed material about this technology in the form of an application that is easy for the community to use. The extension activities for the e-commerce information technology marketing model can be seen in Figure 3.



**Figure 3.** Extension of the E-commerce information technology marketing model

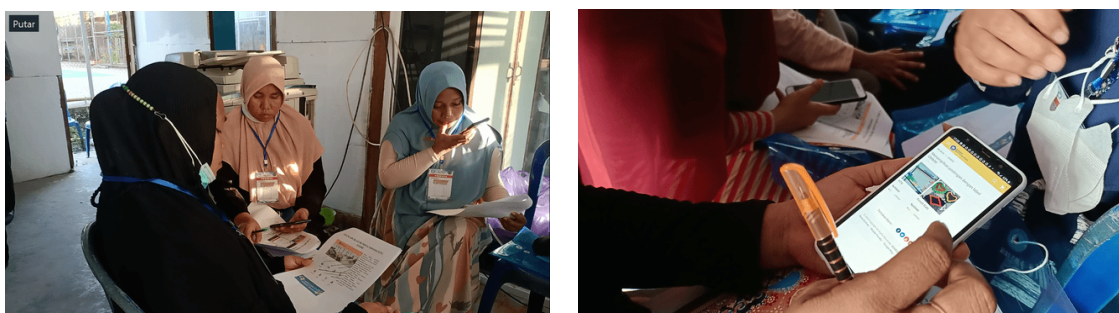
### **3. Information Technology Use Training and Assistance**

The BUMDES Store application for Sipodeceng Village is an application offered by the team to BUMDES Padaidi. This application is oriented towards providing easy shopping services to consumers and making the Sipodeceng Village community a product producer through BUMDES Padaidi as a service provider. This application certainly has a positive impact on village communities because the resulting product can be marketed quickly and does not require the product to be in one place like conventional figures. Therefore, the presence of this application will certainly have a positive impact on the community in particular and on BUMDES. The sustainability of BUMDES Padaidi can certainly be realized through good synergy with the community as product producers. In this activity, the team carried out training

and assistance in various matters which included: (1) Image editing training (2) how to input products into applications (3) product marketing using the BUMDES Sipodeceng Store application as part of the e-commerce information technology.

Image editing is one of the competencies that must be mastered by village communities, especially those who are going to develop a digital-based business. This competency is used to create a product brand that will later be used when entering the product into the application. In this activity, the community is trained on several things which include: (a) the right method of taking pictures so that they look beautiful to buyers (b) the Editing of images in the form of positioning, lighting, and background (c) finishing of images that provide the ability for the community to eliminate blur and maximize images in terms of color balance. Photo editing training aims to make it more attractive after being uploaded to e-commerce media and is a strategy in itself to be able to attract the attention of potential customers [14]. The resulting image is then inputted into the marketing application so that it can be seen by consumers. The ability to edit images for the public is one of the online marketing strategies. Please note that displaying attractive images while not forgetting the principle of truth is a very basic and very important part of marketing in the digitalization era. The display of images will give people confidence in the products offered.

The method of inputting products in the application provided becomes new knowledge for the community, especially if it is done independently. The people who attended were generally trained and assisted specifically and repeatedly because their knowledge was still below standard, and some of them were even blind to e-commerce technology. This training will simultaneously add to the public's insight into marketing techniques in the modern era. For product marketing using this application, training and mentoring techniques begin with measuring public knowledge about online marketing through individual observations conducted by the team. The information obtained is then used as a basis for providing marketing assistance materials. In this activity, the team emphasized the importance of massively using social media as an excellent marketing method in today's era. In addition, the use of information media such as online and print newspapers is also used as mentoring material. The training and mentoring activities for the use of information technology can be seen in [Figure 4](#).

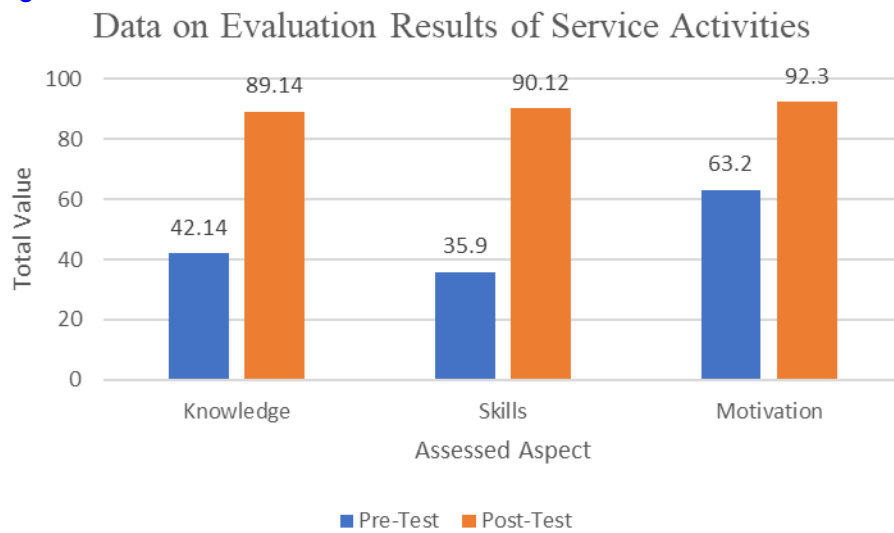


**Figure 4.** Independent assistance

#### **4. Monitoring and Evaluation**

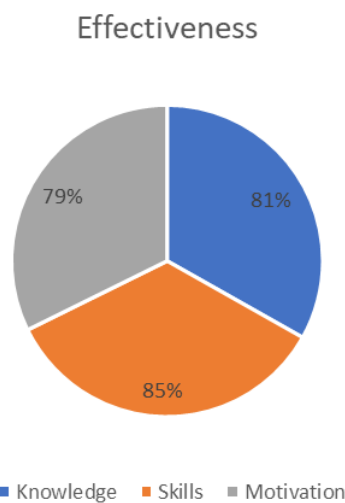
Monitoring and evaluation activities are the final stages of the community service program. This activity measures the level of success of the program implemented in Sipodeceng Village. This activity measures the relevance, efficiency, effectiveness, and impact of the activity with

the objectives to be achieved. Monitoring and evaluation are also information material for the service team for the next program. The results of the pre-test and post-test in this activity can be seen in Figure 5.



**Figure 5.** Data diagram of the results of the evaluation of community service activities

From the diagram above it can be seen that the values of the level of knowledge, skill, and motivation of the community are 42.14%, 35.9%, and 63.2% respectively. These three parameters show low numbers, especially for the level of skills and knowledge whose position is below 50%. The low level of knowledge and skills of respondents regarding e-commerce information technology is one of the reasons for the slow dissemination of technology in the village, especially in overcoming various problems amid the Covid-19 pandemic. This condition indicates that service activities carried out by e-commerce technology-based teams are urgently needed. This can be proven by the results of the evaluation which showed an increase in numbers in the aspect of knowledge which reached 89.14%, skills which reached 90.12%, and motivation which reached 92.3%. The value of effectiveness is one of the parameters for the success of a program that is implemented and can be calculated from the values of the pre-test and post-test [15]. Based on the value achieved in diagram, the effectiveness value can be seen in Figure 6.



**Figure 6.** Service activity effectiveness value diagram

From the diagram above it can be seen that the value of the effectiveness of knowledge, skills, and motivation for service activities is classified as effective because the value obtained is above 50% according to the opinion issued by Ningsih. In his opinion, it is revealed that a value range of 0% - 49% is less effective and a value of 50% -100% is effective [16]. These results indicate that the service activities carried out by the team were classified as successful. This is based on the increase in the number of all parameters assessed. Research on the empowerment of Village Owned Enterprises (VOEs) through e-commerce and information technology to increase the economy is limited. Larasdiputra [17] and Arifin [18] both highlight the role of VOEs in improving the rural economy, with a focus on the allocation of government funds and collaboration with entrepreneurial communities. However, the specific impact of e-commerce and information technology on these enterprises is not explored. Suartini [19] compares VOEs in Indonesia with Township and Village Enterprises in China, emphasizing the importance of economic development at the lower levels of society. Wu [20] provides a case study of rural e-commerce in China, demonstrating the potential of information and communication technology to empower remote areas. However, the direct application of these findings to the empowerment of VOEs through e-commerce and information technology is not discussed.

## CONCLUSION

The conclusion that can be drawn based on the description above is that e-commerce information technology at BUMDES Padaidi Sipodeceng is still very much needed to increase the role of BUMDES in community empowerment. Training and mentoring activities based on pre-test and post-test data analysis have positive implications for 3 parameters, namely knowledge from 42.14 to 89.14%, skills from 35.9% to 90.12%, and motivation from 63.2% to 93.2%. From these data, an analysis of the effectiveness of these 3 parameters is carried out, the values of which are knowledge at 81%, skills at 85%, and motivation at 79%. These three numbers indicate that the community service activities carried out are effective because the value is above 50%.

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