Master Plan of local E-government for Village Office Information System refer to ministerial regulations on work procedures

by Yudhi Kurniawan

Master Plan of local E-government for Village Office Information System refer to ministerial regulations on work procedures

M Susilowati[a] **, Y Kurniawan**[a]**, C Lenny**[a]**, W Adistianaya**[b] **and M Ahsan**[c]

[a] Universitas Ma Chung, Villa Puncak Tidar N-1, Malang, Indonesia
[b]STMIK Pradnya Paramita, Jl. L.A. Sucipto No.249a, Malang, Indonesia
[c]Universitas Kanjuruan, Jl. S. Supriadi No.48, Malang, Indonesia
*correspondence email : me2s2006@email.com

Abstract—This article contains a local e-government master plan with a case study in a village in Malang district. The master plan referred to the Ministerial regulation regarding the Organizational Structure and Work Procedure of Village Administration. This research method will begin with data gathering (literature study, observation, interview), analysis of SRS (Software Requirement and Specification) documents for synchronization with division of work tasks, creating focus groups, making Master Plan. This article also will present a focus group diagram on the division of labour results based on the 2015 ministerial regulation. Then proceed with a master plan diagram based on the requirement of the actor system in the village office. Namely the village head, village secretary, 3 heads of affairs (administration, finance, planning) and a section head. This article will present 13 names and descriptions of applications needed to support the administrative system at the village office. This article also provides 58 tables needed for a Master Plan of Local E-government for village office information system refer to ministerial regulations on work procedures

Index Terms—information system; master plan; Egoverment; administration

Abstrak–-Artikel ini berisi master plan e-government lokal dengan studi kasus di sebuah desa di kabupaten Malang. Rencana induk mengacu pada Peraturan Menteri tentang Susunan Organisasi dan Tata Kerja Pemerintahan Desa. Metode penelitian ini akan dimulai dengan pengumpulan data (studi pustaka, observasi, wawancara), analisis dokumen SRS (Software Requirement and Specification) untuk sinkronisasi dengan pembagian tugas kerja, pembuatan focus group, pembuatan Master Plan. Artikel ini juga akan menyajikan diagram kelompok terarah pembagian hasil kerja berdasarkan Peraturan Menteri 2015. Kemudian dilanjutkan dengan diagram rencana induk berdasarkan kebutuhan sistem aktor di kantor desa. Yaitu kepala desa, sekretaris desa, 3 kepala urusan (pemerintahan, keuangan, perencanaan) dan seorang kepala bagian. Artikel ini akan menyajikan 13 nama dan deskripsi aplikasi yang dibutuhkan untuk mendukung sistem administrasi di kantor desa. Artikel ini juga menyediakan 58 tabel yang diperlukan untuk Rencana Induk E-Government Daerah untuk sistem informasi kantor desa mengacu pada peraturan menteri tentang tata cara kerja.

Kata Kunci—sistem informasi; master plan; Egovernment; administrasi

I. INTRODUCTION

One of the instruments of planning is master plans [1]. Even the master plan especially on information and communication technology is a guide to construct ICT [2]. There are also those who explain how important is master plan. He said if The IT master plan is a long-term plan in an organization. This plan is created to support the organization's vision and mission [3]. This fact is presentation if the master plan is very important to start developing an information system. As well as the process of developing information system in the village is very important. The local e-government need the master plan to know how the planning and developing schedule for implementation information system.

So this research will concern to create master plan of local E-government for village office information system refers to ministerial regulations on work procedures. On many years ago, The E-government has become a major topic of interest for academics and practitioners. Because the study of the success of e-government implementation is part of the success study of the IS application [4]. But implementation of E-government development may not be comprehensive from the outset but will continue to grow steadily over time, in tune with the readiness of each layer of bureaucracy that would be

expropriated E-government and socialization to people. The reason is also about the reference and direction must be right in order to reach the goal, that no manual service to the public, both individuals and institutions, and there is no manual interaction among institutions, and there should be no redundancy process and data [5].

This article contains a local e-government master plan with a case study in a village in Malang district. The master plan referred to the Ministerial regulation regarding the Organizational Structure and Work Procedure of Village Administration. This research method will begin with data gathering (literature study, observation, interview), analysis of SRS (Software Requirement and Specification) documents for synchronization with division of work tasks, creating focus groups, making Master Plan. This article also will present a focus group diagram on the division of labor results based on the 2015 ministerial regulation. Then proceed with a master plan diagram based on the requirement of the actor system in the village office.

II. METHODS

A. Object of research

This research will concern to implementation ministerial regulation on procedures to be the object of research. The ministerial regulation is the main document that is basic for requirement analysis to create a master plan. The main document is Peraturan Menteri No. 84 Tahun 2014 about Susunan Organisasi dan Tata Kerja Pemerintahan Desa [6] this document from Ministry of Home Affairs.

On chapter two from this document shared about organization structure, duty and functional of local e-government. I means is personnel of village office.

- Organization structure. Chapter two section two describes the organizational structure of the village officials. There are Chief of village, Secretary of village, Regional Staff, technical Staff.
- Task and functional. Chapter two section six describes the duty and functional of Chief of village, Secretary of village, Regional Staff, technical Staff.
- The village chief task. Is organizing Village Administration, implementing development, community development, and community empowerment.
- The secretary of village task. Is in charge of assisting the Chief of Village in the field of government administration.
- The head of affairs serves. as an element of the secretariat staff Secretary of village task. The head of affairs are Head of administration and general, head of finance, head of planning.
- The section head serves. as the technical executing element. The section head help Chief of Village for operational technical. There are section head of government, head of social, head od services.
- The head of regional. Help Chief of Village to do the task on their regional.
- The technical executing element. The section head help Chief of Village for operational technical. There are section head of government, head of social, head of services

B. Method

This research method will begin with data gathering (literature study, observation, interview), analysis of SRS (Software Requirement and Specification) documents for synchronization with division of work tasks, creating focus groups, making Master Plan. For detail step can explain in Figure One about method. On Figure One we can see step by step that did in this research.

First step was data gathering with tree activities. There are literature study, observation and interview. Literature study was doing with find many example of master plan about local E-government that implementation on other place from Indonesian and many countries [7] [8]. Literature study step find many official document that output from business process in office of Local E-government too [9]. Observation step was doing with visited the office village to know business proses, especially day to day operation in every divisions. The result of observation was compared with theory from study literature and make conclusion. The conclusions from compare process was explained with interview to clear the business proses component.

The second step is Analysis of SRS (Software Requirement Specification). This step be started with make document SRS to know detail of requirement from business process. SRS give recommendation for develop information system too, because in this document we can know functional requirement from every user in business need and logical database.
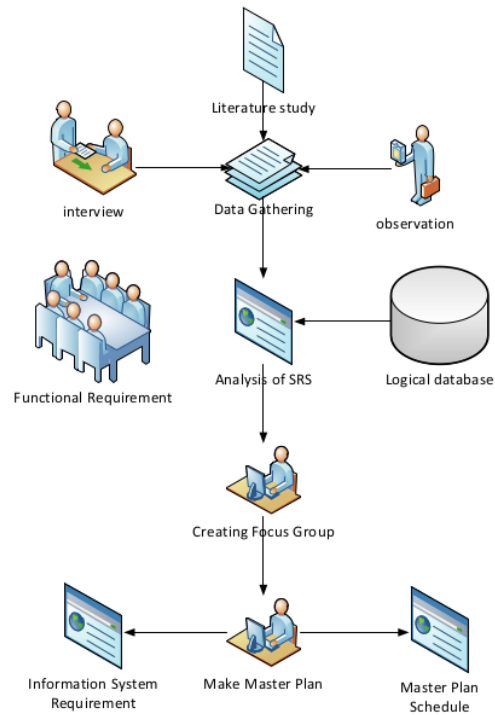
Figure 1. Method

The third step is creating focus group. Focus group is a diagram that explain about many module and sub module that recommended by SRS. Module and sub module like as menus on application of information system, because Focus Group Diagram content about transaction or activities on every business process in every division or users. This article also will present a focus group diagram on the division of labour results based on the 2015 ministerial regulation. Then proceed with a master plan diagram based on the requirement of the actor system in the village office. Namely the village head, village secretary, 3 heads of affairs (administration, finance, planning) and a section head. This article will present 13 names and descriptions of applications needed to support the administrative system at the village office. This article also provides 58 tables needed for a Master Plan of Local E-government for village office information system. Focus Group Diagram can saw on Figure two.

The last step is making master plan with create tables and schedule of information system requirement.

1. Kepala Desa

Administrasi Surat - Menyurat
KD53A6. Mengontrol dan Memvalidasi Administrasi Kependudukan

Kegiatan Operasional Lainnya
KD53A2. Melakukan Penetapan Perdes

2. Sekretaris Desa

Administrasi Surat - Menyurat
SD63A3. Menyimpan Arsip

SD63D4. Menyusun Laporan

SD63A2. Melakukan Administrasi Surat-Menyurat

SD63C3. Melakukan Verifikasi Administrasi Keuangan

Administrasi Keuangan
SD63C1. Mengurus Administrasi Keuangan

SD63C2. Mengurus Administrasi Sumber APBD

SD63C4. Memeriksa Administrasi Penghasilan Perangkat Desa

SD63D1. Menyusun Rencana APBD

Kegiatan Operasional Lainnya
SD63A1. Melakukan Tata Naskah

SD63A4. Mengontrol Ekspedisi

SD63B1. Melakukan Penataan Administrasi Perangkat Desa

SD63B3. Menyiapkan Rapat

SD63B4. Melakukan Pengadministrasian Aset

SD63B6. Mengurus Perjalanan Dinas

SD63D2. Menginventarisir Data Desa dalam rangka Pembangunan

SD63D3. Melakukan Monitoring dan Evaluasi Proker

SD63B5. Melakukan Inventarisasi

3. Kepala Urusan

Administrasi Surat - Menyurat
KU73A3. Menyimpan Arsip

KU73A2. Melakukan Administrasi Surat-Menyurat

KU73B3. Melakukan Verifikasi Administrasi Keuangan

KU73C4. Menyusun Laporan

Administrasi Keuangan
KU73B1. Mengurus Administrasi Keuangan

KU73B2. Mengurus Administrasi Sumber APBD

KU73B4. Melakukan Administrasi Penghasilan Perangkat Desa

KU73C1. Menyusun Rencana APBD

Kegiatan Operasional Lainnya
KU73A1. Melakukan Tata Naskah

KU73A4. Mengurus Ekspedisi

KU73A5. Melakukan Penataan Administrasi Perangkat Desa

KU73A9. Melakukan Inventarisasi

KU73A10. Mengurus Perjalanan Dinas

KU73A8. Melakukan Pengadministrasian Aset

KU73A7. Menyiapkan Rapat

KU73C2. Menginventarisir Data Desa dalam rangka Pembangunan

KU73C3. Melakukan Monitoring dan Evaluasi Proker

4. Kepala Seksi

Kegiatan Operasional Lainnya
KS83A3. Melakukan Pendataan

Figure 2. Focus Group Business Process Diagram

III. RESULT AND DISCUSSION

According to the method, we can share about the result. The master plans will presentation on three matrix tables. The first table describes about Information Requirement for Head of Affairs. And the second table describes about Information Requirement for Section Head Serves. And the last table describes about Information Requirement for Head of Regional, Secretary and Chief of Village.

The number of information system in table is not representation about priority number. It's just sequence number.

Table 1. Head of affairs master plan.

No	Information System Requirement	Head of affairs		
		Administration	Finance	Planning
1	Citizen Database	v		
2	Family Card Record	v		
3	Repository	v		
4	Letters Administration	v		
5	Human Resource Management	v		
6	Aset Management	v	v	v
7	APBD Planning		v	v
8	Finance Report		v	
9	Cash Flow		v	
10	Planning Management			v
11	Internal archives			
12	Govemance			
13	Social Community Management			
14	Village website	v	v	v
15	Inventory Management	v	v	v

There are three software that has not needed by head of affairs on first table. There are Internal archives, Governance, and Social Community Management. And then in second table, There are seven software that has needed by Section head Serves. There are Citizen Database, Repository, Aset Management, Internal archives, Governance, Social Community Management and Village Profile website. In three table, the entire table is needed by Head of Regional, Secretary and Chief of Village. Because Secretary must be verification all of document, data and information before Chief of Village give validation. Likewise, regional heads also require almost all applications.

Table 2. Section head serves master plan.

No	Information System Requirement	Section Head Serves		
		Government	Social	Services
1	Citizen Database	v	v	v
2	Family Card Record	v		
3	Repository	v		
4	Letters Administration	v		
5	Human Resource Management			
6	Aset Management	v	v	
7	APBD Planning			
8	Finance Report			
9	Cash Flow			
10	Planning Management			
11	Internal archives	v		
12	Govemance	v		
13	Social Community Management	v	v	v
14	Village website	v		
15	Inventory Management			

Table 2 explain about requirement information system for three Section Head Serves. There are Government Section Head Serves, Social Section Head Serves and Services Section Head Serves. In this table we can see there are four applications that not requirement by Section Head Serves. There are APBD Planning, Finance Report, Cash Flow and Planning Management.

Table 3. Head of regional, secretary and chief of village master plan.

No	Information System Requirement	Head of Regional	Secretary	Chief of Village
1	Citizen Database		v	v
2	Family Card Record	v	v	v
3	Repository		v	v
4	Letters Administration	v	v	v
5	Human Resource Management		v	v
6	Aset Management	v	v	v
7	APBD Planning	v	v	v
8	Finance Report	v	v	v
9	Cash Flow	v	v	v
10	Planning Management		v	v
11	Internal archives		v	v
12	Governance		v	v
13	Social Community Management	v	v	v
14	Village website	v	v	v
15	Inventory Management		v	v

And next table is about requirement information system for Head of Regional, Secretary and Chief of Village. In table 3 we can see about privilege of Chief of Village for all applications. This privilege to validation access. And Secretary have same privilege too. But there are a little different access. The Secretary have verification access for all applications before send to Chief of Village. The last is head of regional like RT, RW and Kepala Dusun. They have privilege to Family Record, Letters Administration, Asset Management, APBD Planning, Finance Report, Cash Flow, Social Community Management and Village website.

In this section we know there are nine user characteristics that need to operation all off information System. So the government should have a commitment to provide informal education in the field of ICT in the state apparatus and society starting now [10]. This action will build digital communities (digital society) throughout the region in Indonesia. The existence of digital society is considered not only able to develop better e-government system but also has an impact on economic acceleration. Other than those two things, the most important thing also requires commitment and strong leadership in developing e-government [10]

Figure 2. Master plan schedule

The fifteen applications in this master plan can developed as shown in Figure 1. The sequence of this Master Plan are based on the priority of the management information system, which starts from the marketing or services division, manufacturing or services operations, then finance and finally is human resources [11]. About duration or time line can decision according to the resource that had on village. One of recommendation article about duration of implementation e-government master plan can found from Sudan. There are twenty-five e-government projects in Sudan to be implemented within five years from the year 2016 – 2020 [12]. Master Plan Local E-government can be success if get support and collaboration from many related institutions like opinion from researcher from Zambia. The researcher said if 56% of the respondents indicated that there was no framework in place for inter-agency collaboration while 43% said there was a framework for inter-agency collaboration. In Zambia, several researchers and scholars have reviewed e-government implementation. However, there has been no study that has sought to review the role of coordination and inter-agency collaboration in implementing e-Government programmes in Zambia. The results of their study informed policy makers to come up with policies, strategies and legislative interventions that will make e-Government coordination and collaboration of government agencies more effective and transparent [13]. Hopeful this result will send the benefit of E-government like to go beyond cost-quality ration, if adopted well it can transform the government. Because E-government is a channel through which the ruling class interacts with its citizens (e-Citizens and e-Services), improves public service delivery and processes (e-Administration), and builds external interactions (e-Society) [14]

IV. CONCLUSION

After the research worked, we have 3 conclusions about Master Plan of local e-government for village office information system refer to ministerial regulations on work procedures process. There are:
- Master Plan need fifteen Information System Requirement
- Master Plan need nine user characteristic to split that privilege on system
- Master Plan need sequence schedule well. And the researcher suggests the following sequence of schedules for citizen database, family card record, letters administration, village website, repository, internal archives, planning management, inventory management, asset management, APBD planning, cash flow, finance report, social community management, governance, human resource management.

Hopefully this research useful and can be developed further

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