A Estratégia De Utilização Do Sistema De Informação De Gerenciamento Na Governação Governamental De Wargakerta Village, Sukarame, Tasikmalaya

The Strategy Of Using Management Information System On Village Government Management Of Wargakerta Village, Sukarame, Tasikmalaya

La Estrategia De Utilizar El Sistema De Información De Gestión Sobre La Gestión Del Gobierno De Pueblos De Wargakerta Village, Sukarame, Tasikmalaya

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Resumo

Esta pesquisa tenta projetar o sistema de informação do governo da aldeia (SIM PEDES) usando a abordagem da pesquisa-ação como um método útil. Pode ser usada como estratégia do Sistema de Informação, com o objetivo de apoiar a eficácia do sistema gerencial do governo da aldeia em Wargakerta. , Sukarame, Tasikmalaya. A aplicação do sistema de informação foi ajustada de acordo com as necessidades da vila de Wargakerta, portanto, pode ajudar o processo de negócios atual. O Programa de Aplicação SIM PEMDES consiste em vários recursos, desde o sistema de gerenciamento populacional, sistema de gerenciamento de funcionários, sistema de gestão de impostos prediais e prediais, sistema de gerenciamento financeiro de aldeias e sistema de gerenciamento de potencial de aldeias. Além disso, esta estratégia de utilização de informações do sistema pode ser feita como o primeiro passo para o desenvolvimento de um sistema de informações de gerenciamento de aldeias que se refere ao desenvolvimento da Aldeia Digital. O resultado desta pesquisa mostrou como o aplicativo SIM PEMDES é bastante eficaz para auxiliar o processo de gerenciamento de Wargakerta.

Palavras-chave: SIM PEMDES; Fluxograma; Banco de Dados; Aldeia

Abstract

This research attempt to design the information system of village government (SIM PEDES) using the approach of action research as one of useful method can be used as a strategy of Information System using with a purpose to support the effectiveness of Village government managerial system in Wargakerta, Sukarame, Tasikmalaya. The application of Information system havebeen adjusted within the needs of Wargakerta village, therefore it can help the current business process. SIM PEMDES Application Program consist of various feature start from the system of population management, system of employee management, system of land and building tax management, system of village financial management, and the system of village potential management. Beside, this strategy of system information using can be made as the first step guide to develop a village management information system which refers to the development of Digital Village. The result of this research showed how SIM PEMDES Application is quite effective to help the management process of Wargakerta.

Keywords: SIM PEMDES; Flowchart; Database; Village

Resumen

Este intento de investigación para diseñar el sistema de información del gobierno de la aldea (SIM PEDES) usando el enfoque de la investigación de acción como uno de los métodos útiles puede usarse como una estrategia del Sistema de información con el propósito de apoyar la efectividad del sistema de gestión del gobierno de la aldea en Wargakerta , Sukarame, Tasikmalaya. La aplicación del sistema de información se ha ajustado a las necesidades de la aldea de Wargakerta, por lo tanto, puede ayudar al proceso comercial actual. El Programa de Solicitud SIM PEMDES consta de varias características que comienzan desde el sistema de gestión de la población, el sistema de gestión de empleados, el sistema de gestión de impuestos sobre la tierra y la construcción, el sistema de gestión financiera de la aldea y el sistema de gestión potencial de la aldea. Además, esta estrategia de uso de información del sistema se puede hacer como la guía del primer paso para desarrollar un sistema de información de gestión de la aldea que se refiere al desarrollo de Digital Village. El resultado de esta investigación mostró cómo la aplicación SIM PEMDES es bastante efectiva para ayudar al proceso de gestión de Wargakerta.

Palabras clave: SIM PEMDES; Diagrama de flujo; Base de datos; Aldea

1. Introduction

Based on constitution number 6/2014 concerning on Village Regulation, giving a big opportunity of every village to maintain their own governance system along with their village's development system to improve prosperity and the quality of life. Besides, the government of village is expected to be more independent on managing the village and every available resource exist.

Management of village government is a complex and structured management. The arrangement of village government instrument as the instrument with closest relationshipto people such as the leader of neighborhood and hamlet, they should have a direct connection with people to create a good synergy inside the village management.

On its implementation, village government activity has being regulated by government inside the Minister of Home Affairs Regulation number 84 concerning on the arrangement of organization and village governance work procedures. And that procedures explained about the assignment and function of each element of village instrument. Therefore, the will be no collision between a worker and the other. This regulation has a function to adjust the system of institution about the arrangement of task, function and their work relation.

Village government has a wide range and spread in every region that included as the villages boundaries of Wargakerta, Sukarame, Tasikmalaya. Besides, village government also included some association such as village council, Public Empowerment Agency, village youth organization, village figure, MajelisUlama Indonesia (MUI), and the other institution who can have a good communication between one another.

As a Government have to involve all village people on exploring the aspiration of people which represented by village council, Thus the work program and arranged activities can help to accommodate the importance and the needs of village people(Musthafa & Utama, 2018). However, the role and the responsibility that has been accepted by village are not balancing yet with a good human resource whether it is good by quantity or quality. The other general problem is that village does not have any procedures and support of facilities and infrastructures along with it management. Besides, the amount of fund which managed by government have a quite high risk on its management, especially for the village government instrument.

Government Apparatus and Village people which presented by village council have to own an understanding of constitution regulation and other needed regulation, and they have to own an ability to implementing a registration, report and responsibility. Therefore, the importance of managing a responsibility report of village government administration within

the Management Information System that has been made by integrated software to help the process of managing the village management report more effective and efficient, provide a simple menu display, and provide a high security which is quite valid for the user

Based on the problem above, this research aims to apply a village management information system of village government (SIM PEMDES) with implementing some process such as(Fowler, 2007): (1) Method Design and Development a. the development of Information system on Village government; b. *Flowchart,* c. *database* design;(2) SIM PEMDES Wargakerta, Sukarame, Tasikmalaya program application trial. The result of this research can be basic on developing Management system of Village government Management become a professional and independent system which refers to a certain rules and regulation based on the principles of governance rules

2. Literature Review

Village Government

Based on the regulation of Indonesian Minister of Home AffairRegulation number 84/2015 regarding the arrangement of organization and working procedures of village government, village government is an implementation of government concern and the interest of people living around those areas inside the government system of Indonesia. Furthermore, village government can be the head of village within the help of other government instrument as the element of village government.

Management Information System

As how the term of Management of Information system, system have defined by some expert within the different way. That differentiation happens because there are different point of view and different reviewed system scope. The function of system is to accept and input, manage that input then producing an output(O'Brien, 2014). In order to operate the function, this system will have it input components, processing, output and the control to make sure all the function can be operate well. Simply, the definition of Information is a data which has been processed therefore it will have a benefit for making any decision. While management is associations of some people who are in charge of manage the company, organization or government. Management Information System is a group of component that should cooperate with each other and used for collecting data, managing data and providing information for every decision maker in order to make the best decision (Winarno, 2017)

Components of Information System is depends on the process of each company. The main component is a communication technology, computing technology and information technology. Communication technology used to send the data from one place or device to

other place or device. Computing technology is every devices used to processing the data. Information technology is every method to spread every kind of information to various sides who needs it (Zwass, 2003).

3. Methodology

Methodology used in this research is *action research*. This methodology used to analyze a problem and find a solution of the problem. "Action research is a way to do a research and finding solution at the same times"

On system information, there are some methodologies which included as *Action Research,* such as *Cannonical, IS Prototyping, Soft Systems Methodology, ETHICS, Action Science, Participant Observation, Action Learning, Multiview, Clinical Field Work, and Process Consultation*.

This research uses *prototype* method it means an analysis technique and design which have possibility for user to participate on deciding the needs and what kind of system organizer they need to set on fulfilling those needs. General step of *prototype* paradigm is written below:

    a. Identify the user need

    b. Design the *prototype*

    c. Decide whether *prototype* can be accepted by the user

    d. Establish an operational system

    e. Examine an operational system

    f. Decide an operational system

    g. If the system has been approved, therefore the last step will be an implementation of system.

4. Result and Discussion

The use of SIM PEMDES in this research motivated by the researcher view that SIM PEMDES is a need for supporting the activities of village government in performing the village governance. All of this times, village government managerial process still done manually, in other word the existed computer only used as a media to arrange the report without the function of helping the managerial system. Therefore, it needs to use the Management Information System to support the business process of Government in Wargakerta, Sukarame, Tasikmalaya with the application of SIM PEMDES.

Identification result toward the user of SIM PEMDES in Wargakerta, Sukarame, Tasikmalaya about the needs of application explained as below:

Table 4.1

The needs of SIM PEMDES

No	Process Name	Success Indicator
Population Management Process		
1	Population Data Collection	Have an easy information access which is open for public access and easily saved inside *database*
2	Population Data Classification	Have an easy information access which is open for public access and easily saved inside *database*
3	Administration Service	Fast Service because the general application formatis already exist inside the application
Employee Management Process		
4	Working Schedule Management	Schedule can be made and adjusted based on the task and function of each employee
5	Employee Attendance List	EmployeeAtendance list or Village Instrument list can be access digitally, and its management system can be access within online system by the village head and village secretary
6	Salary Management	Salary distribution adjusted based on the attendance of each employee, the amount of salary also could be seen by financial manager including their amount of attendance
Land and Building Tax Management Process		
7	Land and Building Tax Data Mangement	The access of information. The access Information of every taxpayers can be gain easily and can be done anywhere as a material of tax collector.
8	Land and Building Tax Payment Transaction	Data transaction automatically saved inside database along with the personal transaction and could be done anywhere.
Financial Management Process		
9	Cash In Management	Data transaction automatically saved inside database along with the personal transaction and could be done anywhere.
10	Cash Out Management	Data transaction automatically saved inside database along with the personal transaction and could be done anywhere.
Village Potential Management Process		
11	Potential Data Management and Village Aspiration	The access of village data potential can be uploaded everywhere based on the potential location and aspiration, and that data can be seen directly at any time by village instrument because tha data are automatically saved inside database

SIM PEMDES Design

System Information modeling of village government management these days using the plot of system within *flowchart* and for *database* modeling uses *class diagram* with a purpose of giving more simple definition and could be easily understand by the user.

1. Population data management and population classification
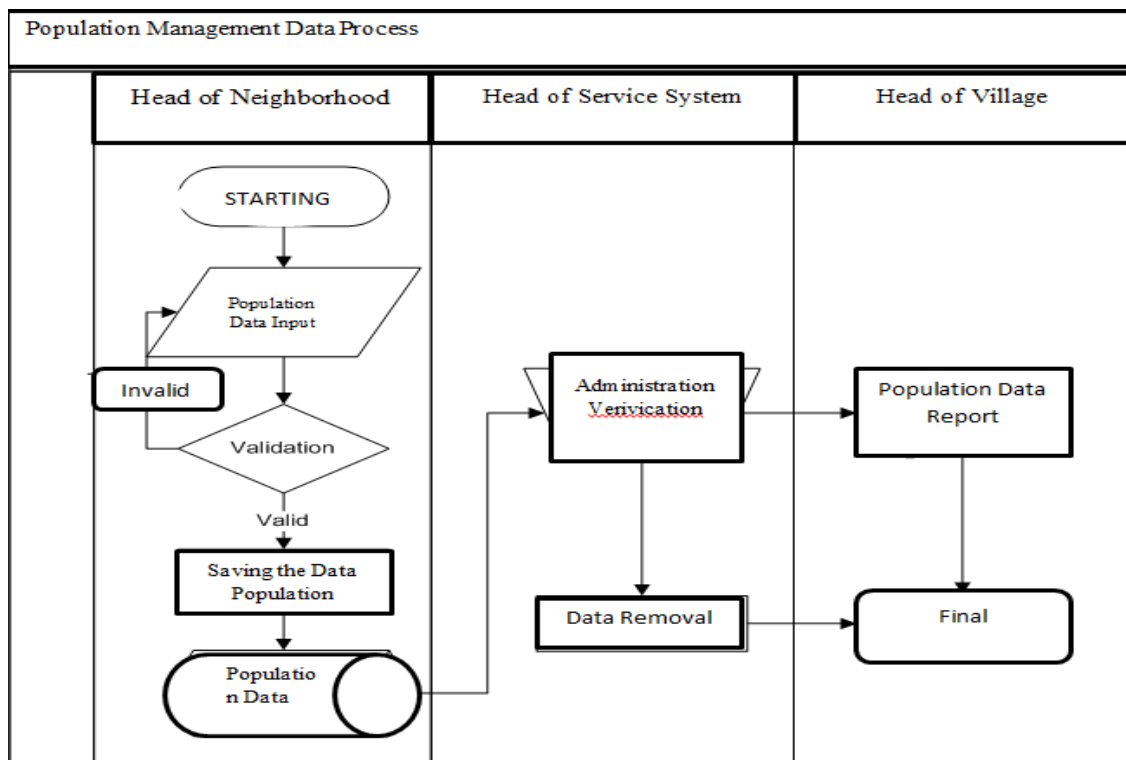
a. *Flowchart*of Population Management

Figure 4.1

*Flowchart*of Population Data Management

The pictures above explained that for population management system on SIM PEDES application needs three entities. Those three entities has each function starting from the head of neighborhood which has a task to collecting the data of population in field directly, then the head of village service has a job to verify the document and the head of village with a job to rechieve any report as a supporting material to make a decision of work program for village people.
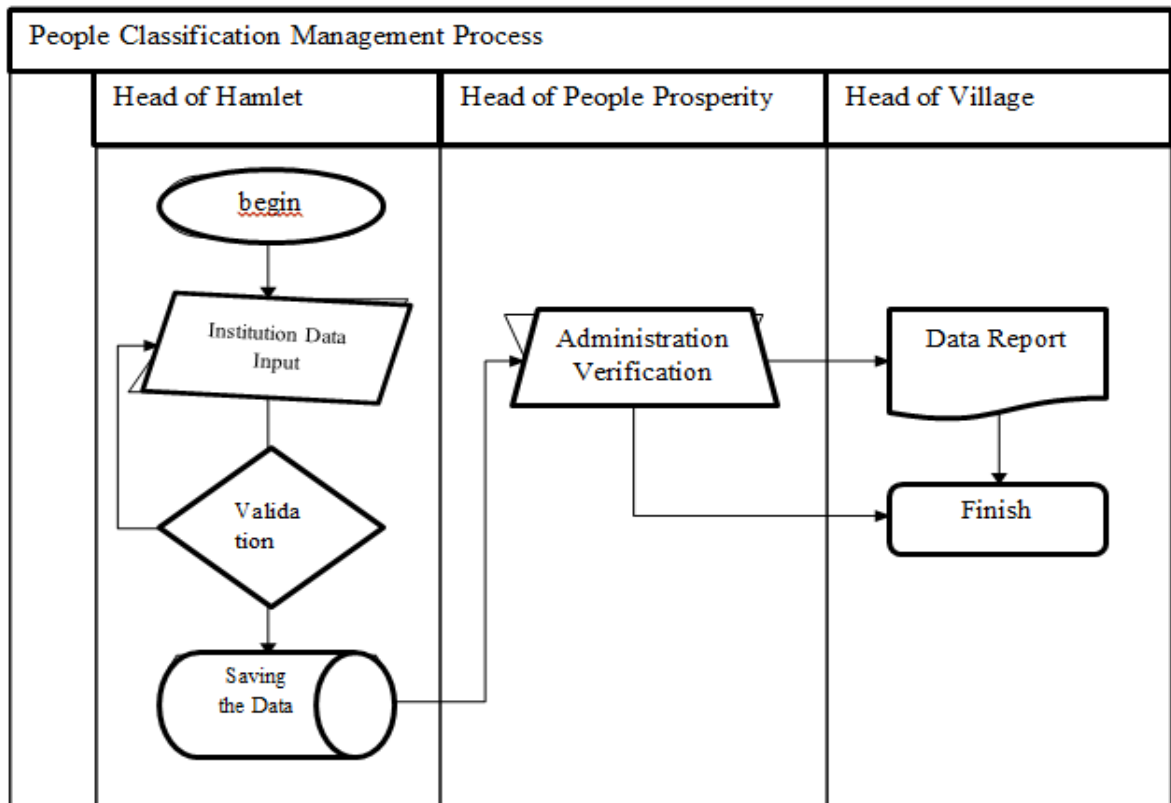
b. *Flowchart*of People Management Classification

Figure 4.2

*Flowchart*of People Management Classification

Beside as the population data management, SIM PEMDES also made to manage a group of people and that is the job of KaurKesra (Head of People Prosperity). The entity involved on managing a group of people of Wargakerta, Sukarame such as the head of Hamlet that have a job to make a direct data of each region, and then Head of Civil Service and people prosperity will help to verify the administration data and as the leader, the head of village will receive a report as supporting material of deciding the work program for group of people.

c. *Flowchart*of Correspondency Service

Beside the management of population and a group of people there is also a service process for people and a group of people. SIM PEMDES Application provide some services such as an administration service whether from individual person or from a group of people association as what written on *flowchart* 4.3
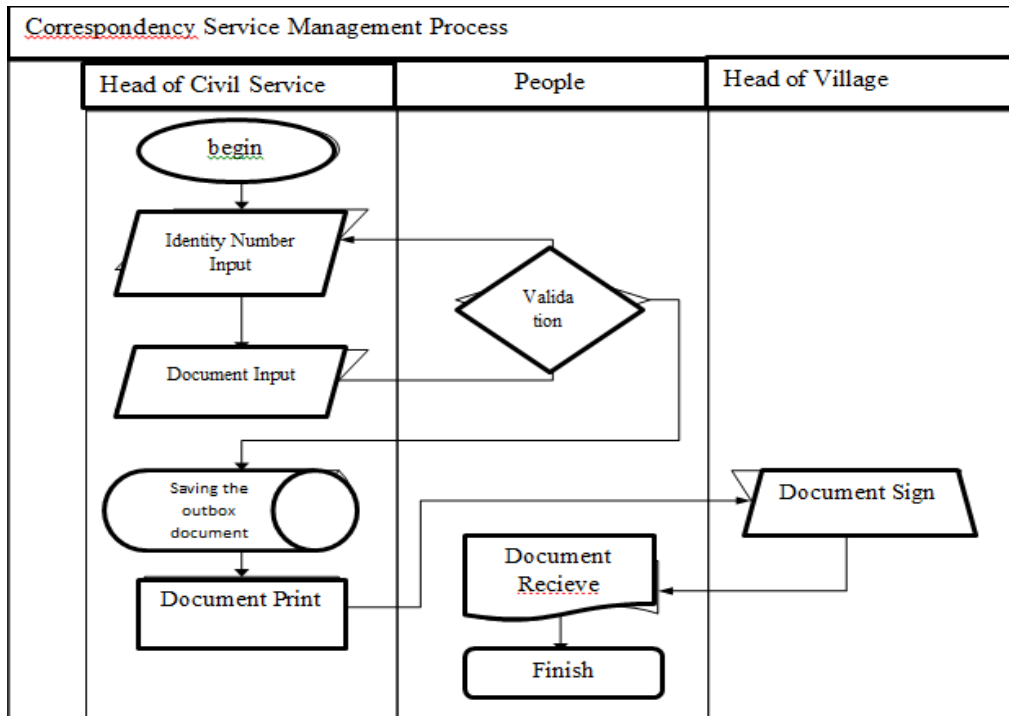
Figure 4.3

*Flowchart*of Correspondency Service Management

2. Employee Management Model

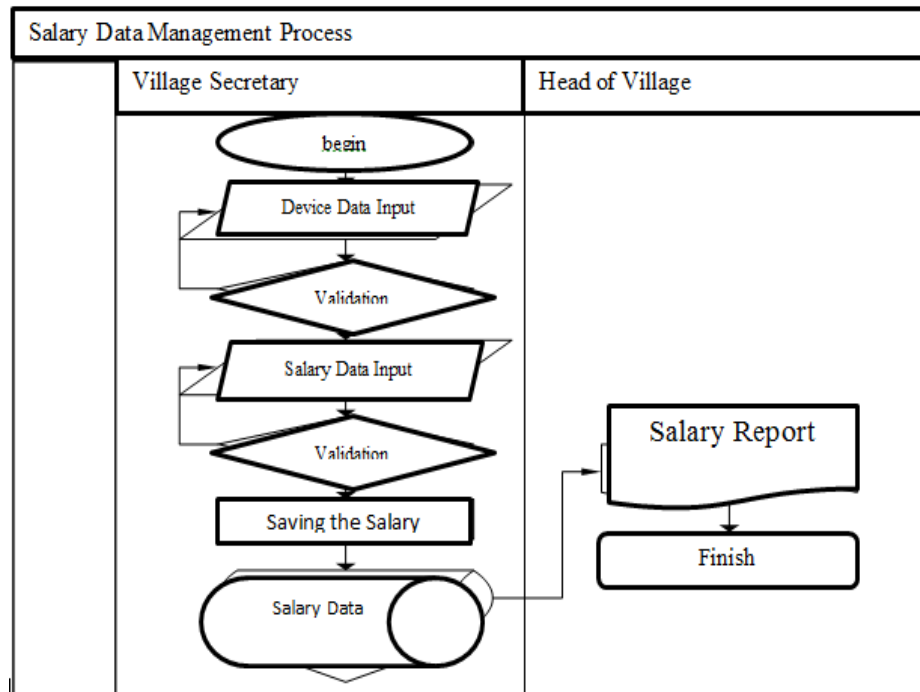d. *Flowchar*t of Employee's Salary Management

Figure 4.4

*Flowchart*Employee Salary Management

The figure above showed the process of employee salary distribution on SIM PEMDES Application which is done by village secretary and being reported to the head of village
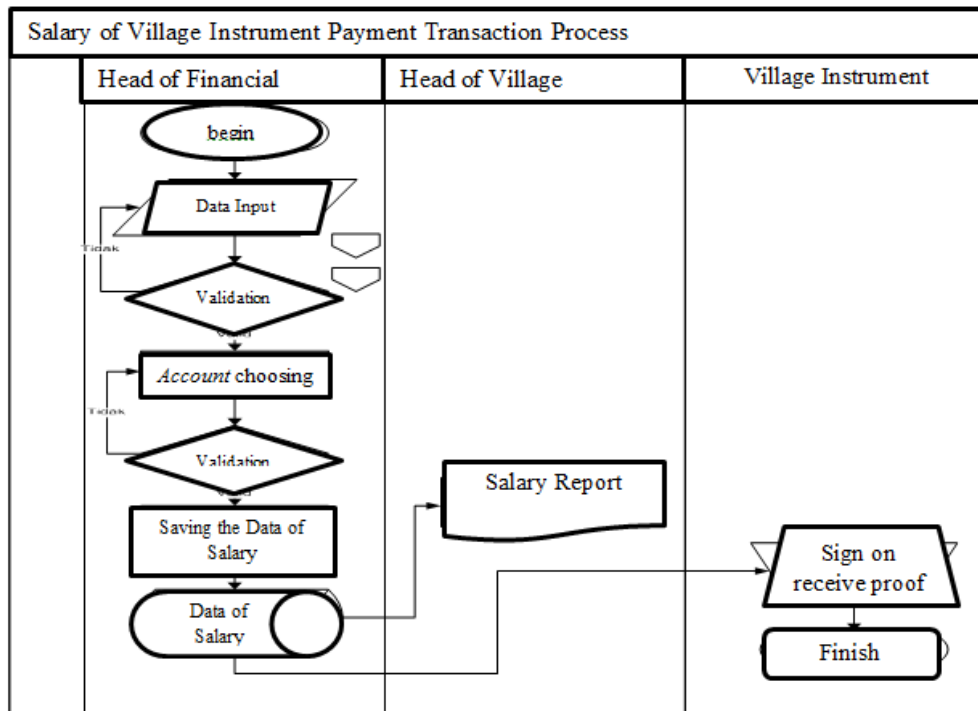
e. *Flowchart* of Salary Payment Transaction

Figure 4.5

Flowchart Salary Payment Transaction Management

Based on the figure above, on its process of salary distribution involving three entities that is Financial Manager who distributed the amount of salary, head of village making a decision of agreement, Village instrument worker receive their salary.

3. Land and Building Tax Management

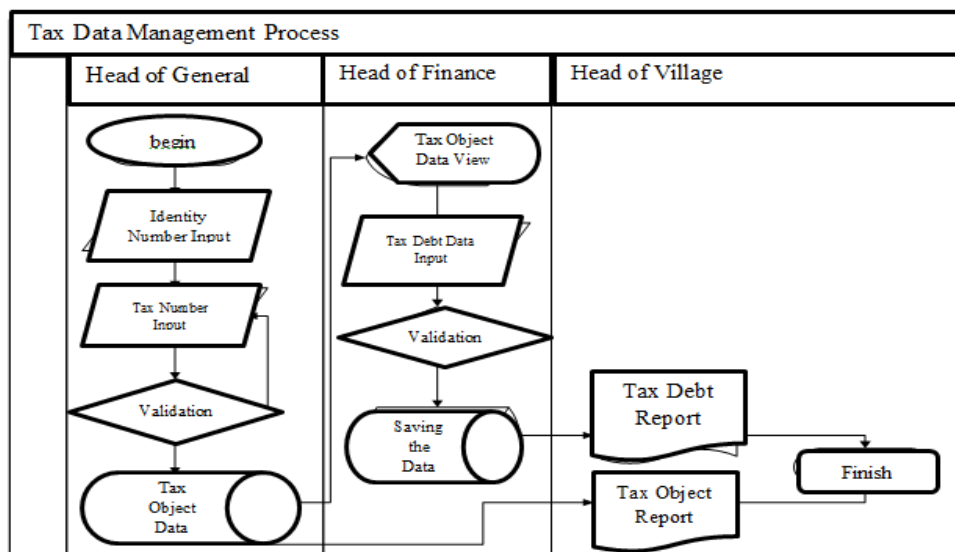a. *Flowchart* of Land and Building Tax Data

Figure 4.6

*Flowchart*of Land and Building Tax Management

The figure above is a process of Land and Building Tax data Collection inside SIM PEDES application. And that process involved three entities, start from General Manager as the one who manages general administration and have a job to input the data of every taxpayers including their tax debt of each taxpayer. Besides, financial manager has a job to collect the data of village financial report. And the last, the head of village as leader will receive the report of Land and Building Tax Management as a material to support every village program.

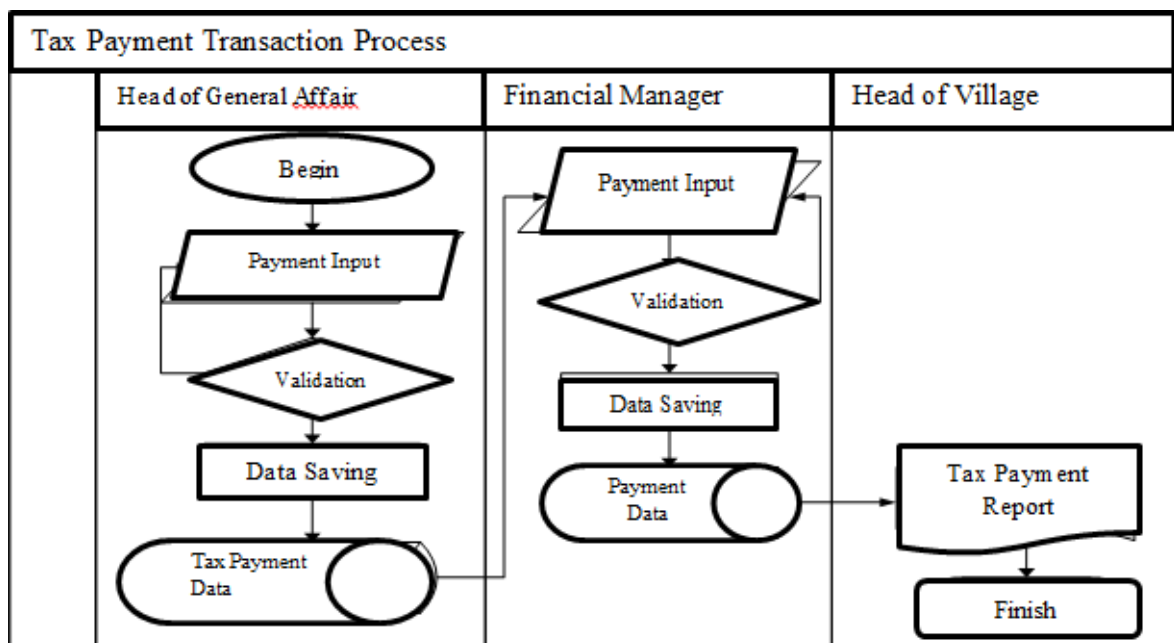b. *Flowchar*t Transaction of Land and Building Tax Payment

Figure 4.7

*Flowchart*of Transaction of Land and Building Tax

The figure above explained that on the process of Land and Building Tax payment done by general manager that accept a payment transaction from every taxpayers, and then those payment will be transferred to village cash through financial manager. The head of village will receive result report

4. Village Cash Management Model

This application model made based on the other application that used in Wargakerta village which is SistemKeuanganDesa (Village Financial System) as one supporting application from central government that used to manage the village financial. Therefore, inside the SIM PEMDES Application there is no detail information but flexible based on

people needs. The entities consist of financial manager and head of Village as what explained in figure 4.8 below
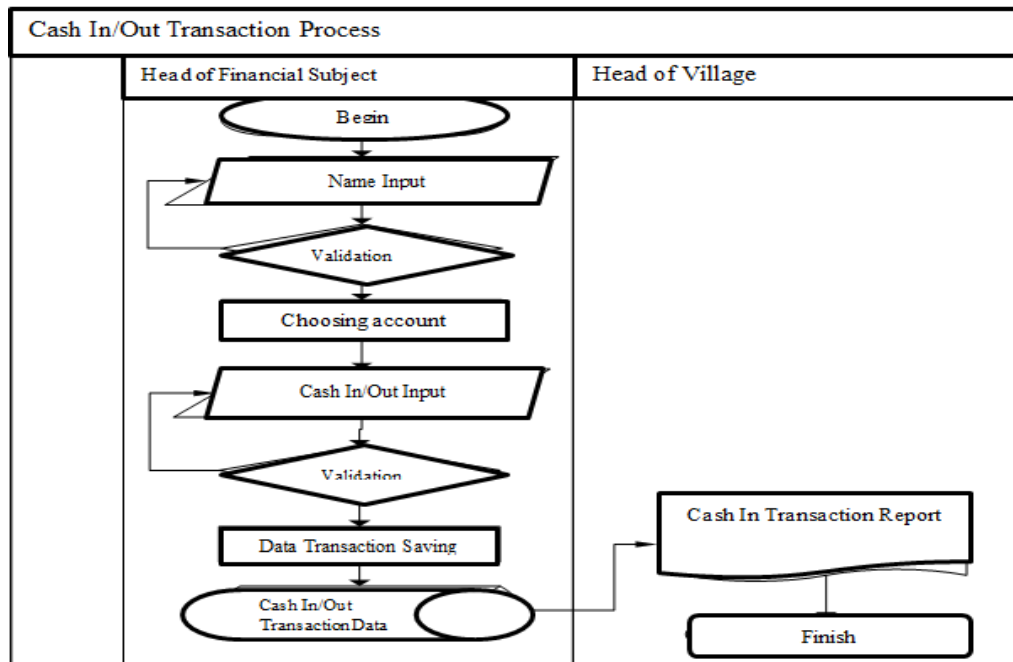

Figure 4.8

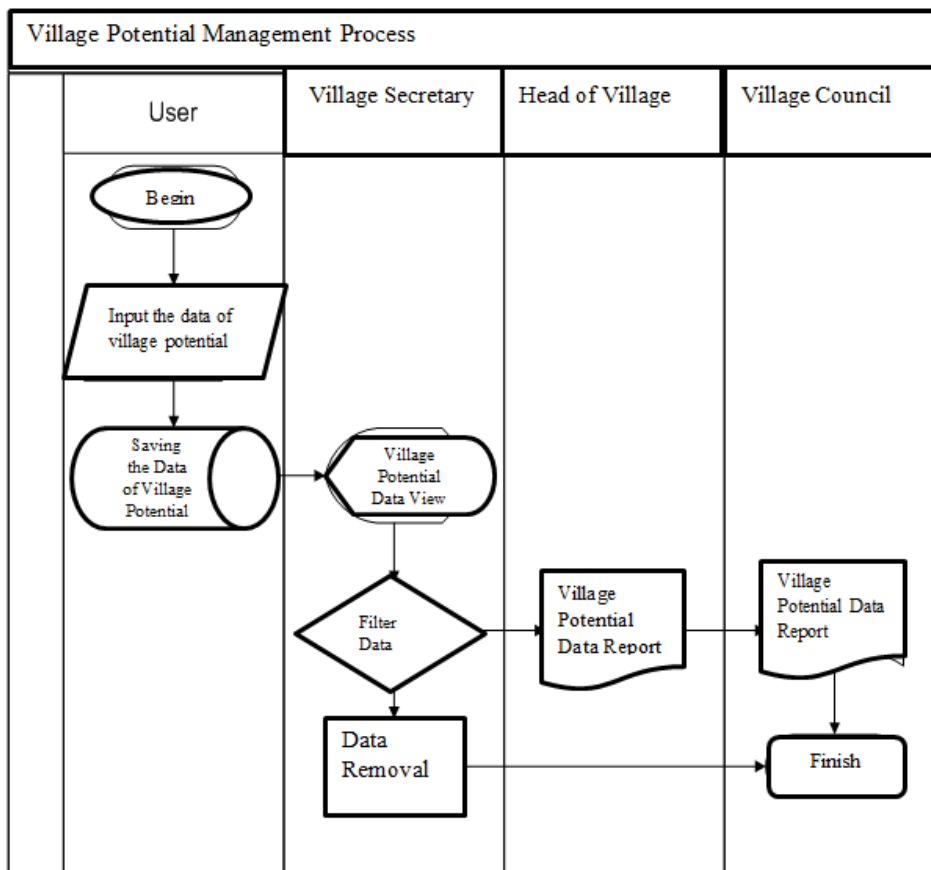*Flowchart*Cash Transaction Management

Village Potential Management Model

Figure 4.9

*Flowchart*of Village Potential

The figure above explained the process of data collection of village potential. Village potential take a source from people through RT (Head of Neighborhood) or RW (Head of Hamlet) of each region in Wargakerta Village. Within the application program of SIM PEMDES, it can be used to collect the data and people opinion can be directly received by government and other village institution with the same matter.

Beside the potential, this form also can be used to receive people's aspiration through their each region's leader. Aspiration can be used as the material working program of village government and it usually getting renew every six months inside the plan of Village Medium-term development (RPJMDes) and being processed together within a year period inside village development working plan (RKPDes).

4.4 *Database***Design**

Based on the identified *flowchart* of previous step, therefore it can help to support the data design based on the system of Wargakerta. In this step, there are some steps including the analysis toward the data entity and continue to designing the *database* based on the description of identified data entity on the step of analyzing data entity.

Population Management *Database*

Table 4.2

KeteranganRelasiEntitas Data Kependudukan

Entity Origin	Entity Relation	Relation Information
Head of Neighborhood	People	Head of Neighborhood collecting data
People	Temporary ID Card	People can make their Identity card
Entity Origin	**Entity Relation**	**Relation Information**
	Domicile	People can make their information of domicile
	Birth	People can make their information of Birth
	Status Information	People can make their information of Marital Status
Head of Service	People	Head of Service have a duty to serve people administration need
Head of Village	People	Head of Village can review the data of Wargakerta's people

Employee Database

Table 4.3

Information of Employee Attendance List Entity Data Relation

Entity	Entity	Relation Information
Village Secretary	Schedule	Village Secretary have to make employee (government employee) working schedule
Employee	Schedule	All the employee doing the attendance list as the schedule

Land and Building Tax Management

Table 4.4 Information of Land and Building Tax Data Entity Relation

Entity Origin	Entity	Relation Information
Head of General Affair	Tax Transaction	Input the data of tax object, tax debt and the transaction of tax payment.
Tax Object	Tax Transaction	tax object have to pay or pay off tax debt
Entity Origin	**EntitasRelasi**	**Relation Information**
Head of Financial Subject	Cash In	Head of Financial input all the cash of the result of tax payment to village cash

Financial Management Distribution

Table 4.5 Information of Financial Data Entity Relation

Entity Origin	Entity	Relation Information
Head of Financial Subject	Cash Out	Head of Financial Subject have a job to manage the data of cash out (Spending)
	Cash In	Head of Financial Subject have a job to manage the data of cash in (income)

Potential Data Management

Table 4.6 Information of Village Potential Data Entity Relation

Entity Origin	Entity	Relation Information
Head of Neighborhood	Village Potential	Head of Neighborhood have the access right to input any potential and the data aspiration of each person
Head of Hamlet	Village Potential	Head of Hamlet have the access right to input any potential and the data aspiration of each person or a group of people
User	Village Potential	User have the access right to input any potential and the data aspiration of each person or a group of people
Village Councill	Village Potential	Village Councill have a job to accommodate all the opinion of publicas the supporting material to make any decision on every program gathering

5   Conclusion

Based on the result and discussion above, it can be concluded that:

a. The Implementation of Information Technology on government of Wargakerta, Sukarame involve every public figure especially internal employee within the method of action research and produce an application of Government Management Information System (SIM PEMDES). System Information modeling of village government management using the plot of system within *flowchart* and for *database* modeling uses *class diagram* with a purpose of giving more simple definition and could be easily understand which is: Population data management and population classification, *Flowchart*of Population Management.

b. SIM PEMDES Application which used in Wargakerta is a web-basis application and it database using cloud computing method. Therefore, the application only uses computer devices inside Wargakerta without adding any other devices of new technology.

c. SIM PEMDES Application is quite effective to help the management process of Wargakerta within the features of :

1) Population Management System

2) Employee Management System

3) Land and Building Tax Management System

4) Village Financing Management System

5) Village Potential Management System

Here are some suggestion reviewer suggest for the development of research about the using of Management Information System in Wargakerta:

a. For the application of Government Management Information System (SIM PEMDES) need a commitment from the government of Wargakerta. Thus, it can be used continuously and giving a benefit as what it expected.

b. Every user has to make sure they could make a contribution toward every socialized program of Wargakerta government or could be implicate by SIM PEMDES in order to make sure there is a benefit.

c. To develop the management information system of Wargakerta (SIM PEMDES) and it need to be adjusted within the standard of Government needs. Thus, it can be optimally supporting the function of bussiness

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