

# Study on Implementation of Electronic Records Management System in Yogyakarta City Government Office

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## Abstract

This study aims to determine: 1) agencies within the Government of Yogyakarta City are implementing electronic records management; 2) electronic records management system is implemented; 3) facilities used in the implementation of electronic records management in the Office of Government of Yogyakarta City. The research method used is a survey method. From the perspective of the nature of the analysis, this research categorized as a descriptive exploratory study. This research subject is an employee in charge of managing records in a government office in Yogyakarta City. The number of units of work that is the subject of much research as 13. The respondent is the source of data on each unit of work is one people, so that the number of respondents in this study as many as 13 people. The conclusion of this study were: 1) there are two agencies in the government of Yogyakarta City implementing electronic records management, namely the Licensing Agency and the Population and Civil Registry Agency; 2) electronic records management system implemented at Licensing Agency and the Population and Civil Registry Agency is the same, which is composed of a system of document scanning and electronic records management software system; 3) the facilities used to implement electronic records management system in the Government of Yogyakarta City as: computers, scanners, printers, compact discs, and electronic records management software.

**Keywords:** implementation, systems, electronic records management, Yogyakarta

## 1. Introduction

Records is one source of important information for an organization. Various information relating to the development and operational activities of an organization will be constantly maintained in line with the preservation of the records of the organization. The existence of the records for an organization not only be evidence of history, but it has various functions and use values. Functionally, an records will be needed by the leadership for consideration in the decision-making organization. Recordss are also needed as a material acauan in planning organization. In addition, the records is also widely used to support the organization's operational activities. Similarly, in the interests of surveillance, the records becomes one important element in the control of the organization.

In line with the development of information and communication technology, as well as the development of various types of work and the type of file is generated, then the electronic records management becomes a necessity for an institution. Electronic records management has some advantages that lead to the achievement of the effectiveness and efficiency of recordss. Management of electronic records can save storage space, simplify and accelerate the recovery of the records, as well as improving the security records.

Despite the many advantages of electronic records management, until now many government and private institutions that have not implemented electronic records management. Until now not known with certainty the implementation of electronic records management in government offices that provide many services to the community. Not many information and research results in the field of electronic records management were published in scientific journals in Indonesia.

Ideally for support services to the community as quickly as necessary the application of information technology-based systems. However, in the implementation on the ground is still facing some technical problems. The problems faced by institutions in the management of electronic records, among others, is the lack of competent human resources in recordss management. To better manage the records required human resources that have the specific knowledge and skills in the field of recordss, including electronic filing. Another problem faced is the

lack of application programs and a means of supporting the management of electronic records. Managing electronic records requires some supporting devices such as computers, filing an application program, and technology transfer records media. Not every application program records can be used by an institution, but must be adapted to organizational structure and the type of work there. This study will focus on efforts to address the problem of the limited information on the implementation of the results of the study of electronic records management in the office of government agencies.

University of California, Berkeley's School of Information Management and Systems (Read & Ginn, 2011: 2) had conducted research on information growth from 1999 to 2002. One of the results of these studies indicate that from 1999 to 2002 has generated new information as much as 5 exabytes (1 exabytes equal to 10<sup>18</sup> bytes) is a stand-alone in the print media, films, magnetic and optical media. Number of new information predicted to be doubled in the next three years. At this time, the possibilities increase the amount of new information is greater than the findings in 2002. The information generated by the activities of the organization consists of various fields and required by various parties, thus requiring the special management so that the information can be found immediately in accordance with the needs of everyone. Information recorded as evidence of an organization's activities are often referred to as the records.

Read & Ginn (2011: 5) in his book entitled Record Management cites the definition records of ARMA International and the International Organization for Standardization (ISO) 15489. According to ARMA International records is information stored in any shape and characteristics, made or received by the organization as evidence activities as well as having a value within a certain period. Meanwhile, the International Organization for Standardization (ISO) 15489 defines records as information created, received, and maintained as evidence and information for organizations or individuals for the sake of law and business. Definition of ARMA and ISO have in common is as information created or received and stored as evidence. However, ARMA more emphasis on organization, while the ISO definition includes individual organizations. Another definition of the records put forward by Quible (2005: 475), which mentions the records as documents containing information in the form of paper or electronic format that is used for various functions activity. Furthermore, it is much simpler Diamond (1995: 1) states "A record is any form of recorded information. Records are various forms of recorded information. Some of the opinions above, illustrates that in substance the records can be regarded as the information recorded in various forms. The formulation of the definition is also in accordance with Act No. 43 of 2009 on Records, which formulates the records as a record of activities or events in various forms and media in accordance with the development of information and communication technology have made and received by state agencies, local governments, educational institutions, companies, political organizations, community organizations, and individuals in the implementation of social, civic, and state.

Every record has the elements contained therein. According to Kennedy and Schauder (Sukoco, 2007: 82), the elements contained in each records is an element of the content, structure and context. The element is the content of the information recorded in the records. The information in question may be ideas, concepts, and facts about an event. The element structure is a specification of an records. Such specifications can be systematic writing, the type and size of letters, as well as parts of the records. While the element of context is an underlying condition created an records, or the reasons that led to the records created.

Read & Ginn (2011: 8) classify the records by importance and value of the point. Based on the level of importance, the records can be divided into: vital records, records, records handy, and the records is not important. Meanwhile, according to the value of the point, the records can be divided into an records that has a use value: administrative, legal, and historical. While Quible (2005: 483) the classification of the records in accordance with the formulation of the National Fire Protection Association, the vital records and vital records. Sukoco (2007: 82) distinguishes records into records and records. Records distinguished records again become active and dynamic inactive. Whereas in accordance with Act No. 43 of 2009 on Filing Article 9, the records can be divided into the records and records. Records consist of vital records, records, active and inactive records.

Management is the process of using the organization's resources to achieve the goal through the functions of planning, organizing, and controlling. Records is one resource that is important and valuable to the organization. Organizations need information fast, complete, and accurate as a good decision-making. For this reason it is necessary to records management.

Records management in essence is a term that is complex, requiring limits and understanding carefully. ANRI (1999: 11) concludes records management as the implementation of management functions in order to manage the entire life cycle (life cycle) records which includes three stages: creation, use and maintenance, and depreciation recordss. Read & Ginn (2011: 4) explains that the records management function in it include information management, so there is also a mention of records management in terms of records and information management. More formally Read & Ginn defines records management as a systematic control of the entire records begin the process of creation, distribution, organization, storage, and retrieval, to extermination. Quible (2005: 475) states records management as activities undertaken to control the life cycle of records, ranging from the creation and up to annihilation. While Odgers (Odgers, 2005: 364) defines records management as a process monitoring, storage, and security recordss, either in paper form or electronic media. Definition of records management by Odgers describes the two types of recordss, the recordss of paper-based and electronic recordss. Based on some of the above opinion, records management can be defined as the process of managing the life cycle of the records.

Records management should be implemented with regard to certain principles in order to achieve the desired objectives. Holliday (2009: 2) describes the principles of records management which include: confidentiality, information integrity, high availability, adherence to policy, auditability.

The principles of records management implementation of the above indicates that the records management in an organization should consider the security aspects of the records. There should be controls on access to the recordss of the organization. Only certain people are given the right to be able to view or access the records. Records management system must also be able to present information in an integrated manner on the content, structure and context of the records. The availability of integrated information will facilitate the search for the records when it is needed so that it supports the principle of High Availability, meaning that the records is always available and ready to be used to support ongoing activities of the organization. Records management should also have clear policies or rules about ways of handling various types of recordss. This policy must be communicated to all stakeholders, including institutions or units creator of the records. In addition, the records management system applied shall allow and facilitate the search was performed for history recordss. Should be known by anyone and anytime an records accessible, so that in case of damage or loss of the records will be known who is responsible.

Management as a process directed to realize the achievement of a goal by utilizing a variety of resources through the implementation of functions within the organization. In general, management functions within the organization include: planning, organizing, leading, controlling (Read & Ginn, 2011: 18; Robbins & Coulter, 2009: 24; Griffin, 2002: 8); planning, organizing, staffing, directing, controlling (quible, 2005: 7).

Records management functions in the organization in addition to referring to the management functions in general, also referring to the life cycle of the records. ANRI (1999: 12) divides the archival life cycle into three phases, namely the creation, use and maintenance, and depreciation. Quible (2005: 478) divides the records cycle stages into five stages: creation, utilization, storage, retrieval, and diposition. While Read & Ginn (2011: 19) describes the life cycle of records and information as follows:

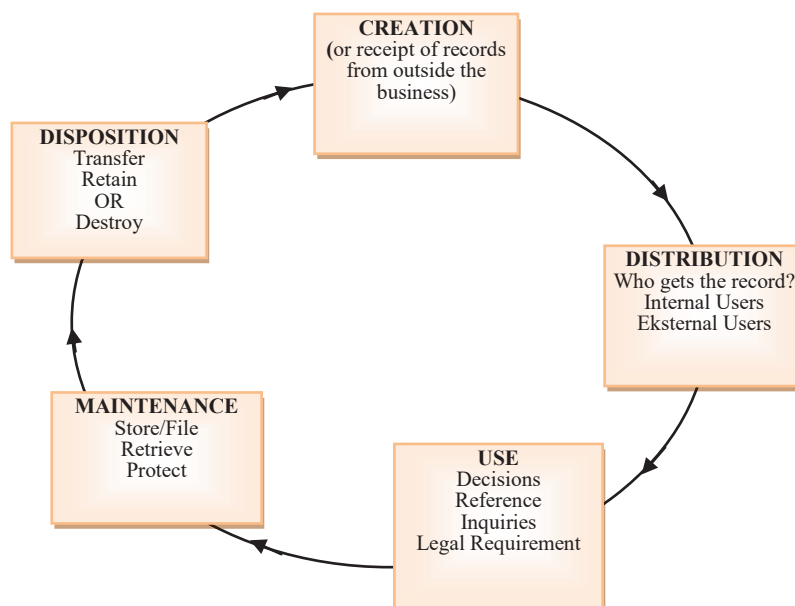


Figure 1.  
Records Life Cycle (Read & Ginn, 2011:19)

Implementation of records management functions should be implemented particularly effective in order to have a positive impact on the productivity of the organization. Quible (2005: 475) identifies several advantages for organizations on the implementation of effective records management, namely: it better serves its clients or customers; it increase employee productivity; it accomplishes its workload with fewer employees; it centralizes its records and information, thus readily making them available to all employees who need them; it eliminates duplicate records and information; it reduces storage space; it complies with reporting regulation at the federal, state, and local levels; it keeps better track of and control over its records and information; it avoids costly litigation and liability issues.

If the records management functions executed properly it will provide benefits for the organization. Effective records management will cause the service to customers better, increase employee productivity, save labor, and facilitate access to records and information by all employees in need. Additionally, another advantage is that it can avoid duplication of records and information by parties who are not responsible, efficient use of storage space, there is better control of the records and information, and can mengemat costs.

Smith (2007: 3) states that records management should ensure that: the record is present, the records can be accessed, the record can be interpreted, the record can be trusted, the record can be maintained through time, the record will be disposed of. More Smith (2007: 5) concludes that there are two fundamental elements of records management functions, namely: (1) it covers records in all formats (paper, electronic, oral, films, microfilm, etc); (2) it covers records from the moment that they are created until reviews their disposal (either by destruction or preservation in an records). Elements of the first records management function which includes notes in any format (paper, electronic, verbal, films, microfilms, etc.), while the second element includes a record since the records is created to extermination.

Along with the development of information technology, conventional file management began to be accompanied by an electronic records management system. Most businesses and government organizations in today's era has produced many documents in electronic form. According to Read & Ginn (2011: 313) "electronic record is a record stored on electronic storage media that can be accessed readily or changed". Records electronic records is stored in electronic storage media that can be accessed or modified. Further Read & Ginn added that "electronic

records may contain quantitative data is, text, images, or sounds that originate as an electronic signal". An electronic records can contain quantitative data, text, image, or sound that comes from electronic signals.

Electronic media consisted of magnetic media and optical media. Read & Ginn (2011: 313) describes the magnetic media as "a variety of magnetically coated materials used by computers for the data storage". The electronic media is a wide range of coated magnetic material used for computer data storage. While the optical media is "a high-density information storage medium where digitally encoded information is both written and read by means of a laser." Optical media is an information storage medium with high density where digital information is encoded using a laser.

In the current era has been developed electronic records management system. Various electronic records management system that is now developing can be grouped into three systems (Sukoco, 2007: 116), namely: 1) Electronic Document Management System; 2) Electronic Scanning Systems; 3) Document Management Software. Electronic Document Management System is a system file management performed by each employee's office in the form of the creation of records and computer-based storage. This system is done using a computer application program that is commonly used in office work, such as word processing, spread sheet, publishers, and other office applications program. Electronic Scanning Systems is a records management system that starts with the process of media transfer paper records into electronic records, and then performed electronically management. Document Management Software is a file management system using an application program (software) specifically.

Management of electronic records have many benefits, especially facilitate the rediscovery of the required records. According Odegers (2005: 371), some of the advantages of electronic records management are: quickly find and enable the utilization of records without leaving the desk; indexing flexible and easily modified; full-text search; less likely the file will be lost; save space; reduce the risk of damage to records for stored digitally; facilitate the sharing (sharing) records; improving security; easy data recovery.

Electronic records management is a solution to the problem of records increasingly growing a lot. Through the management of electronic records can be obtained various benefits that support the creation of the effectiveness and efficiency of the organization.

## **2. Research Methods**

This study aimed to uncover the facts that occurred without treatment to variable or create certain conditions. The method used is a survey method. From the perspective of the nature of the analysis, this research categorized as a descriptive exploratory study.

This research subject is an employee in charge of managing an records in the office / department within the City Government of Yogyakarta. Number of offices / agencies are the subject of research as much as 13. The respondent is the source of data on each office / department is one person, so the number of respondents in this study as many as 13 people.

Data collection techniques used in this research is interview, observation, documentation techniques. In accordance with the data collection techniques used, the instrument used in this study consisted of: interview guides, observation sheets, and a list of documents. The technique used to analyze the data in this research is descriptive analysis techniques, both quantitatively and qualitatively. The process of data analysis is conducted in stages: presentation of data, data reduction, data analysis, and summed up the results of data processing.

## **3. Results**

### **3.1 Office of the Implementing Electronic Records Management System.**

Based on interviews and observations carried out at government offices in the city of Yogyakarta derived the data presented in Table 1.

Table 1. Agencies are implementing electronic records management

Number	Office	Electronic Record Management Systems	Information
1	General Division of Yogyakarta City Secretariat	No	
2	Education Agency of Yogyakarta City	No	
3	Transportation Agency of Yogyakarta City	No	
4	The Social Service, Manpower, and Transmigration Agency of Yogyakarta City	No	
5	Tourism and Culture Agency of Yogyakarta City	No	
6	Population and Civil Registration Agency of Yogyakarta City	Implementing	Imaging Software, Certificate Register System
7	Housing and Regional Infrastructure Agency of Yogyakarta City	No	
8	Industry, Trade and Agriculture Agency of Yogyakarta City	No	
9	Regional Tax and Financial Management Agency of Yogyakarta City	No	
10	Licensing Agency of Yogyakarta City	Implementing	Imaging Software, Document Management Information System
11	Market Management Agency of Yogyakarta City	No	
12	Order Agency of Yogyakarta City	No	
13	Building and Regional Asset Agency of Yogyakarta City	No	

### 3.2 Electronic Records Management System Implemented

According to the table 1 is known that there are two Agencies in the government of Yogyakarta City are implementing electronic records management system, namely the Licensing Agency and the Population and Civil Registration Agency. While electronic records management system that was implemented in two agencies are presented in Table 2.

Tabel 2. Electronic records management system implemented

No	Office	Electronic Record Management Systems	Type of Records
1	Licensing Agency	1. Document Scanning System	1. Substantive Records
		2. Software Management Document	2. Inactive Records
2	Population and Civil Registration Agency	1. Document Scanning System	1. Substantive Records
		2. Software Management Document	2. Inactive Records

### 3.3. Facilities Used in Implementing Electronic Records Management Systems

Data on the means used to implement electronic records management system in government offices Yogyakarta

are presented in Table 3.

Table 3. Facilities used to implementating of electronic records management system

Number	Office	Facilities
1	Licensing Agency	1. Computers 2. Scanner : a. A0 b. A4 c. Continous Paper 3. Printer 4. Software
2	Population and Civil Registration Agency	1. Computers 2. Scanner : a. F4 b. A4 3. Printer 4. CD 5. Software

#### 4. Discussion

Based on data from the survey results revealed that 13 work units in Yogyakarta City Government offices consisting of 12 offices and one office section secretariat general area, there are two (2) units that implement electronic records management system. The work unit which implements the electronic records management system is the Licensing Agency and the Department of Population and Civil Registration.

Electronic records management systems used by the two agencies together, that the system Document Scanning and Document Management Software System. Software used by the Department of Licensing is a Document Management Information System (SIMD). While software used by the Department of Population and Civil Registration Act is a Registry System (SIRA).

File type that is managed by an electronic records management system was also similar in the two offices above, the types of records in the active. The records is managed by an electronic records management system is dynamic in the records of the active work related subject or department concerned so-called substantive records. The records is managed by an electronic records management system at the Licensing Agency is the records of licenses and attachments. While the records is managed by an electronic records management system in the Department of Population and Civil Registry is an records of certificates of residence.

The facilities used by the Department of Licensing and the Department of Population and Civil Registration in implementing electronic records management system is basically the same, which is composed of a computer, scanner, printer and software.

Implementation of the environmental management system of records in Yogyakarta City Government still have some obstacles, such unpreparedness in terms of human resources and infrastructure. One example unpreparedness in terms of Human Resources is when archival work practices has been running from the lower management levels, but at the level of top management has not provided the expected response, the letter sent by the middle management and lower management did not immediately acted upon. This is due to factors not yet skilled upper management levels in the use of software and technology. In addition to the limitations of human resources, in terms of the readiness of facilities and infrastructure, too, some of which face problems, such as lack of available software and technology tools that ideally should exist in the governance of the electronic records. Thus, the problems commonly encountered in the implementation of electronic records management systems within the government of Yogyakarta is the lack of facilities and policies related to the management of electronic records management system itself.

#### 5. Conclusion

The conclusion of this study were: 1) there are two agencies in the government of Yogyakarta City implementing electronic records management, namely the Licensing Agency and the Population and Civil Registry Agency; 2) electronic records management system implemented at Licensing Agency and the Population and Civil Registry Agency is the same, which is composed of a system of document scanning and electronic records management

software system; 3) the facilities used to implement electronic records management system in the Government of Yogyakarta City as: computers, scanners, printers, compact discs, and electronic records management software.

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