



Appropriate Information Technology for E-Government Service of Cooperatives in Sampit City Web-Based

Wira Pradana, Nurahman*

¹ Sistem Informasi, Universitas Darwan Ali, Sampit, Indonesia

Email: ¹wirapradanajr7@gmail.com, ^{2,*}nurahman.ikhtiar@gmail.com

Coressponding Author: nurahman.ikhtiar@gmail.com

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Abstract—This research is motivated by the application of information systems through e-Government which is the main problem in the development of information systems applied to the Sampit City Cooperative Service, to develop information and sites that already exist and can be used properly and are beneficial for MSMEs in using cooperative services. The type of research used in this study is data sharing, the method used is the method of data collection and system development. The research result obtained is information system which is applied to the Department of Cooperatives through the creation of a website can help p roses collection more effective and efficient related registration of members , p romosi product data and product advancements SMEs as well as web site also helps better services to SMEs and the public thereby improving the relationship between the two parties and illustrates the implementation of a good information system from the public authorities to the local area.

Keywords: Office of Cooperatives; MySQL; MSME

1. INTRODUCTION

Technology is an important thing that cannot be separated from everyday life, and information system technology is no exception. The application of information systems is an important issue in institutions or institutions in various fields to facilitate the process of delivering information and improving public services. A filiation, associations and offices require a unit that regulate the administration of the special , which will be associated with the work. Basically regulation exercises play a role in generating, obtaining, handling, and storing information, reports, frames and so on [1].

Information system technology that is commonly used is closely related to the current government system called e-government. E-Government is the process of implementing efficient and effective government management using information and communication system technology, as well as providing transparent and satisfying services to local communities [2]. In terms of providing good government public services, the government must adapt to technological developments so as not to be left behind. Anwar's Hageand Powers states that one of the distinguishing characteristics of this era of communication and information technology advancement is the use of computer technology [3]. The concept of E-Government services using information technology can be divided into several stages. Second, maturity; Third, stabilization. And fourth, use it. E-Government development seriously considers three success factors in order to develop properly according to e-Government procedures. The first factor is support, capacity, and value. Willingness and unity with local cultural elements (Month, 2008, p.168). according to [4].

World Bank, eGov use government technology to enable governments to transform their relationships with stakeholders in the community, business world (eg, wide area networks, Internet of mobile computing [5]. E-government-based public information services increase public participation and increase bureaucratic productivity and efficiency where public participation is actively involved in government decision-making and policy. By achieving proper transparency of information from the government to the public, the public can easily track, monitor, and control the progress of government operations. The implementation of eGov can also apply the principles of responsibility that can be explained by all policy making and implementation [6]. In Indonesia, Government Regulation no. March 2003 on National Policy and Strategy for E-Government Development. The government said that the use of communication and information technology in the government process (eGov) will increase the efficiency, effectiveness, transparency and accountability of government administration. E-government development policies and strategies are needed to implement good governance and improve effective and efficient public services. The existence of this presidential directive is a form of government seriousness that can bring eGov to the Indonesian government and local governments and improve the quality of services to the local community [7].

The Sampit City Cooperative Office plays a role in developing leading MSMEs through various innovations and incentives that can increase leading MSMEs. The roles carried out are education and training for MSME actors, facilitation of business development and product diversification of MSMEs, marketing expansion, provision of additional capital in order to increase production output, fostering product packaging so that it can compete with imported products, awarding certificates, training to increase human resources in order to create product quality innovation, business meetings that bring together retail, modern stores, supermarkets and banking, as well as the promotion of MSMEs [8].

More efficient management of funds and administrative processes in cooperatives is needed to facilitate MSMEs in using cooperative services. e-Government can be implemented through the creation of a website based on information obtained from the Office of Cooperatives in Sampit City . The Cooperative Office can use the website to provide information on training and exhibitions held , promote its products, and provide complete information about the Sampit City Cooperative Office. The Department of Cooperatives & UMKM of Sampit City already has a special website , but the site does not yet contain the necessary data so it is not used [9].



The government has developed telecommunications and internet infrastructure throughout Indonesia in accordance with the Regulation of the Minister of Communication and Information No. 11/PER/M.KOMINFO/04/2007 . The application of information and communication system technology in local government is carried out through e-Government . e-Government is a form of application of information system technology to help the government administration process more efficiently and effectively, as well as to help provide satisfactory and transparent services for the users. e-Government can be applied in the G2C (government-to-citizen) , G2G (government-to-government) and G2B (government-to - business) sectors . In this case, the government of East Kotawaringin Regency has begun to implement G2C e-Government in the process of communication and delivering information to the public [10].

In Indonesia, e-Gov began to be developed when the government issued Presidential Instruction No. 3 of 2003 concerning the National Policy and Strategy for the Development of e-Gov. The government states that the use of communication and information technology in the government process (e-Gov) will increase the efficiency, effectiveness, transparency and accountability of government administration. In order to implement good governance and improve effective and efficient public services, it is necessary to have e-Gov development policies and strategies. The existence of this presidential instruction is a form of the government's seriousness in presenting e-Gov in the Indonesian government and local governments to be able to improve the quality of services to the community [11]. Sampit City is a city located in Central Kalimantan, Indonesia and acts as one of the important cities in this region with a fairly developed economy. The existence of cooperatives in Sampit City has an important role in terms of individual money circulation. Miniature, Small and Medium Enterprises (MSMEs) are one of the subjects of cooperative services that need attention [12].

Since 1997-1998 Indonesia experienced a monetary emergency which affected financial developments in Indonesia. MSMEs were able to meet the limits and capacities during the monetary emergency that year, thus becoming a monetary sign that added to development in Indonesia, including limited business openings, lower unemployment rates, and fulfillment of needs. In addition, MSMEs can also develop goods on a public scale, in particular expanding trade and distributing impartial public payments. In increasing this opportunity, the institution that oversees Small and Medium Enterprises (MSMEs) plays a vital role in building electability as far as the shortcomings that exist in MSMEs. Therefore, agencies such as the Department of Cooperatives have a big role in the process of developing and progressing MSMEs. However, there were around 644 MSMEs that were picked up, but they were not recorded properly so that neither assistance could be conveyed to those concerned [13].

Based on the description of the background, the development of an information system needs to be applied to the Cooperative Office in Sampit City, so that existing information and sites can be used properly and are beneficial for MSMEs. With these considerations in mind, it is considered important to bring up the above case in this report with the title: “ Web-Based Information Technology of the Cooperative Office in Sampit ”. With the boundary problem, among others: a) s system is built using the PHP programming language and MySQL as the database server , b) Department of Cooperatives is the object of study in the town of Sampit , c) System and reports consist of data the Department of Cooperatives [14].

2. RESEARCH METHODOLOGY

System development is carried out using the waterfall model introduced by Winston Royce. This method develops software on an ongoing basis with progress flowing down through the planning, modeling, implementation and testing phases. The stages of the waterfall method include:

- a. Requirements analysis and definition: At this stage, system services, constraints and objectives will be determined based on the results of consultation with users. Next, a detailed definition of the system specifications will be carried out.
- b. System and software design: At this stage, the system design is carried out by allocating the hardware and software system requirements through the formation of the system architecture. The design of the software includes a description of the basic system and its relationships.
- c. Implementation and unit testing: Software design is implemented in the form of a series or program unit. Furthermore, a unit verification test is carried out so that each unit meets the specified specifications.
- d. Integration and system testing: Program units and programs are combined for further testing in the form of a complete system. This is done to ensure the suitability of the system with software requirements.
- e. Operation and maintenance: This stage is the longest stage. The designed system will be installed and used immediately. Maintenance is also carried out to correct errors that were not found in the previous stage, improve system services and improve the implementation of system units.

3. RESULT AND DISCUSSION

3.1 System Analysis

System analysis is the decomposition of a complete information system into its component parts with a view to identifying and evaluating problems, opportunities, obstacles that occur and expected needs so that improvements can be proposed. The product registration system for participating in promotional programs at the Sampit City Cooperative Service is still done manually [15].

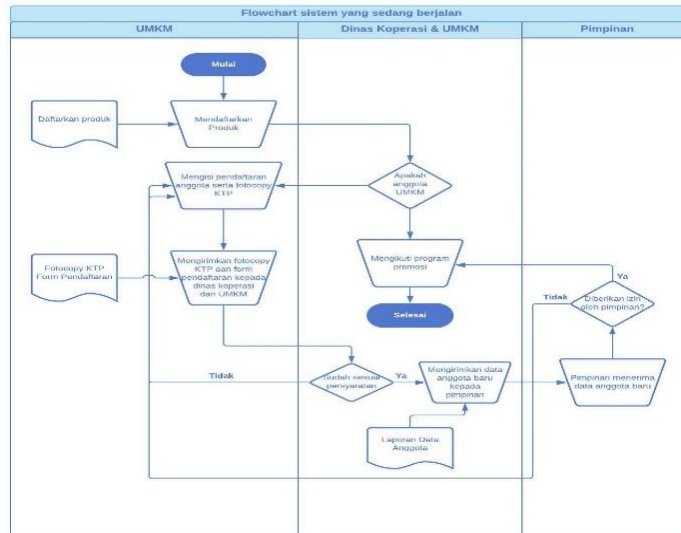


Figure 1. On-going flowmap

Based on the results of the analysis of the information data processing system that is currently running, in the process of the system there are still many shortcomings. After knowing the current system, the shortcomings can be summarized as follows:

- The registration process for MSME members is not efficient in verifying the correctness of data and conformity with requirements, so it takes a long time to get to the leader and get approval.
- Incomplete or invalid data will be returned and MSMEs must repeat the registration process from the beginning so that it will make it difficult for MSMEs and prolong the process that must be done.
- The Sampit City Cooperative Office must check the participation of MSMEs for each MSME registering new products so that the process is not efficient.
- Registration does not use a data framework that oversees information on the MSME section and MSME products so that there are often delays in making choices resulting in poor and unattractive data frame reports.

3.2 System Design

From the results of the description above, it can be seen that there are several shortcomings and weaknesses in the current system, to overcome the shortcomings and weaknesses of the current system, a better computerized system design is made.

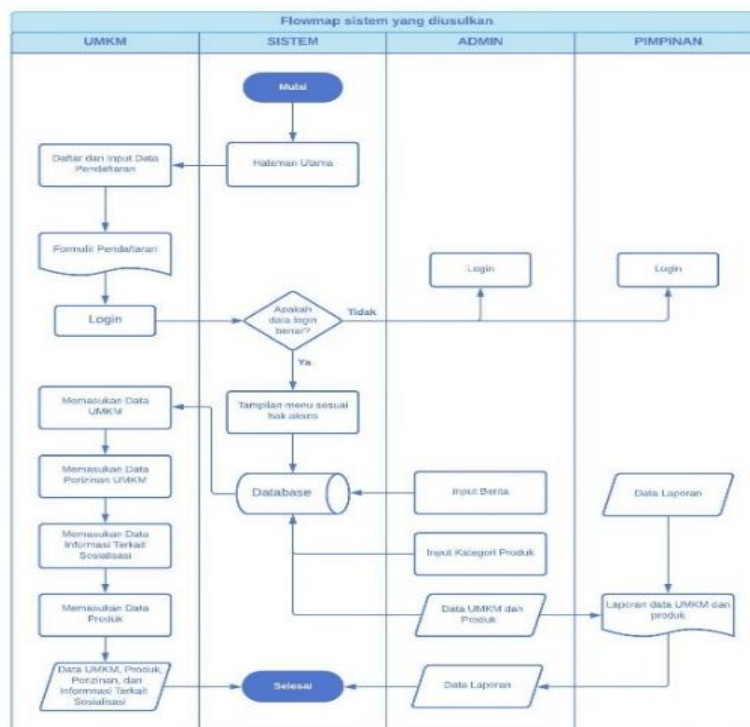


Figure 2. Proposal system flowmap

The system model design can be described in several charts, namely Data Flow Diagrams (Data Flow Diagrams), Entity Relationship Diagrams (Entity Relationship Diagrams), Relational Data Models (Relational Data Models). UML Design There are several actors in this MSME information system, namely admin, MSME and leaders [16].

Table 2. Description of MSME information system actor.

Actor	Description
Admin	The client is responsible for handling the framework and overseeing MSME information, item information, item class, and news information.
MSME	A client that registers and advances items on the framework.
Leader	Clients who only see MSME information reports and goods information.

Table 3. Description Use Case of MSME information system

ID	Use Case Name	Description
UC-01	Login	Perform client validation as a client or administrator.
UC-02	Manage user data	Supervise MSME information, for example adjusting and deleting information.
UC-03	Manage product data	Monitor item progress information, for example, modify, delete information.
UC-04	Managing news	Monitor news information, for example changing, deleting, and adding news.
UC-05	Manage product categories	Classify items, for example changing, deleting, and adding classes.
UC-06	Manage product promotions	Supervise item upgrades, for example, changing, deleting, and adding item upgrades.
UC-07	Register	Register as a new section coming soon.
UC-08	MSME Data	Supervise MSME information, such as changing character information.
UC-9	Report	View reports, for example, MSME information reports and item progress. Reports can be viewed by administrators and pioneers.
UC-10	Change Password	Change client secret key.

3.3 Interface Design

The interface used for the login page is shown in the image below. This page contains a form to fill in the username and password to enter the admin menu.

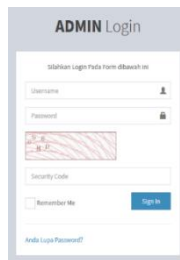


Figure 3. Login interface design

The interface used for the admin page is shown in the image below.

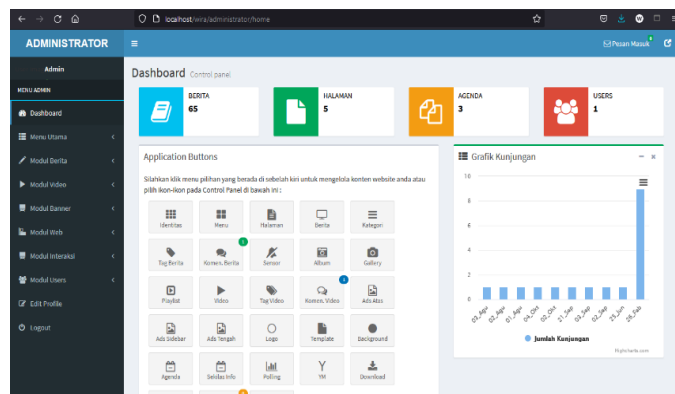


Figure 4. Main menu admin interface design

The interface used for the user menu admin page is shown in the image below. This page contains a table containing details of all users. Furthermore, in the table there is a user search menu and displays the amount of data

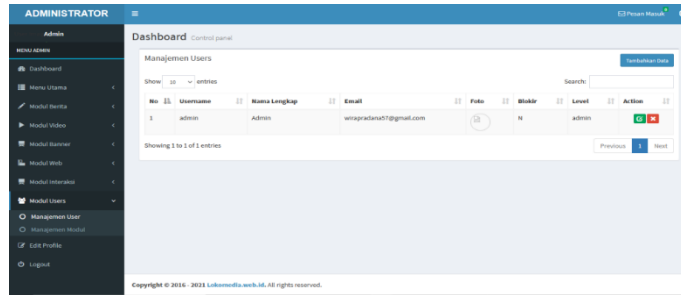


Figure 5. Admin menu interface design user

The interface used for the add user admin page is shown in the image below. This page contains a form to add username, full name, email, position, date of new contract, date of old contract, and description.

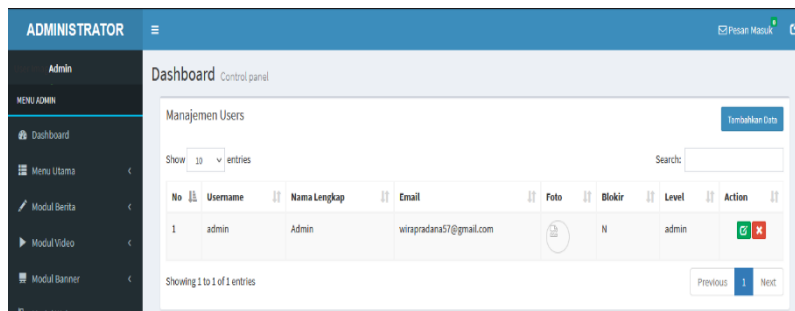


Figure 6. Added admin interface design user

The interface used for the admin edit user page is shown in the image below. This page contains a form to edit your full name, position, date of new contract, date of old contract, and description. And has an edit button to edit the user.

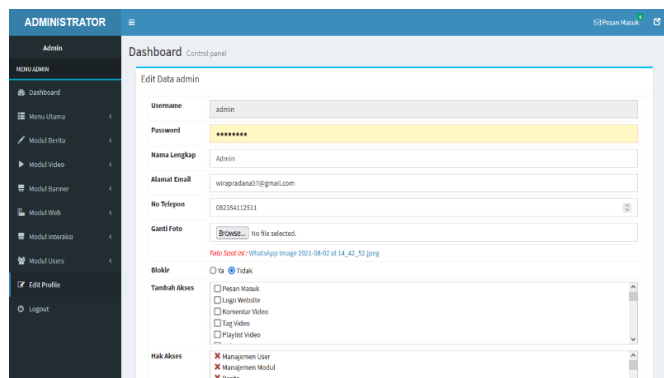


Figure 7. Admin interface design edit user

The interface used for the delete user admin page is shown in the image below. This page contains a form for user data. And has 2 buttons the first button is ok to delete the user and the second button is cancel to cancel the delete user.

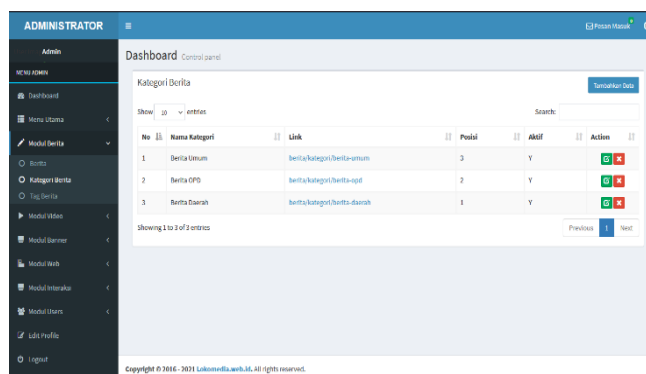


Figure 8. Admin interface design delete user

The interface used for the admin page to change user password is shown in the image below. This page contains a table containing full name, position, date of new contract, date of old contract, description. Furthermore, in the table there is a user search menu and display the amount of data. And has a change button to change the user's password.

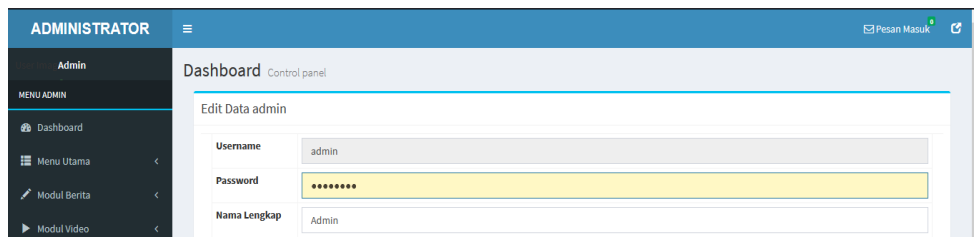


Figure 9. Admin interface design change user password

The interface used for the admin page change user edit password is shown in the image below. This page contains a form to fill in a new password. And has an update button to update the new user password.

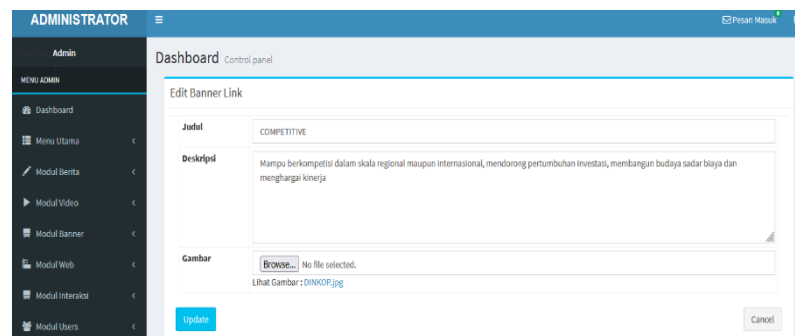


Figure 10. Admin interface design change user password edit

4. CONCLUSION

The information system implemented at the Cooperatives Office through the creation of a website can assist in a more effective and efficient data collection process related to member registration, product promotion and MSME product progress data. The proposed system on the Website of the Cooperatives and UMKM Office of Sampit City can solve the constraints of the previous system and provide convenience for MSMEs with the aim of expanding the range of promotion of goods which initially only depended on verbal delivery and data can be introduced quickly to buyers because refreshments of goods are carried out at any time. , so that the production of this site can further develop the old data scattering framework in MSMEs.

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