Development of Sahabat Masjid Asset and Financial Information System

Haris Setyawan¹, Tony K Haryadi¹, Pascal Pahlevi Pasha¹, Adika Sri Widagdo²

¹Information Technology Department, 55183 Universitas Muhammadiyah Yogyakarta, Indonesia
²Information Technology Department, 57419 Universitas Muhammadiyah Klaten, Indonesia

Abstract. Sahabat Masjid is a community that cares about alleviating poverty and improving the welfare of the community. This community is located in Sorosutan sub-district of Umbulharjo Yogyakarta. To date, Sahabat Masjid has recorded 27 independent orphans (not joining orphanages) covering Tamansiswa area to Tamanan, and Giwangan to the west to Salakan. In addition, this community also assists in handling the sick and the glorification of the dead. Sahabat Masjid collects funds from the community. Currently, Sahabat Masjid is experiencing problems in the process of recording, verifying, and making reports. In addition, financial recording is carried out by manual bookkeeping and the accessibility is still limited. Therefore, an information system to manage its assets and finances is needed. The method of implementing this program consisted of 5 (five) stages, namely preparation of system requirements, asset information system planning, system development and testing, application usage training, and program evaluation. By developing an asset information system, the management of the organization becomes more effective and efficient.

Keywords: asset and financial, information system, sahabat masjid

1 Introduction

Poverty is still a major issue that needs to be addressed in Indonesia. Although poverty alleviation programs have been carried out, the number of poor people is still increasing. The Indonesian Central Bureau of Statistics states that poverty is seen as an economic inability to meet basic food and non-food needs measured in terms of expenditure. People are categorized as poor if they have an average expenditure per capita per month below the poverty line. The Food Poverty Line (FPL) is the minimum expenditure value for food needs, which is equivalent to 2100 kilocalories per capita per day. The basic food commodity package is represented by 52 types of commodities (grains, tubers, fish, meat, eggs and milk, vegetables, nuts, fruits, oils and fats, etc.). The Non-Food Poverty Line (NFPL) is the minimum expenditure value for non-food needs in the form of housing, clothing, education, and health. The basic non-food commodity package is represented by 51 commodities in urban areas and 47 commodities in rural areas.

Poverty Line Calculation Formula:

\[ PL = FPL + NFPL \]

Where:

PL = Poverty Line
FPL = Food Poverty Line
NFPL = Non-Food Poverty Line

* Corresponding author: haris.setyawan@umy.ac.id
Although efforts to reduce poverty have always been rigorously pursued, many things have been neglected, such as equity or justice. This is due to the vast territory of the unitary state of the Republic of Indonesia and the geographical condition of the archipelago. Therefore, there is a possibility that people who should receive assistance are neglected.

On a smaller scale, Sorosutan Urban Village, Umbulharjo Subdistrict Yogyakarta is a densely populated urban area and the majority of the population has good economic conditions. However, from the results of observation and research, there are still poor people, and orphans who need help.

Sahabat Masjid Community is a group of residents having programs to prosper the community, especially the surrounding community and nearby areas. The concept of the nearest area arises because there is still a lot of community assistance that is distributed to distant areas but closer residents are neglected[1]. This community raises funds from residents who are able and willing to become donors to support poverty alleviation activities. The name of Sahabat Masjid is an easy phrase to understand the direction of goodness. Here are some of the activities of Sahabat Masjid, including:
1. Organizing meetings of residents and takmir around the mosque and the region.
2. Assisting the handling of funeral ceremonies.
3. Improving the smooth running of charity activities so that they are more targeted.
4. Providing support to community small businesses.
5. Pursuing the routine of orphan compensation in the neighborhood.

Sahabat Masjid conducts observations and approaches through reports from members or volunteers who are assigned to observe the welfare conditions around them. These volunteers then report to the management to be further scrutinized so that their validity is guaranteed, and then assistance will be distributed to the person concerned. Hence, continuous communication needs to be carried out between members, volunteers, and the management of Sahabat Masjid by using short message media through cell phones, or direct reports. Today, Sahabat Masjid has recorded 27 independent orphans (not joining an orphanage) covering the Tamansiswa area to Tamanan, and Giwangan to the west to Salakan. As of today, the youngest age in the data we have is a 10-month-old orphan and the oldest is grade 2 of high school / vocational school.

Currently, Sahabat Masjid is experiencing obstacles in the process of recording, verifying, and reporting. The management of Sahabat Masjid conducted door-to-door campaigns to meet the residents who have the potential to become donors. Then, they report the donation by sending it via text message. However, financial recording is still carried out by manual bookkeeping and the accessibility is still limited. Therefore, an information system to manage its assets and finances is needed to increase the accountability of this activity [2], [3].

2 Methodology

This program was implemented through the following steps:
1. Preparation
Program preparation was carried out through intensive discussions between program implementers and partners and surveys to the management of Sahabat Masjid. Discussions and surveys aimed to find out in more detail what partner needs are related to asset and financial management problems[4]. The output of this stage was an analysis of partner needs for asset and financial management applications[5]. Some very important things to agree on were what features were needed.
2. Design
The results of the preparation stage in the form of an analysis of partner needs were used to plan the information system. This stage was carried out in the Database Laboratory
at the UMY Information Technology Study Program. The output of this stage was in the form of an activity diagram design, interface, database diagram, and real details of the devices needed[6], [7].

3. Development and testing
The application design that had been made was implemented in Sahabat Masjid. The implementation was in the form of database server installation and installation of Information Systems that have been made.

   Validation or testing was carried out to determine whether the information system was functioning according to design and needs[8]. Technical details of testing can be:
   a. Connection testing between devices with database servers
   b. Testing application features

4. Training
The training aimed to transfer knowledge on how to use the information system that had been built from the program implemener to the management of Sahabat Masjid.

5. Evaluation
Program evaluation was carried out through discussions and the use of post-program applications. Aspects of service speed and ease of process were recorded at this stage.

Figure 1. Methodology

3 Results and Discussion

1. Preparation
   Program preparation was carried out through intensive discussions between program implementers and partners as well as surveys to the management of Sahabat Masjid. The results of the survey and discussion were the specifications of the information system to be created, including assets in the form of:
   a. Objects (movable objects and immovable objects)
   b. Money (cash inflow and cash outflow)

2. Design
   The results of the preparation stage in the form of analyzing partner needs were used to plan the information system. This stage was carried out in the Database Laboratory at the UMY Information Technology Study Program. The following are the results of designing database tables that are used for asset management at Sahabat Masjid.
3. Development and testing

The construction of a web-based application was carried out. Data management can only be done by the designated admin. The interface that has been built can be seen in the following images.
Figure 4. Form to add asset data

Figure 5. Form to change asset data

Fig 6. Financial assets management
4. Training
The training aimed to transfer knowledge on how to use the information system that had been built from the program implementer to the management of Sahabat Masjid. The training was held in the Computer Laboratory of Electrical Engineering Department, Universitas Muhammadiyah Yogyakarta, and attended by 6 foundation managers who are responsible for the assets owned by the foundation.

Figure 7. Training

5. Evaluation
Program evaluation was carried out through discussions and the use of post-program applications. The aspects of service speed and ease of process were recorded at this stage. The results of observations and interviews showed that this program had helped to improve the management of assets owned by Sahabat Masjid. In addition, we realize that some features must be developed so that asset management becomes more optimal.

6. Follow-up Plan
To manage all data and applications, 2 admins were appointed to manage data through web-based applications and provide instructions to members if they experience problems using the application. In the future, features will be developed as needed.

4 Conclusions
This program has been implemented very well and has succeeded in improving the management of assets owned by the Sahabat Masjid community and its financial accountability. In the future, it will be equipped with several features that will further support and improve this social service.

References


