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# Arrangement of Archives of Cloud Computing Based and Utilization of Microsoft Access

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#### **Abstrak**

Layanan di "Kelurahan" adalah bagian yang sangat penting dalam menentukan keberhasilan pembangunan, terutama dalam pelayanan publik. Permasalahan yang dihadapi adalah kurangnya tingkat keterampilan aparatur "Kelurahan" dengan tuntutan masyarakat yang semakin dinamis dan sistem pengelolaan arsip yang masih konvensional dan manual yaitu penulisan identitas arsip ke dalam agenda buku, ekspedisi, kartu kendali, dan meminjam kartu arsip, sehingga dibutuhkan sistem elektronik yang lebih praktis, efektif dan efisien sehingga diperlukan untuk mengembangkan diri guna meningkatkan pelayanan publik. Administrasi konvensional dan manajemen arsip harus diubah menjadi komputasi berbasis cloud (digital), di mana manajer pengarsipan harus selalu responsif dan mengikuti perkembangan ini dan sedapat mungkin untuk memanfaatkan kegiatan arsip, dengan akses yang lebih besar arsip yang diharapkan adalah bukti sekaligus mampu untuk berbicara tentang fakta dan peristiwa sejarah dan dapat memberikan makna dan manfaat bagi kehidupan manusia, sehingga arsip yang hanya dapat dilihat dan dibaca di pusat arsip sekarang dapat diakses secara online, dan bahkan layanan mereka telah menyebabkan sistem layanan otomatis. Menggunakan Microsoft Access yang fungsi utamanya adalah untuk menangani proses manipulasi data dan pembuatan sistem, sistem ini dibangun sehingga bias berjalan di Cloud. Cloud itu sendiri adalah paradigma di mana informasi disimpan secara permanen di server di internet, dan disimpan. Tujuan dari program ini adalah implementasi manajemen administrasi yang telah berbasis cloud computing (digital) dan diharapkan dapat menjadi solusi dalam mengelola arsip sehingga jika telah dirancang dan diprogram, maka dapat disimpan di komputer dan bermanfaat. resmi untuk aparatur "Kelurahan" dan menambahkan di bidang arsip manajemen dalam bentuk peningkatan kualitas layanan kepada masyarakat, dapat memfasilitasi dan publikasi ilmiah.

Kata Kunci: cloud computing; microsoft access; village archives

#### **Abstract**

Service at the "Kelurahan" is a very important part in determining the success of development, especially in public service. The problem faced is the lack of skill level of the "Kelurahan" apparatus with the more dynamic demands of the community and the archive management system is still conventional and manual that is writing the identity of the archive into the book agenda, expedition, control card, and borrowed archive card, so it takes a more practical electronic system, effective and efficient so required to develop themselves in order to improve public services. Conventional administration and archive management must be transformed into cloud-based computing (digital), for which archiving managers should always be responsive and follow these developments and wherever possible in order to utilize for archival activities, with greater access expected archives are evidence at once able to talk about historical facts and events and be able to give meaning and benefit to human life, so archives that were only visible and readable at archival centers can now be accessed online, and even their services have led to automated service systems. Using Microsoft Access which its main function is to handle the process of data manipulation and manufacture of a system, this system is built so that the bias runs on Cloud which means Cloud itself is a paradigm in which information is permanently stored on servers on the internet and stored. The purpose of this program is the implementation of administrative management that has been based cloud computing (digital) and is expected to be a solution in managing the archive so that if it has been designed and programmed, it can be stored in the computer and benefi- cial to the "Kelurahan" apparatus and add in the

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field of management archives in the form of improving the quality of service to the community, can facilitate and scientific publications.

Keywords: cloud computing; microsoft access; village archives

#### INTRODUCTION

An archive is a record or record of any activity undertaken as a tool for remembering and for administrative purposes and authentic interests. Archival files will arise, either with simple equipment or with sophisticated equipment or technologies such as computers and documentary evidence of problem solving and evidence of transactions or reminders of a body or institution, providing the required information, the verification value of a so that it can provide easiness for the future, so there needs to be a good archive management system, so that the entire process of activities can be recorded and can be a material assessment of the performance of an institution. Arrangement of this archive using Microsoft Access which its main function is to handle the process of data manipulation and manufacture of a system, in addition to the system that will be built also Cloud Computing-based where is a paradigma where information is permanently stored in server on the internet. So in the archive will be able to facilitate employees to collect data archives in the Pradah Kali Kendal and Kali Rungkut. Similarly, the ar-chives in Kelurahan need to be managed properly and systematically so that every archive management in the field of Government can run efficiently. For that will be built an archive-based archival system cloud computing as a container in the arrangement of mail archives, so the process of collecting ar- chives that during this less efficient can run efficiently.



Figure 1. More details related to the problem

In the era of regional autonomy, "Kelurahan" is a very important part in determining the success of development and in direct contact with the community, especially in public services, Rungkut Kidul and Pradah Kalikendal, as the spearhead in providing services public to the people in the city of Surabaya, we see in terms of administrative structuring services levels have not shown improvement in service.

Another problem faced by the kelurahan apparatus is the lack of skill level of the kelurahan apparatus with the more dynamic demands of the community. The conventional archive management system trig- gers high risk with natural disruption (flood & fire) and other disturbances. This happens because of the lack of information communication technology (ICT), lack of human resources (HR), the amount of budget needed to implement ICT until financing maintenance, because the system needed to facilitate the process of delivering information and efficient communication on the side cost and operation. In order to realize the program kelurahan apparatus should strive to improve the ability of

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individuals, organizations and services based system. Users do not need to know how and where their computing re-sources are met by cloud providers and do not need to be bothered with the provision of server, storage, software, system maintenance, and IT personnel, but simply subscribe to the service by choosing the packages provided as needed and paying regular rental fees, then fill and process the content inside. The hope is to create uniformity and ease in terms of information processing so that access to information becomes faster, easier, cheaper, can be done anytime and anywhere. Geographically the area of Rungkut Kidul is located in East Surabaya precisely at Jl. Rungkut No. 35 Surabaya. In accordance with the slogan "SERVE WITH HEART" serves with all my heart, while the Village Pradah Kalikendal in Dukuh Pakis in West Surabaya.

Boundaries of Kelurahan Rungkut Kidul, North: Kalirungkut dan Penjaringansari, East: Medokan Ayu, South: Rungkut Tengah, dan Gunung Anyar, West: Kendangsari. The population is14.410 people with details of 7.200 men and 7210 women consisting of 12 RW from 58 RT and 4.414 families. Kelurahan Rungkut Kidul consists of 12 RW and 58 RT.

The problems encountered in Kelurahan Rungkut Kidul as follows: 1) Unavailability of an up-to-date Microsoft Access based system. 2) Lack of ability and skill of kelurahan apparatus in controlling system to improve service in society. 3) Limitations of personnel in the kelurahan compared with the volume of work encountered to interfere with the effectiveness of service. 4) A very limited archiving place compared to the number of documents to be stored (space, wardrobe archives). 5) The lack of facilities owned by the infrastructure including computers and printers and not yet has a scanner as a supporting tool for archiving.

Pradah Kali Kendal village, North: Suko Manunggal, South: Babatan Wiyung, Border: Lontar Kecamatan Lakarsantri; and East: Putat Gede Kecamatan Suko Manungga. It has an area of 520,670 Ha which is divided into 43 RT and 9 RW with 3.5 s / d 4.0 m above sea level and dry climates. Based on number of residents as many as 13,196 souls consisted of men 6666 and women 6,530 inhabitants. The number of family members consists of 3,609 families, with a total population of 820 people (205 households). Based on Profile data, as much as 2226 consist of men as many as 1115 inhabitants and women as many as 1069 inhabitants. The number of head of household consists of 735 families, with the total population of poor as many as 122 KK` The profile of each partner of IbM program we can explain as follows.



Figure 2. More details related to the problem

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The problems encountered in Kelurahan Pradah Kali Kendal as follows: 1) Unorganized documents and archives systematically (still using conventional archiving), the risk is higher (prone to fire and rayab). A very limited archiving place compared to the number of docu- ments to be stored (space, wardrobe archives). 2) Lack of ability and skill of kelurahan apparatus in controlling system to improve service in society, compared with volume of work encountered so that interfere with service effectiveness. 3) The absence of cloud computing implementation for services that provide applications. Maintenance system, infrastructure and data storage centrally.

Objective and benefit of this research are : a). This archive system using Microsoft Access and Cloud Computing based only mengij upload file archive and can download archives that have been uploaded, b). Storing archival materials or documents that still have value in use at a time is required with a particular system, so that when required by ceas can be rediscovered, c). Maintain and maintain physical archives or documents in order to avoid the possibilities of damaged or lost by storing them into the system, d). Benefits: may facilitate the collection, storage, retrieval and maintenance of archives or documents in order to avoid loss or damage.

Based on the agreement with the Kelurahan Pradah Kali Kendal and Rungkut Kidul with PENMAS Team the problems that will be resolved in the activity will be discussed in 3 problems.

**Table 1. Solutions Offered in Resolving Partner Problems** 

| No. | Problems   | Solution  | Facts   |
|-----|--|---|---|
| 1   | Not yet systematized<br>documents and archives<br>(still using conventional<br>filings at higher risk and<br>prone to fire and rayab)                            | Workshop of administrative<br>by changing from manual/<br>conventional to digital by<br>maximizing cloud computing<br>based system and the use of<br>computer and printer<br>scanners and socialization<br>UUASN 2014   | Documents will remain stored<br>systematically, easily, safely from the<br>danger of flooding, nerds and do not<br>need a vast place because in digital<br>form |
| 2   | Unavailability of up-to-date<br>cloud computing System-<br>based in 2 (two) Kelurahan  | <ul> <li>a. Communicating Microsoft access to the entire kelurahan apparatus and involving RT and RW indata retrieval (Stakeholder)</li> <li>b. Up-date cloud computing involving students in extracting data and recapitulation and implementing a system of "virtualbureaucracy"</li> <li>c. Provision of sarpras (computer PC andscanner)</li> </ul> | Cloud computing data is up-dated and ready to be used as a reference for the development of regional potential  |
| 3   | Minimum ability and skill of<br>Kelurahan apparatus in<br>order to increase service in<br>society according to<br>bureaucratic reform agenda<br>from Ministry of | <ul> <li>a. Providing socialization on the State Civil Apparatus Act (ASN) in2014</li> <li>b. Provide training on cloud computing software and virtual bureaucracy</li> </ul>   |   |

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| Administrative | C. | Money cloud computing     |
|----------------|----|---------------------------|
| Reform (MENPAN |    | software applications and |
|                |    | Microsoft access era      |
|                |    | virtualbureaucracy        |

Output target in science and technology activities for the Community (IbM) is as follows: (1). Cloud computing and Microsoft access, (2). Document administration and documentation system based on Cloud Computing, (3). Improving the ability and skills of the kelurahan with Microsoft Access software training and cloud computing-based archiving in order to improve the service to the community to realize Good Governance, (4). Scientific articles in national journals, published through online media.

#### **METHOD**

Microsoft Access kelurahan is a collection of data implemented by kelurahan and government systematically compiled, complete accurate and integrated in governmental administration, development (Microsoft access, 2009). Kelurahan has a very decisive role, because the success of the implementation of various government programs in the city of Surabaya at all levels is very dependent on the preparation of the plan that stems on the data and information compiled systematically, completely, accurately and integrated.

The role of the kelurahan as a place, the foundation of the community in obtaining prime la-dies and as the spearhead in governance, the implementation of building and community development as well as a source of data and information in the determination of various government policies. In order to realize the excellent service in Rungkut Kidul and Pradah Kali Kendal, the following strategies are needed: In administrative and archive administration should be supported by infrastructure facilities based on cloud computing. According Prastowo (2014).

There is Model 4 Model Development Cloud computing is implemented on various servers running various data center for easy access:

- 1. Public Cloud usually done by a company or organization by holding the attributes of cloud computing ie, elasticity, Self Service, Pay-by-Use, and programmability. This exists because it is able to efficiently cost such as reducing electricity consumption and cooling for their previous server. Vendors that provide this model include vm Ware, Microsoft, IBM, and Sun.
- 2. Private Cloud, combination or combination of public and private models that still have unique entities but are tied together by technology standards or data ownership and application portability.
- 3. Hybrid Cloud is implemented when several companies or organizations have the same data context
- 4. Community Cloud, with the use of Cloud Computing and Microsoft Access

On archiving arrangement in Kelurahan Rungkut Kidul & Pradah Kali Kendal got the following

- 1. Simplify the process of data and information ready to be submitted both to the citizens in need because of web-based services, delivery of information faster, easier, cheaper, and can be done anytime
- 2. Implement a cloud computing for services in kelurahan that provide services, applications, maintenance system, infrastructure and data storage centrally in the cloud server.
- 3. Generate an E-Village Cloud-based cloud computing as a public service with ready-made features and modules, on demand, capable of processing information, creating uniformity in terms of information processing. But basically cloud computing has many benefits besides being

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environmentally friendly because it does not add to the trash also helps to reduce the pile of paper on the desk. In addition to the digital format, information dissemination becomes easier and faster.

- 4. Preparation of Microsoft Access is up-date based on the system as a source of data and information for all preparation of development programs. In an effort to present the administrative data of the kelurahan as a whole, integrated, accurate and accountable the truth should be arranged in the form of microsoft access kelurahan. To make microsoft access updated in need of virtual bureaucracy software.
- 5. Increasing human resources (HR) apparatus through workshops structuring administrasi and socialization of Civil State Property Act (ASN).

For the accompaniment of the implementation of IbM there are also 2 students who are involved to assist, in solving the problems of the partners in this team has related duties and responsibilities and complement each other. So as to create a synergy of the right science in finding solutions to existing partner problems. As a solid team and accompanying students, we strive to contribute knowledge and thought to the community, especially Kelurahan Pradah Kali Kendal and Village Rungkut Kidul.

#### RESULTS AND DISCUSSION

This stage is the core stage of system development. At this stage, what is done is to translate the design results into the program code to generate the archive arrangement system. In implementation, this system is built using Microsoft Access, but it also built website archive arrangement system whose contents are not much different from the application made in Microsoft Access.

Trial Scenarios: 1) In this section will be explained about the experiments that have been done with various inputs. The trial of the Kelurahan Arrangement Management system is done to determine whether the system can run as properly as possible. The experiments were carried out with a predetermined test environment and performed in accordance with the trial scheme, 2) Trial Environment, 3) This test is performed on a computer that has installed Microsoft Access and XAMPP Server programs. The operating system installed on this computer is Microsoft Windows 10 Professional. The computer that used the trial has also been installed Mozilla Firefox and Chrome browser, 4) Trial Scenarios, 5) To ensure that this application runs smoothly, the authors will arrange the scenarios to be attempted. The scenarios to be tested are divided into two, namely scenarios in Microsoft Access based systems and scenarios in web-based systems.

These scenarios include: For Microsoft Access based systems: 1) Doing login, 2) Performing additional user data, 3) Changing incoming mail, 4) Changing outgoing mail data For web-based systems: 1) Doing login, 2) Performing additional employee data, 3) Changing incoming mail, 4) Changing outgoing mail data, 5) Print daily reports of incoming mail.

#### **CONCLUSION**

Arrangement System Archives Rungkut Kidul Village and Pradah Kali Kendal Cloud Computing is a system that can store archives safely in the cloud and can be opened anytime. This system can facilitate employees in the process of storing mail archives, because archiving is not done manually, but has been computerized. Archive search is also easier with the facility to find the box on the archive data page of incoming mail and outgoing mail. □

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