

DEVELOPING MONITORING SYSTEM DASHBOARD MODULE USING ITERATIVE INCREMENTAL METHOD FOR MONITORING ZISWAF PRODUCTIVE REPORTING PERFORMANCE

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Abstract

One of the problems that faced by Indonesia is the disparity (inequality) income distribution and poverty. In 2014 poor people in Indonesia reached 27.727,78 souls or 10,96%. The data is accompanied by an increase of unemployment in Indonesia. The concept of Zakat, Infak, Sadaqoh, and Waqf (ZISWAF) should be recognized by the government and all the people of Indonesia as one of the media in the realization of poverty reduction. Form of equitable distribution of income that can be one is to distribute the income of people who can afford to can not afford. One of the Islamic Financial institutions are tasked to collect the public fund and distribute them is Lembaga Amil Zakat (LAZ) or Badan Amil Zakat (BAZ). The existence of this institution aims at collecting funds from people who are afforded. ZISWAF potential in Indonesia in 2005 is estimated to reach Rp 19.3 trillion. Due percentage ZISWAF is an obligation for all Muslims able to or have reached 'nisab' in his property. Model portfolio ZISWAF by institutions there are two ways, namely consumptive and productive ways. In a productive way, with ZISWAF Fund processing includes planning, implementation, and coordination in the collection, distribution, and utilization of ZISWAF funds, Committed by both BAZ or LAZ. Other obstacles experienced by LAZ and BAZ in the distribution of funds to the poor is not very effective because the target is repeated or similar, is due to the absence of control within the data collection and reporting after the distribution of productive enterprise funds. The existence of the poor majority of the work on the micro business sector, the establishment of policies in providing funding productive activities is very influential with the hope to create new jobs and increase revenues. Based on the problem and to develop the Monitoring System that can help ZISWAF institutions in transparency to the public including the relevant parties. One of them is the Dashboard Micro Monitoring System, an application which is intended to establish Communications and interaction between the funders and built several Business sectors in an effort to increase its capacity in which the system functions to evaluate the distribution of funds reporting performance.

Keywords: the poor in Indonesia, ZISWAF productive, LAZ and BAZ Institutes, Monitoring System.

1. Preliminary

Viewed from the social justice aspect of the *Zakat, Infak, Sadaqah, and Waqaf* (ZISWAF) can be understood as one unified system that cannot be separated in the achievement of economic and social well-being. One of the real problems facing the nation of Indonesia is the disparity (inequality) income distribution and poverty (Yahya, 2010).

Based on the survey results of the Central Bureau of statistics recorded the total population of Indonesia in 2010 reached

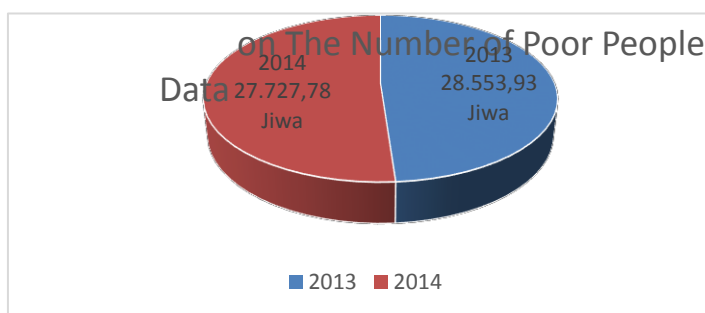


Figure I.1 Data on the Number of Poor People

237,641,326 inhabitants ((BPS, Jumlah Penduduk Indonesia, 2011)). It made Indonesia as the country with the fourth largest population in the world. With such a position, it requires the Government to optimize all resources belonging to the prosperity of the whole community for the sake of Indonesia.

The concept of *zakat*, *sadaqah*, *infak* and *waqaf* (ZISWAF) should be realized by the Government and the whole society of Indonesia as one of the media in achieving poverty reduction. The shape of the Equalization of income that can be done is to redistribute income from the community who are unable to afford. Poverty reduction is a step that must be taken Government organizers. Increase income and purchasing power is a form of poverty alleviation efforts, this can be achieved one of them through the equitable distribution of income.

In Indonesia there are approximately 81.6% *Muslim* population (Tempo, 2011, January 27). This illustrates how great the potential zakat if all Muslims who have already reached the *nisab* channeling Zakat. The potential of zakat in Indonesia in 2005 is estimated to reach 19.3 trillion Rupiah (IDR), but that happened recently around 820 billion Rupiah (IDR) (BAZNAS, 2006)The potential refers to the assumption that there are 80 million population, Muslims in Indonesia are compulsory tithes, with magnitudes of zakat issued monthly starting 50-150 thousand, whereas the percentage of Zakat is an obligation for all Muslims who can afford it or have reached the *nisab* in his wealth.

Based on the data of the Central Bureau of statistics (BPS, *Jumlah UMKM di Indonesia*, 2013) the number of SME reached 56.53 million units and is able to absorb 97.7 percent labor and contributes to the gross domestic income-57.8 percent (of GDP). The strategic role of the various sectors of SME owned, but the sector also faced a variety of problems. One of the constraints and of the problem is the funding aspect.

The question of funding is one of the dilemmas that are very crucial for the continuation of the efforts of SME. Formal financial institutions (banks) are expected as a source of funding for economic development of SME turned out to be not also helps survival. Even the institution looked at micro enterprises as economic units that are not bankable.

Based on the problems from the effort of enhancing financial inclusion, it needs to be done in a comprehensive and coordinated by involving functions and other elements in society. One of them is with the person who manages *zakat*, *infaq*, *sadaqah*, and *waqf* (ZISWAF) which performs remittances ZISWAF is good for consumptive or productive.

Islamic banking is one of the contributors to ZISWAF, in addition to other community elements. Integrating the management of the ZISWAF into the banking system may improve sustainability index (Pratiwi, 2015). One way for that is to give the funds to the ZISWAF the right to the refund without obligation, where these funds can be used to start a business capital.

2. Literature Review and Methodology

2.1. Micro Monitoring System

Micro Application Monitoring System is intended for the building of communication and interaction between funder and any small-scale business sector in an effort to increase the capacity of its business where the system was functioning do performance assessment of the utilization of funds provided (Pratiwi, 2015). The Micro Monitoring System is used as the media liaison for investors and businesses built for information related to the growth and development of small-scale businesses to be able to serve as decision-making by investors. Islamic banks can use the information in the Monitoring System for the Micro decisions granting financing (Pratiwi, 2015). Islamic banks which act as contributors to utilize this system for decision making in the conduct of its funding. The system is also utilized by other investors as the general public, Institution Builder and users of other ZISWAF to get relevant information related to the development of productive ZISWAF.

2.2. Crowdfunding

Crowdfunding is the practice of financing new projects or ventures (the venture) and the way of raising contributions to the funding of a large number of people (the public), which was done using the internet. Crowdfunding is a model of financing projects involving three parties involved, namely:

1. The initiator of the project

The owner of the project presents a proposal containing ideas or projects that need is financed.

2. Individual investors

A collection of individuals or groups who support the ideas or new project and are willing to finance the project has to offer.

3. Platform

The provider of the Website that the site has a program to bring together the two parties above, i.e. the project owners and investors. His role is similar to a 'matchmaker' which offers its website with a special platform to bring together between demand and supply.

2.3. Islamic Banking

Reporting System by SMEs become one important component of the Micro Monitoring System. Where the data required by the Monitoring System come from SMEs reporting. SMEs reporting System is made to help the LKM (microfinance institution) to log the SMEs to apply for funding ZISWAF and also reported the inclusion of SMEs reporting that can be used to apply for funding history reporting to the bank, so that the SMEs do not have to give a guarantee to the bank to borrow fund from bank.

2.4. Laravel Framework

Laravel is a framework used for web development in PHP. The age of this framework, is still new (though it had already begun moving on to version 5), and possibly the same age as with PhalconPHP. This framework is actually arguably built on components that are largely the property of Symfony, and has already made use of almost all the methodology and tools of modern enough for now.

2.5. PHP

Lukmanul Hakim (Murty, 2011) explains that PHP was created by Rasmus Lerdof in 1994 and is open source. Extension of PHP is Hypertext Preprocessor, is a scripting language that is installed in HTML. The majority of the language syntax similar to Java, C, and Perl. PHP intended to write dynamic web pages quickly. PHP is a web programming language that is server-side HTML embedded scripting, this means PHP can be integrated with HTML tags and on the server. PHP script is processed and executed on the server, the client can only see the results of PHP in the form of html. There are some DBMS can be used with PHP include Oracle, MySQL, Sybase, and PostgreSQL. PHP can run various operating systems such as Windows, UNIX / Linux, and Macintosh during the operating system is installed PHP server such as Apache and Nginx.

2.6. Iterative Incremental Development

Figure II. 1 shows the main phases in the RUP development cycle using iterative and incremental fashion, along with the concentration of efforts undertaken in each parking area. The main phases are placed on top of the image and the furrows of work placed on the left side of the image.

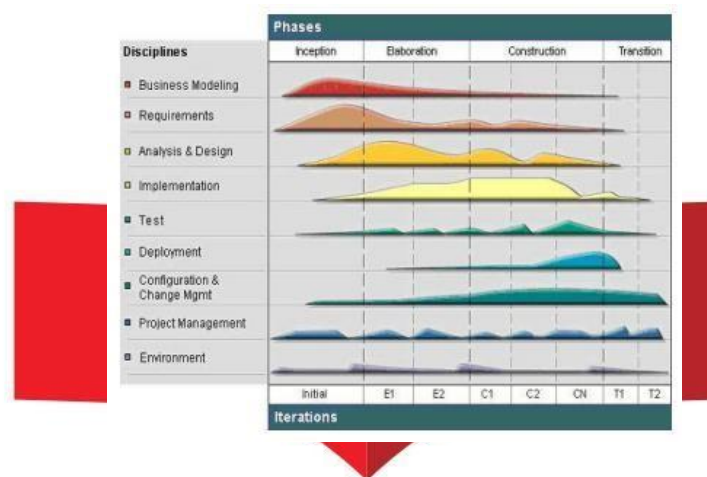


Figure II.1 Phase on Iterative and Incremental.

Method development on a picture above consists of four main phases, i.e., inception, elaboration, construction, and transition. Each cycle includes one or more of the shrimp paste. Here is an explanation of each phase.

1. Inception Phase

This phase focused on defining the scope and the life cycle of the project. To achieve this, need to be identified all the people who will interact with the system and the needs of the system to be developed.

2. Elaboration Phase

The purpose of this phase is to analyze the scope of the problem, creating project plans, create a stable base architecture and eliminating the largest dress rehearsal for this project.

3. Construction Phase

During this phase, all the components and features of the remaining applications are developed and integrated into a product that will then be tested.

4. Transition Phase

The purpose of this phase is to introduce the product to the user, exercising and getting approval from the customer will be products that are already made.

2.7. Conceptual Model

This system pulls data report business development of Micro Monitoring System and provide some parameters to support the decision-making on funding to the SMEs potential. After selecting SMEs Islamic banks that deserve funding, the bank will send data to the approval of the funding of Micro Monitoring System, and record all forms of transactions between banks and SMEs.

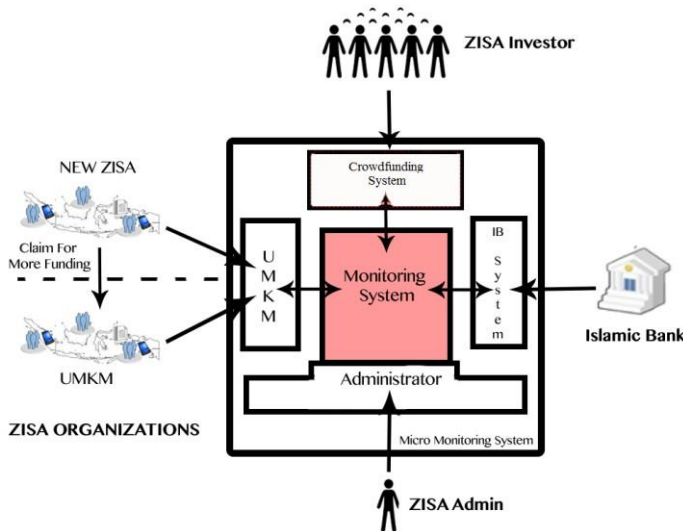


Figure II.2 Conceptual Model Micro Monitoring System Related management of Productive ZISWAF

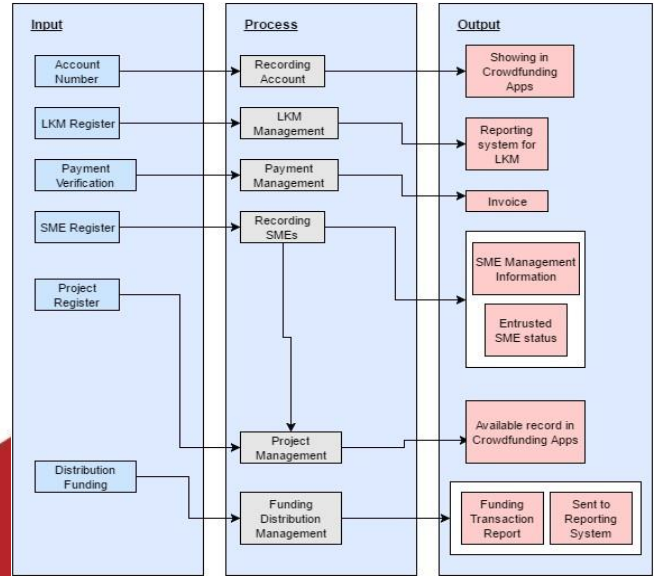


Figure II.3 Conceptual Model of ZISWAF Productive management Monitoring System Module Using Iterative Incremental

3. Study

3.1. Design System

3.1.1. Use Case Diagram

Use Case Diagram created based on business process.

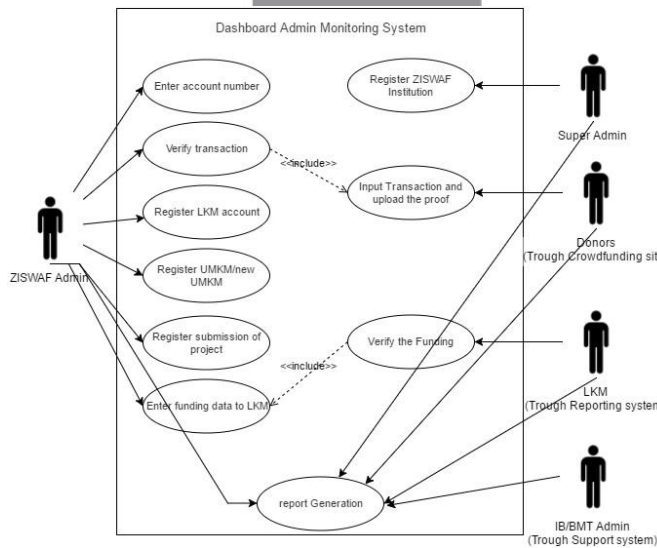


Figure III.1 Use Case Diagram of Decision Supporting

3.1.2. Class Diagram

Class diagram is used to capture the function in the class of project

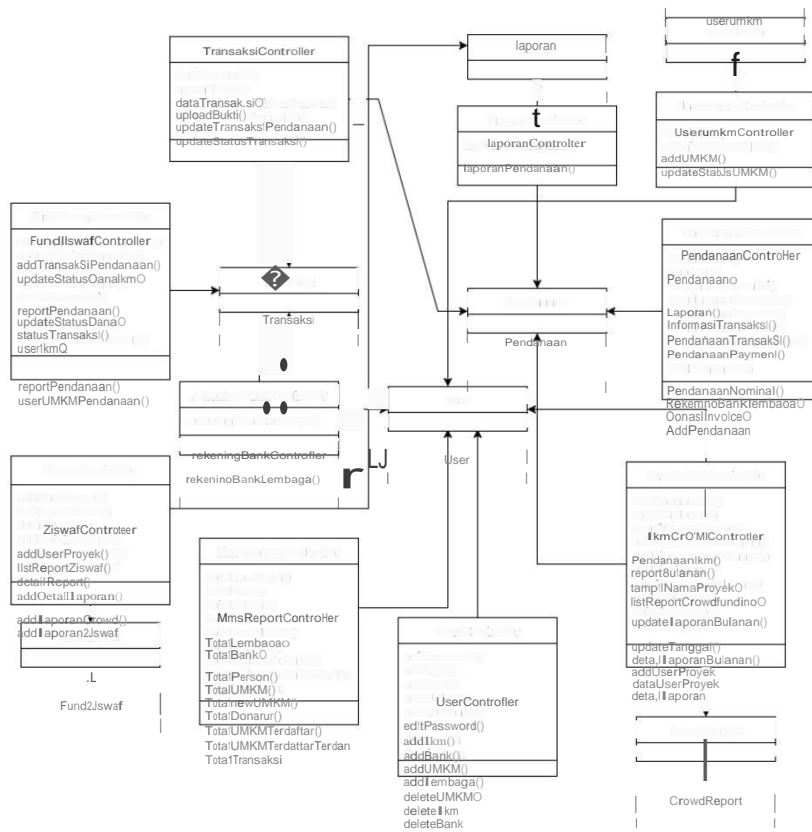


Figure III.1 Class Diagram

4. Implementation

Interface of Ziswaf.org are as follows:

a. Dashboard of ZISWAF Page



Figure 4.1 Dashboard of ZISWAF management

b. Home Page (Current Requests)

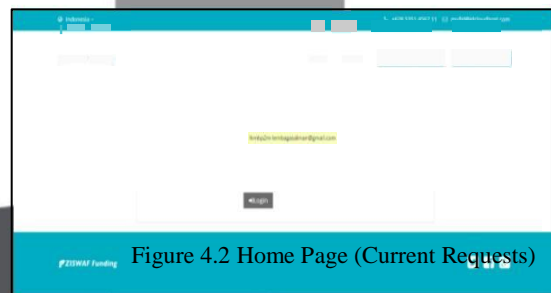


Figure 4.2 Home Page (Current Requests)

c. Super Admin Dashboard

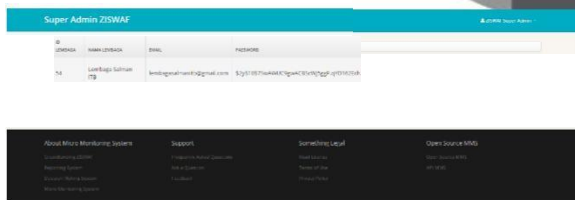


Figure 4.3 Super Admin Dashboard

d. Verification Page

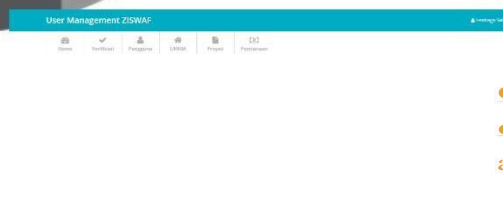


Figure 2.4 Verification Page

e. Report Dashboard

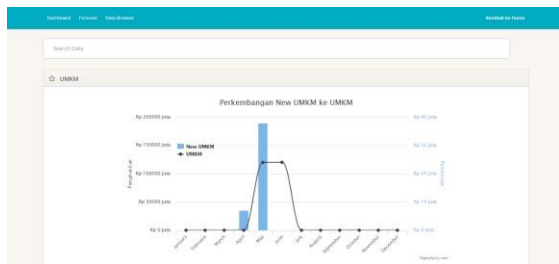


Figure 4.5 Report Dashboard

f. Project Submission Page

| No | Nama | Kategori | Status | Tanggal | Jumlah | Kategori | Status | Tanggal | Kategori |
|----|-------------|----------|--------|------------|---------|----------|--------|------------|----------|
| 1 | Proyek Baru | UMK | Baru | 2016-08-01 | 1000000 | Baru | Baru | 2016-08-01 | UMK |
| 2 | Proyek Lama | UMK | Lama | 2016-07-15 | 500000 | Lama | Lama | 2016-07-15 | UMK |
| 3 | Proyek Baru | UMK | Baru | 2016-08-05 | 1500000 | Baru | Baru | 2016-08-05 | UMK |
| 4 | Proyek Baru | UMK | Baru | 2016-08-10 | 2000000 | Baru | Baru | 2016-08-10 | UMK |

Figure 4.6 Project Submission Page

5. User Validation

Tester describes this application as easy to use, and understandable after the first try

The Conclusion of that result is this application can be adopt to the institutions.

6. Conclusion

Conclusions of the system are as follows :

- The needs of the Monitoring System has been developed as expected and meets the needs of all users. the users such as ZISWAF institution, LKM, SME, Crowdfunding site, and publics.
- The data information between all the Dashboard features build Monitoring System so that the entire functionality of the system to monitor and evaluate the channeling of funds and decision-making has been fulfilled.
- The institution can access the application using every browser with domain ziswaf.org so, that it can be relied upon in making decisions for the concerned agencies in the integration of related funds reporting ZISWAF.
- The report charts has analysis based on all parties needs.
- Conclusion from application objective of DMS (Dashboard Monitoring System) as proposed on section IV.1.4.3. This application divided by 3 component, that are (1) Super admin dashboard that will manage by the developer, this dashboard is for Control the ZISWAF System and for registering ZISWAF institution user account. (2) ZISWAF System Dashboard, it will manage by institution. On the System has several features that have been researched from institution needs. The last (3) Reporting Dashboard, this System is public that can access by everyone. It contains a collection of the charts. All the chart have been analysis in the previous. The following is a conclusion of some features in the application.

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