



Archivist and Archives Management In Digital Era

Layla Rahmadanty¹, Veithzal Rivai Zainal², Azis Hakim³

¹ Universitas Krisnadwipayana, Jakarta, Indonesia, layla.rahmadanty@gmail.com

² Chairman of the Board of Trustees of the Indonesian MSME Communication Forum, veithzal47@gmail.com

³ Universitas Krisnadwipayana, Jakarta, dr_azishakim@unkris.ac.id

Corresponding Author: Layla Rahmadanty

Abstract: In this digital era, everything is technology-based, so that Human Resources in carrying out their work must develop according to the speed of development. Archivists are Human Resources in the field of archives that are highly exposed to the development of digital technology. Previously Archive was always identified with the activity of managing old and dusty archives. Whereas Archivists in this era must be able to manage archives both conventionally and digitally or electronically. Archivists in this case must continually improve the quality and competency they possess, one of which is by increasing their capabilities in the field of records management. Archivists must change their way of thinking in managing archives, which were previously based on conventional to electronic based records management. Archivists must be able to adjust to technological developments so they can use computer systems in their work to manage records.

Keywords: Archivist, Archives, Records Management.

INTRODUCTION

In this globalization, the talk about the development of new technologies refer to the industrial revolution 4.0. This is marked by the development of the internet followed by new technologies in data science, artificial intelligence, and so forth. The digital revolution and the era of technological disruption are other terms of industry 4.0. Technological advancements make automation possible in almost all fields. New technologies and approaches that connect the physical, digital and biological world will fundamentally change the patterns of life and human interaction.

The above fact also urges the overall development of archives. An archivist in this case must surely follow the development of technology in the era of the industrial revolution 4.0 which in it requires an archivist to understand technology. The development of this technology also influenced the management of records carried out by an archivist. In order to support technological development, Archivists must be able to guarantee that the

management of records carried out by them can be in accordance with technological developments.

Nowadays an Archivist is demanded to be a professional, independent and independent person. This is in accordance with the mandate of the law on State Civil Apparatus. To guarantee the realization of Archivists with such character, the National Archives of the Republic of Indonesia continues to improve the competence of an Archivist by conducting Education and Training activities, Technical Guidance, Certification, and so forth.

An Archivist in Indonesia must be able to manage archives, both archives and records. This is because in Indonesia, the profession of managing archives and records cannot be separated. An Archivist in accordance with the applicable laws and regulations must be able to conduct Dynamic Records Management (PAD) and also Static Records Management (PAS). In this paper we will discuss the two issues related to the relationship in the digital era.

LITERATURE REVIEW

According to Government Regulation Number 28 of 2012 concerning Implementation of Law Number 43 of 2009 concerning Archiving, Archivist is someone who has competence in the field of archives obtained through formal education and/or archival education and training and has the functions, duties and responsibilities to carry out archival activities. Archivists consist of Archivists of Civil Servants and Archivists of non-Civil Servants. Archivist Civil Servants who are subsequently better known as Archivist Functional Officials are employees who have competence in the field of archives who are fully appointed and assigned to positions in accordance with the provisions of the applicable laws and regulations. While non-Civil Servants Archivists are employees who have competence in the field of archives that are appointed and assigned in full to carry out archival activities within the TNI, the Indonesian National Police, BUMN, BUMD, private universities, companies, political organizations, and community organizations in accordance with statutory provisions.

Archivists have a legal position as professionals who are independent and independent in carrying out their functions and duties. What is meant by independence is in carrying out the functions and duties of the Archivist to hold on to their competence. Whereas what is meant by independence is free from the influence of any party in carrying out its authority based on the rules of archives and the provisions of the applicable laws and regulations.

Archive functions and tasks include:

1. Maintain the creation of archives of activities carried out by state institutions, local governments, educational institutions, companies, political organizations, and community organizations
2. Maintain the availability of authentic and trusted archives as valid evidence
3. Maintain the realization of reliable archival management and utilization of archives in accordance with statutory provisions
4. Maintaining the security and safety of archives that function to guarantee the archives relating to the rights of civil liberties through the management and use of archives that are authentic and reliable
5. Maintain the safety and preservation of records as evidence of accountability in the life of society, nation and state
6. Maintaining the safety of national assets in the economic, social, political, cultural, defense and security fields as national identity and identity
7. Providing information to improve the quality of public services in the management and use of archives that are authentic and reliable

In carrying out its functions and duties, the Archivist has several authorities, including:

1. Close the use of archives that are the responsibility of the user of the archive if it is considered the use of the archive can damage the security of information and / or physical archives
2. Close the use of archives that are the responsibility of the user of the archive that is not entitled in accordance with the provisions of the legislation
3. Conducting a static archive search on the creator of the archive based on the assignment by the leader of the creator of the archive or the head of the archival institution in accordance with their authority in saving the archive

According to Law Number 43 of 2009 concerning Archives, the administration of archives is all activities including policies, fostering archives, and management of archives in a national filing system supported by human resources, infrastructure and facilities, and other resources. The organization of archives aims to:

1. Ensuring the creation of archives of activities carried out by state institutions, regional governments, educational institutions, companies, political organizations, social organizations, and individuals, as well as ANRI as organizers of national archives
2. Ensuring the availability of authentic and trusted archives as valid evidence
3. Ensure the realization of reliable records management and use of archives in accordance with statutory provisions
4. Ensuring the protection of the interests of the state and the rights of the people's civilization through the management and use of authentic and trusted archives
5. Dynamics the implementation of national archives as a comprehensive and integrated system
6. Ensure the safety and security of records as evidence of accountability in the life of society, nation and state
7. To guarantee the safety of national assets in the economic, social, political, cultural, defense and security fields as national identity and identity
8. Improving the quality of public services in the management and use of archives that are authentic and reliable

National archiving is the responsibility of ANRI as the national archival organizer. To enhance the quality of the organization of national archives, organizers of national archives conduct research and development as well as the organization of education and training of archives. One of the national archives, including the management of records. Archival management in Indonesia in organizing archives nationally is carried out on both records and archives.

Records management is the third element in organizing archives. Records management is an activity carried out to arrange the records so that the records that are managed can be efficient and effective for their owners. Archive management is carried out on records and archives. Records management must be carried out reliably, meaning that records management is carried out based on a system that is able to accommodate and respond to the needs of the times.

As it is known that in some countries, records have different terms than archives. In Indonesia, the term archive itself is interpreted as a recording of activities or events in various forms and media in accordance with the development of information and communication technology created and accepted by state institutions, regional governments, educational institutions, companies, political organizations, social organizations, and individuals in the implementation community, nation and state life. In Indonesia, in terms of the function of the archive as recorded information has an understanding of the role that can be divided into two, namely records and archives. This is different from the notion of records abroad that are referred to as records while static records are called archives. Records can be used directly in the planning, implementation of life and archiving in government. Archives are no longer

used in the management functions of the creator's organization but can be used for educational and research purposes.

According to Lundgren, archival management basically manages the entire life cycle of records. Meanwhile, according to Ira A. Penn et al stated that records management is an approach to shrinking archives including the existing information. From some of these definitions it can be concluded that records management is the implementation of management functions in order to manage the entire archive life cycle. The life cycle of an archive is a subsystem that will affect other subsystems. From some concepts about the life cycle of the archive can actually be simplified in three phases, namely the phase of creating the archive, the phase of the use and maintenance of the archive, and the depreciation phase as the resting period of the archive. The creation phase as the initial stage of the archive, both in the life cycle of the archive will determine the life journey of the next archive. In this phase the forerunner to the determination of an information will be archived or will not be created. Therefore, records management starts at this phase of creation.

Static archives are archives produced by the creators of archives because they have historical use value, retention period has expired, and are permanently defined which have been verified either directly or indirectly by the National Archives of the Republic of Indonesia and/or archival institutions. Whereas the definition of archive management is the process of controlling records in an efficient, effective, systematic fan covering the acquisition, processing, preservation, utilization, utilization, and public services in a national archival system. Static archive management activities are largely determined by the creation of records management activities.

No different from records management, the factors that influence the basic principles in managing archives consist of three components, namely the relationship between one archive with another archive, the context of the archive relating to the activities and purposes of the archive created or accepted, and its function as material evidence. With these three factors, modern archive management uses at least three basic principles, namely the principle of origin, the principle of original rules, and the principle of the chain of responsibility. These principles serve as a guide for managing static records, specifically the process of documenting records and their context and developing systems for physical and intellectual control of archives, including management and description, storage, and maintenance. In turn, this management has an important influence on the construction of the finding aid. This static archive management is not only to be able to maintain and store archives that are no longer used by the creator's organization, but also so that the information contained in the archives can be used for the benefit of the public or the general public.

METHODS

The research approach according to Creswell in Nasution (1998) is a research plan and procedure which includes steps: from broad assumptions to detailed methods in data collection, analysis and interpretation. The design involves a number of decisions regarding the stages and tools used to research a particular topic. The research approach has a very important function to help researchers achieve their research goals. In connection with this, the research approach that researchers used in this study was qualitative. Qualitative research is essentially observing people in their environment, interacting with them, trying to understand their language and interpretation of the world around them (Nasution, 1998:5)

RESULTS AND DISCUSSION

Archivist in Digital Era

In this digital era, everything is technology-based, so that Human Resources in carrying out their work must develop according to the speed of development. Archivists are Human

Resources in the field of archives that are highly exposed to the development of digital technology. Previously Archive was always identified with the activity of managing old and dusty archives. Whereas Archivists in this era must be able to manage archives both conventionally and digitally or electronically. Archivists in this case must continually improve the quality and competency they possess, one of which is by increasing their capabilities in the field of records management. Archivists must change their way of thinking in managing archives, which were previously based on conventional to electronic based records management. Archivists must be able to adjust to technological developments so they can use computer systems in their work to manage records.

Archivists must continue to improve their competence in a variety of ways that are currently widely used, such as education and technical training, technical guidance, and workshops that prioritize improving technical abilities. It also cannot be forgotten that an Archivist has the obligation to take part in certification activities to be recognized whether he is competent or not in the position he is currently occupying. This is done so that the knowledge learned and obtained has recognition and can be justified by an Archivist.

A good archivist must be able to utilize and manage information technology properly with the aim of implementing an Electronic-Based Government System (SPBE) as a result of the emergence of the 4.0 Industrial Revolution in Indonesia in which the use of technology is highly prioritized. Archivists in the digital era must be able to improve their cognitive, affective, and psychomotor abilities in order to increase competence in accordance with the development of the digital era.

Archives Management in Digital Era

Records management in Indonesia is basically an uptake of the term records management which is used in archival literature in several archival terms in several countries other than Indonesia. In essence, this term is a complex term that requires boundaries and understandings that need to be examined carefully. Records management is carried out to ensure the availability of records in conducting activities as a material for performance accountability and valid evidence based on a system that meets five requirements, namely reliable, systematic, whole, comprehensive, and in accordance with norms, standards, procedures, and criteria (NSPK).

Formerly archival management was identified by simply preserving and storing archives physically. The shift in information needs causes archival management to be interpreted as managing records that occur in every organization along with the readiness of systems and programs that ensure that the information needed can be stored and presented properly.

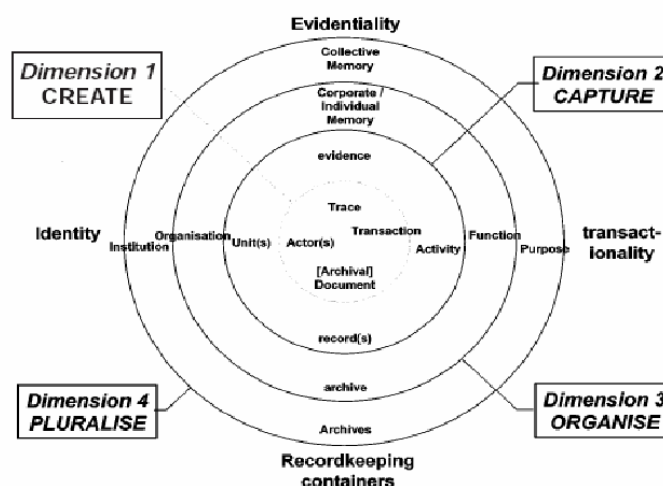
In the perspective of the life cycle of records, archives are records that have retained but have permanent value or have a sustainable value. Therefore, in the perspective of archive life, static archive management is a continuation of records management. Archive management is no longer carried out by the organization or its creating agency, but rather by archival institutions, both central and regional.

According to Ricks, the archive life cycle is a theoretical framework that records management must cover the entire period from the time of creation, classification, use and maintenance, to its depreciation. The theoretical framework provides a clear distance between the profession of managing records and the profession of managing archives. Provision of distance can then not be maintained when the archival profession must have the ability from the planning aspect to its preservation as a static archive. With the implementation of archive management, the purpose of managing archive in the form of saving and preserving archive that have historical value and ensuring the availability and service of archive to the public can be realized properly.

Some opinions about the life cycle of records fully describe the stages of archiving activities that guarantee continuity in the creation of records until the final decree, is destroyed or permanently stored as archive. The life cycle of this archive shows the processing of information that is still in the form of raw data to then produce information that is ready to be presented to users.

Based on the foregoing, this model is finally used as a basis for use in the current archival administration. Records that are created or accepted are a proof of an activity that occurs. As a source of information that contains historical value and sustainability, the archives are still maintained and preserved. Thus, this model will automatically classify files into their functions, namely active, inactive, and static files. However, records and archives management is actually a continuous process between one another. This process forms a whole between records and archives.

According to Australian US Standard 3490-1996, The Record Continuum Model is the overall existence of records which shows the relationship and linkages of the maintenance system of the management process, at the time of creation of the archive (and before creation, in designing the recordkeeping system) including the maintenance and use of the archive itself. The focus of the record continuum model shows that there is a continuous process in organizing records, so that users' information needs can be met. This model is a guide in developing recordkeeping. In addition, this model strengthens and anticipates the organization's future needs for documentation as an integral part of operational management and strategic management.



Gambar 1. The Record Continuum Model

The Kennedy Schauder Records continuum model is an archival management model with clear controls from when the archive was created to being accessible to the public or published. There are three perspectives in the records continuum model. First the current recordkeeping, which is looking at what must be done to capture or create an archive so that it can be found again. The two regulatory recordkeeping, namely looking at how the archive is monitored, standardized, controlled, and monitored. Third is historical recordkeeping, which is maintaining and managing the value contained in the archive all the time. The existence of archives based on this model at the creation stage has primary use value and secondary use value. This model is a combination of records and archives management.

The axes in this model are the identity axis, the proof axis, the transaction axis, and the recordkeeping axis. Each axis consists of four coordinates which can be dimensionally connected. The four dimensions include:

1. Dimension 1 Create, i.e. the actor or actor has a document as a sign or file to carry out an activity
2. Dimension 2 Capturing, namely the creation of documents by a unit that supports the proof of an activity
3. Dimension 3 Organizing, namely organizing recordkeeping to compile a static archive that functions as an organizational or individual memory
4. Dimension 4 Pluralise, which describes the archive as a collective memory for social purposes in an institution

Simply put, the archival management approach aims to provide organizational accountability material. The shift of paradigm along with the development of information technology causes organizational responsibility depends on the ability of the organization to manage the search process of existing archives for use by users. With the understanding that archivists in Indonesia must master both records and archives management, this archival model is the most appropriate to use today because in the digital era as it is today, archivists must be able to ensure that archival management runs continuously from creation to destruction or archive storage.

Tabel 1. Differences in life cycle of records and model continuum records

NO	DYNAMIC ARCHIVES MANAGEMENT	STATIC ARCHIVE MANAGEMENT	RECORDS CONTINUUM MODELS
1	Life cycle of records : Creation Use and maintenance Disposal	Life cycle of records : Acquisition Description Preservation Conservation Information service Public service provider	A combination of dynamic archive management and static archive management
2	Manage active and inactive dynamic archives	Manage static archives	Manage archives integrally (thoroughly) without separating
3	Can have or not have a secondary value	Only has a secondary value	At the creation stage it has primary and secondary use values
4	Manage active and inactive dynamic textual archives	Manage static textual archives	Manage electronic and textual archives
5	People who are dynamic archives are called records managers	People who are architects are archivists	Experts in both are called the Archivists (Indonesia)

Source : <http://nreiina.blogspot.com/2013/07/records-continuum-model.html>

Continuous records management in the digital era must begin with the use of a good and reliable electronic system, for example the use of a Dynamic Filing Information System (SIKD) that is used when managing records that will become archives when using a Static Filing Information System (SIKS). This electronic based system must be done because in the digital era, what we need is speed of access but still authentic, so that in the future these systems must be maintained and adapted to technological developments.

Analysis

Based on the discussion above, it can be analyzed that Archival competence is very influential in the management of records in the digital era. An Archivist must participate in ensuring that the management of archives through records management takes place on an ongoing basis. Records management must start from creation to become a static archive, so that the functions of an Archivist can be realized in accordance with statutory regulations.

Judging from the problems that arise at this time an Archivist has the right and must always improve his competence to support the management of records that are intact and in

accordance with technological developments in the digital era as the industrial revolution 4.0 has begun in Indonesia. In order for Archivists to ensure archival management is ongoing, the existing archiving system can be emphasized to always be improved in accordance with current technological developments, so that the system used does not complicate Archivists and their use can be maximally as it should be.

To be able to bridge between archivists with archival management in the digital era, it is necessary to establish appropriate policies so that an archive management system that has been created is able to ensure the validity of an archive that has been stored. Regulatory arrangements must be made clearly and in detail related to the management of digital records and their application to the management of records and archives management.

Challenges

Based on the discussion above, it was found that challenges for Archivists and records management in the digital era include:

Tabel 2. Challenges for Archivists and Archives Management

No	Challenges for Archivists	Challenges for Archives Management
1	Become a quality Archive Human Resources	Management of technology-based archives
2	Increased Archivist competence	Development of a user friendly filing system
3	The ability of Archivists to adapt to technological developments	Adequate regulations
4	Public services through the digital era	Security of archive management systems
5	Good leadership and aware of the importance of quality over quantity	Ease of access
6	Become a professional, independent and independent archivist	

The challenges mentioned above should be able to be a motivation for Archivists and also management of archives to continue to advance and develop in accordance with the development of information technology.

Constraints and Anticipation of Constraints

In a large-scale change, especially everything related to the development of information technology, there are certainly many obstacles that will occur, both internal and external. Some plans to anticipate obstacles have been thought out and set forth in the table below:

Table 3. Constraints and Anticipation of Constraints

No.	Constraints	Anticipation of Constraints
1.	Fulfillment of Archivist competencies that have not been maximized	Preparation of education and training plans and mapping for Archivists to see the capabilities of each individual employee
2.	An archive management system that has not yet been used to its full potential	Develop an archive management system that is easy to use and easily accessed anytime, anywhere
3.	The function of the Archivist function is not in accordance with the laws and regulations, many Archivists do not understand archival management, both dynamic and static	The implementation of certification as a form of increasing the competence of an Archivist in managing archives

CONCLUSION

Based on the discussion that has been stated before, it can be concluded as follows:

1. Archivists in the digital era must have competencies in accordance with technological developments, the competency standards of an Archivist must be clear so that at the time of measurement it can be done easily.

2. Archivists in Indonesia are very special, because the competencies that should be possessed are not only dynamic archive management or static archive management separately, but also must have competency in managing archives in both types of records. Archivists must be able to ensure that the archives created from the beginning are already using the information technology that has been created.
3. Along with the times, archive management activities are increasingly advanced and must begin to adjust to be carried out based on technology, so that the management of records that are currently used should be done in accordance with the Records Continuum Model in its application in Indonesia.
4. Compilation of policies related to digital records management in which an Archivist can ensure that the records created are in accordance with applicable archival rules.

REFERENCE

- Basrowi dan Suwandi. 2008. *Memahami Penelitian Kualitatif*. Rineka Cipta: Jakarta.
- Catatan Arsiparis Rumah Ingatan Kearsipan Indonesia*, Jakarta: Ikatan Arsiparis ANRI. 2015
- Heri, Eko Indra. *Orasi Ilmiah: Tantangan Pengembangan Sumber Daya Manusia POLRI di Era Revolusi Industri 4.0*, Jakarta: 2019
- Modul Pengantar Kearsipan*, Jakarta: Pusdiklat ANRI. 2015
- Modul Pengantar Pengelolaan Arsip Dinamis*, Jakarta: Pusdiklat ANRI. 2015
- Modul Pengantar Pengelolaan Arsip Statis*, Jakarta: Pusdiklat ANRI. 2015
- Sugiyono. 2008. *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Alfabeta: Bandung.
- Suryabrata, Sumadi. 2010. *Metodologi Penelitian*. PT Raja Grafindo: Jakarta.
- Undang-Undang Nomor 43 Tahun 2009 tentang Kearsipan
- Peraturan Pemerintah Nomor 28 Tahun 2012 tentang Pelaksanaan Undang-Undang Nomor 43 Tahun 2009 tentang Kearsipan