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Web Based Distribution of Zakat, Infaq, and shodaqoh (Case Study Of Surakarta City Region)

1st Siti Rokhmah, 2nd Ihsan Cahyo Utomo, 3rd Muqorobin, 4th Isnawati Muslihah
[1,3,4] Institut Teknologi Bisnis AAS Indonesia Surakarta
[2]Universitas Muhammadiyah Surakarta
[1,3,4]Jl. Slamet Riyadi No. 361 Windan, Makamhaji, Kartasura, Sukoharjo, Indonesia
[2]Jl. Ahmad Yani, Pabelan, Kartasura, Sukoharjo, Central Java, Indonesia 57162
[1]elfathiey@gmail.com, [2]lcu886@ums.ac.id, [3]robbyaullah@gmail.com, [4]isnawatimuslihah12345@gmail.com

Abstract— Zakat is one of the pillars of Islam whose implementation is required for all Muslims whose wealth meets the Nisab. Nisab is a standard of property that must be Zakati. Because Zakat is the property of the people, the management must be properly channeled. Surakarta city is one of the major cities in Indonesia, there are several institutions of amil Zakat in the city of solo. However, there is no data on the distribution of Zakat in the integrated solo city, so that there are still many recipients of Zakat who receive alms from several amil Zakat. In this study, mapping of Zakat, Infaqand shadaqoh mapping was carried out with a Geographical Information System (GIS). This study aims to produce a deeper analysis of the socioeconomic life in the city of Surakarta as a basis for mapping the distribution of Zakat, Infaq, andShodaqoh. The method used to collect data with rapid appraisal. Where rapid appraisal is a method used to collect data based on socio-economic conditions in the environment, so as to produce a picture of mapping the distribution of Zakat, Infaq, andShodaqoh which is used as a reference for amil Zakat institutions in the Surakarta region to spread.

Keywords:Mapping, distribution, GIS, Rapid Appraisal, ZIS (Zakat, Infaq, andShodaqoh)

I. INTRODUCTION

In the Surakarta region there are many amil Zakat institutions that participate in helping the economic empowerment of the people, especially the poor population and contribute in giving donations to the poor, as reported by the independence vote Thursday 5 October 2006 there are 3 amil Zakat institutions authorized by the city government of Surakarta including amil institutions Zakat (LAZ) of the city government of Surakarta, the dhuafa wallet in collaboration with solo care and amil Zakat institutions in Al-Islam Surakarta, but the data is only LAZIS official data, in the city of Surakarta there are a lot of amil Zakat institutions that manage ZAKAT, INFAQ, andSHODAQOH funds in the region. surakarta, such as LAZIS which was formed by each mosque or by the campus environment, based on the monitoring of the Solo Pos team on the 15 March 2014 edition explained that the emergence of new amil Zakat institutions has the potential to cause misuse and inadequate supervision of the distribution of InfaqandShodaqoh funds[17]

To see and observe how much amil Zakat institutions in helping the economic empowerment of the people in the Surakarta region, the researchers conducted research on the two largest amil Zakat institutions in the city of Solo namely Solo Peduli and LAZIS Jateng solo, from the study the authors obtained data about the targets of amil institutions Zakat to the poor population which will then be mapped by.

The author, so that it can be made a reference by the Surakarta city government and other amil Zakat institutions, so that it is more evenly and precisely targeted in the distribution of alms, Infaqand alms giving.
mapping of ZAKAT, INFAQ, andSHODAQOH fund analysis analysis in the city of Surakarta using the Rapid Appraisal method, this method is a fast and inexpensive way to gather information about the views and input of the target population and other stakeholders regarding geographical and socio-economic conditions, while the results of the distribution analysis will be mapped, where the mapping will be made using GIS (geographical information system) using mapping software that will produce a mapping of the distribution ofZakat, Infaq, andShodaqoh, from the mapping description it can be seen which areas have not received the Zakat distribution , Infaq, and Shodaqohand which regions have received Zakat, Infaq, andShodaqoh funds from amil Zakat institutions.

II. RESEARCH METHODS

Zakat is one of the pillars of Islam that must be performed for Muslims whose property has reached the nisab. Zakat is a redistribution of wealth from those who can afford it. The charity charity is an official institution of Islamic law to create social economic well-being of the people[1]. However, the distribution of Zakat is still not well organized, this is due to the lack of management of Zakat in distributing Zakat[2]. Other than that the management organization of Zakat does not yet have a good distribution strategy in distributing Zakat[3]

Therefore a pattern is needed in the distribution of Zakat, so there is no overlap in the distribution of Zakat[4]. Mapping the distribution of Zakat is one of the solutions in the management of Zakat distribution patterns. The rapid development of technology today can be utilized in helping to make mapping. One example of the use of technology in mapping is mapping to map boarding houses using geographic information systems, where the coordinates of the points are made distribution maps so that patterns and locations of boarding houses can be seen in an area [5]. Mapping the distribution of Zakat can also utilize the Geographic Information System, to create a distribution pattern of Zakat distribution in the city of Surakarta, so that the Organization of Zakat management has a map of the distribution of all Zakat recipients in the city of Surakarta.

2.1 Mapping

Mapping is a grouping of a group of regions related to several geographical locations of the region which includes the highlands, mountains, resources and population potential that influence social culture which has special characteristics in the use of appropriate scales [7]. Another definition of mapping is a stage that must be carried out in map making. The initial steps taken in making data, followed by data processing, and presentation in the form of maps[10].

2.2 Geographic Information System

Geographic Information System is a system (computer-based) that is used to store and manipulate geographical information. Meanwhile, states that GIS is a computer system used to collect, examine, integrate and analyze information relating to the surface of the earth. [8]. in addition Geographic Information Systems are organized collections of computer hardware, software, geographic data and personnel that are efficiently designed to obtain, store, update, manipulate,analyze and display all forms of geographic reference information [12].

2.3 Data

In principle, there are two types of data to support GIS, namely:

- Spatial Data
  Spatial data is a real picture of an area contained on the surface of the earth. Generally represented in the form of graphs, maps, images with digital format and stored in the form of coordinates x, y (vector) or in the form of images (raster) that have a certain value.
- Non spatial data
  Non spatial data is tabular data where the table contains information that is owned by objects in spatial data. The data is in the form of tabular data which is integrated with existing spatial data

2.4 Website

Web based if translated into Indonesian, "web-based", or "internet-based". Can be interpreted as anything that can be accessed via the web, such as Yahoo mail service, your wikimu is also said to be "something" (read: forum) based on the web, which can be accessed via the internet[13].

The desktop applications that are now dominant are running for Windows, only a few are running for Linux /Unix or other OS. Whether it's a free desktop application or a license can only be installed on a PC / Notebook that has a Windows OS. One drawback of desktop applications is the need for high system devices. While web-based applications only require local or online servers and media browsers to access them.

III. RESULT AND ANALYSIS

At present there is no integrated system between amil Zakat bodies in Surakarta, the distribution system is still random and has not been coordinated between amil Zakat institutions so that there are several regions that receive double division. In addition to the distribution system the process of determining the recipient of Zakat is also still a manual, because it has not used a modern survey system. In this study, it is expected that a centralized system regarding the ZIS distribution system and the determination system of Zakat, Infaq, andShodaqoh recipients will be made.

By looking at the problems above, an integrated system between amil Zakat institutions in Surakarta is needed. In addition to the efficiency and effectiveness of the distribution process of Zakat, Infaq, and Shodaqoh, this also increases the accuracy in the distribution of Zakat, Infaq, and Shodaqoh.

Researchers will design a system that has the ability to map the ZIS division in urban areas throughout Surakarta. Every area that receives Zakat, Infaq, andShodaqoh will be recorded on the distribution map.

The following are general procedures for system design regarding ZIS mapping flow in Surakarta region:

1. Administrators will access the web admin mapping Zakat, Infaq, andShodaqoh
2. Next will be checked whether the area has received the distribution of funds Zakat, Infaq, andShodaqoh.
3. If there is no distribution of Zakat, Infaq, andShodaqoh in the area then the data will be added to the mapping of the distribution of Zakat, Infaq, andShodaqoh.
4. If the area already exists, the data will be canceled.

3.1 Zakat Distribution Data

1. Surakarta poor citizen data
   there are 5 districts in the Surakarta region, from the data we got from the Surakarta social service, there are several tables that summarize data on the number of poor each district, here are the data.

Table 1. Surakarta poor Citizen Data

No	District Name	RTS	ART
1	Laweyan	6,562	22,772
2	Serengan	4,214	14,119
3	Pasar kliwon	8,130	28,156
4	Jebres	12,458	44,238
5	Banjarsari	15,024	53,436
	Jumlah	46,388	162,721

Source: Litbang Surakarta

2. Comparison Data
   From the analysis of the distribution of Zakat, InfaqandShodaqoh at the Amil Solo Peduli Institute and Central Java Lazis (data obtained from the distribution of alms attached) the following comparison is obtained.

Table2 . Distribution ZIS of Lazis Jateng

District Name	jumlah sebaran
Banjarsari	18
Laweyan	23
Jebres	7
Serengan	2
pasar kliwon	10

Source: Solo peduli data

To compare the number of distributions of solo care, see the following table

Table 3. Distribution ZIS of Solo peduli

District Name	Number of distribution
banjarsari	38
laweyan	39
jebres	19
serengan	4
pasar kliwon	15

3. Comparison Graphic
Grafik ini merupakan grafik yang menggambarkan perbandingan sebaran Zakat antaralembaga amil Lazis Jateng dan Solo Peduli

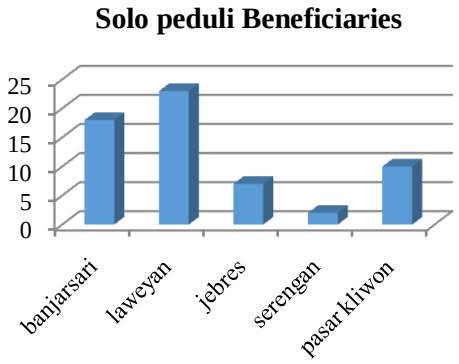

Figure 1. Graphic distribution of Lazis Jateng

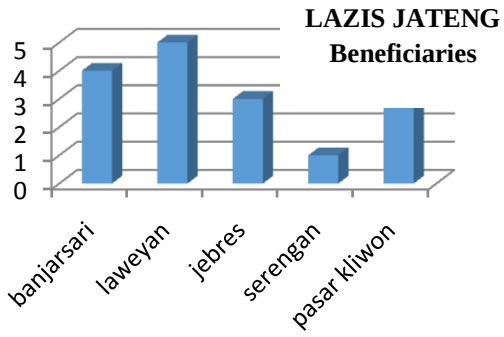

Figure 2. Graphic distribution of Lazis Jateng

system analysis and design is intended to provide an overall picture of the system to be built. as for this system was designed with Unifield Modelling Language (UML) techniques.

1. Use Case Diagram
use case diagram is a diagram depicting the relationship between the actor and the system, in this diagram depicts the activity performed by the actor.

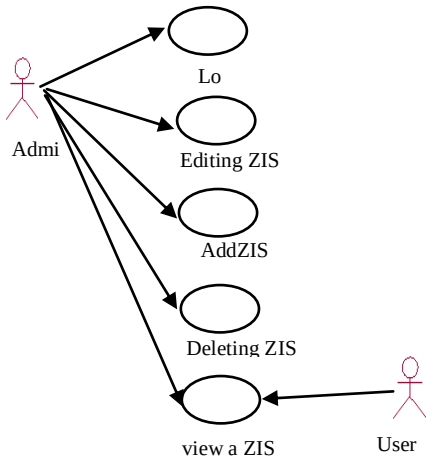

Figure 3. Use Case Diagram

2. Activity Diagram
Activity Diagram illustrates the sequence of activities in a system, activity diagrams are based on usecase diagrams

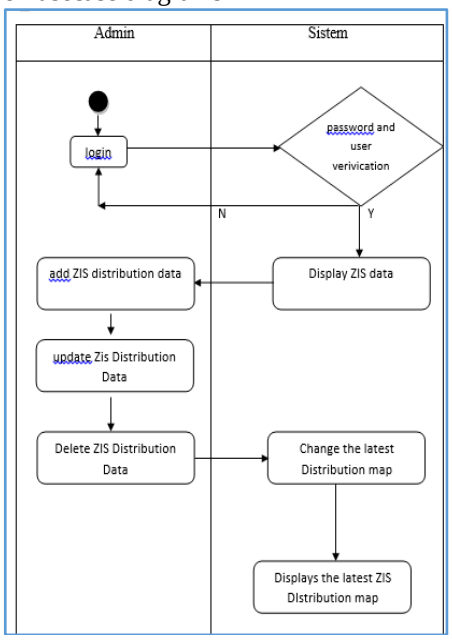

Figure 4. Activity Diagram of Admin

In addition to the admin of Amil Zakat activity diagrams are also provided for website visitors

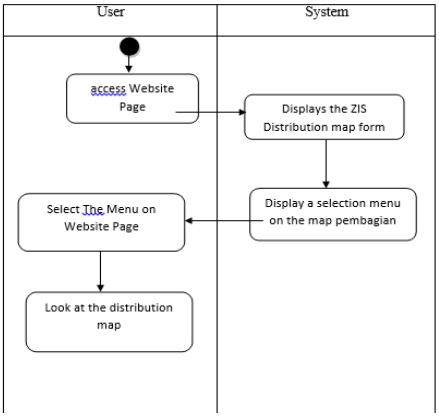

Figure 4. Activity Diagram of User

3.2 System Planning

The data design stage consists of Entity Relationship Diagrams (ERD) diagram of table structure design and relations between tables. GIS applications use the PHP programming language and MySQL DBMS. The results of the design implementation are presented in the figure below:

Figure 5. Main Page of Mapping ZIS website

Explanation:

The main menu display is the first page that will appear after entering the address. In this address there are several menus ranging from the lazy profile of Central Java, solo lazy profiles, solo city administration, Zakat distribution maps, Infaq, andShodaqoh, and sebran statistics.

1. Display admin login form

Figure 6. Admin Login Page

Explanation:

Display admin login function to enter the user id and password as admin, namely amil Zakat institution officials to enter the admin index page.

2. Display Admin's Main menu

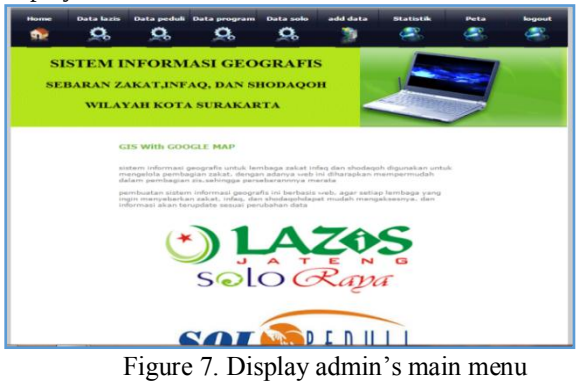

Figure 7. Display admin's main menu

Explanation:

Display the admin menu as a page that functions as a system controller consisting of adding a lazy data menu, adding a caring data, adding distribution data, and maps that have been distributed

3. Display Input form map distribution

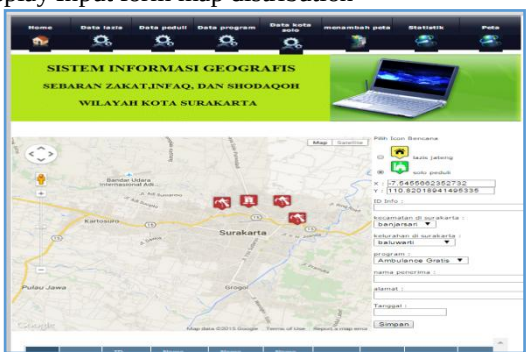

Figure 8. Display Page of Input Form

Explanation:

Form added map distribution serves to add data on the distribution of Zakat, Infaq, andShodaqoh in the Surakarta area, so that the distribution data added by amil Zakat institutions in Surakarta will appear.

4. Display the recipient's solopeduli form

Figure 9. Page Display from the recepient's Solopeduli fom

Explanation:

The solopeduli recipient data form is to add those entitled to receive in solo care.

5. Display Lazis Central Java receiver form

Figure 10. Page Display from the recepient's Solopeduli form

Explanation: The solopeduli recipient data form is to add those entitled to receive in solo care.

IV. CONCLUSION

The mapping application of the distribution of Zakat, Infaq, andShodaqoh makes it easy for amil Zakat institutions in Surakarta to make the distribution of ZakatInfaq, andShodaqoh in the Surakarta region. And can help other amil institutions to distribute. Because this system can be accessed by all amil Zakat institutions and all people, at anytime and anywhere. Making it easier in providing information on the distribution of Zakat Infaq, and Shodaqoh.

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