Implementation of digital archives using a dynamic archive information system

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Received: April 2021; Accepted: November 2022; Published: December 2022

Abstract

Archive structuring is sorting and combining archives according to type and use of archives for organization's benefit. Electronic filing systems are useful in facilitating the management of archives in organization. The study aimed to determine the implementation of the Dynamic Archival Information System or Sistem Informasi Kearsipan Dinamis (SIKD) at the Purwodadi Grobogan Regional Archives and Library Office. The research method was descriptive qualitative. The results showed that implementation of SIKD in dynamic archives at the Purwodadi Grobogan Regional Archives and Library Office began with document recording, archive control, distribution of archives, archive storage, and archive shrinkage. Archives are recorded in various methods consist of agenda books, control cards, and manuscripts. Archive control used are a control card system, spreadsheet introduction, and the SIKD framework application, which is equipped with a login. Distribution of archives used identification cards in SIKD after taking advantage of new developments and using conventional process combinations. Archive storage, both active and inactive records used the usual storage process that relied on the classification code recorded on the control card. This study concludes that the creation of the archives to archives shrinkage needs to be optimized. Due to the limited human resources of digital archive managers, not all dynamic archive files are digitized, and not all units can use the SIKD system due to website network problems. This study implies that the management of digital archives needs improvements in meeting the needs of those who require them at the Purwodadi Grobogan Regional Archives and Library Office.

Keywords: E-archive; Digital archives; Dynamic archival information system; Dynamic archive management

Implementasi arsip digital menggunakan sistem informasi arsip dinamis

Abstrak

Penataan arsip adalah tindakan memilah dan menggabungkan arsip sesuai jenis dan penggunaan arsip untuk kepentingan organisasi. Sistem pengarsipan elektronik bermanfaat untuk memudahkan pengelolaan arsip di organisasi. Tujuan penelitian ini adalah untuk mengetahui implementasi Sistem Informasi Kearsipan Dinamis (SIKD) di Dinas Arsip dan Perpustakaan Daerah, Purwodadi, Grobogan. Metode penelitian yang digunakan adalah kualitatif deskriptif. Hasil penelitian menunjukkan bahwa implementasi SIKD dalam penyelenggaraan kearsipan dinamis di Dinas Arsip dan Perpustakaan Daerah Purwodadi Grobogan dimulai dari pencatatan dokumen, pengendalian arsip, distribusi arsip, penyimpanan arsip, dan penyusutan arsip. Pencatatan dokumen menggunakan buku agenda, kartu kendali, dan naskah. Pengendalian arsip menggunakan sistem kartu kendali, pengenalan spreadsheet, dan aplikasi framework SIKD yang dilengkapi dengan login. Distribusi arsip menggunakan kartu identitas di SIKD setelah memanfaatkan perkembangan baru dan menggunakan kombinasi proses konvensional. Penyimpanan arsip menggunakan kode klasifikasi yang tercatat pada kartu kendali. Kesimpulan penelitian adalah pembuatan arsip hingga penyusutan arsip belum dilakukan secara optimal karena keterbatasan sumber daya manusia sebagai pengelola arsip digital, tidak semua file arsip dinamis dibuat secara digital, serta tidak semua unit dapat menggunakan sistem SIKD karena adanya masalah jaringan website. Implikasi penelitian ini adalah bahwa pengelolaan arsip digital masih terhambat dalam memenuhi kebutuhan pihak yang memerlukan di Dinas Kearasipan dan Perpustakaan Daearah Purwodadi.

Kata Kunci: E-arsip; Arsip digital; Sistem informasi kearsipan dinamis; Pengelolaan arsip dinamis

INTRODUCTION

The development of information technology is currently running rapidly and continuously. One of the benefits derived from information technology is archiving. Records management is an activity that is often carried out in various organizations or agencies. Archives are a source of information that can help improve and make quick and accurate decisions about problems.

Moreover, archival activities are the foundation of the establishment of an institution. Archiving is a vital part of office work related to archives. The Purwodadi Grobogan Regional Archives and Library Office archival has activities that integration to systems. This is important to study because many archival offices have conditions that are still far below those of using a dynamic system. Of course, there is a significant obstacle, namely the need for human resources for archive more management.

Archives have an essential role in the process of presenting the information. Kuswantoro and Hartati (2019) state that archives have an essential role in leaders making decisions and formulating policies. Therefore, archive management must have a sound work system and procedures to present accurate, timely (fast), relevant and complete information. The purpose of managing the archive is the creation of a memory center and information sources that will launch the life and development of the organization (Adawiah, 2017). It shows that good archive management will support archives as a source of information in the organization.

Offices as large institutions need archive support so that they are appropriately managed. In general, offices still need a higher appreciation of archive management for correcting deficiencies and irregularities in document/archive storage. So, office development requires effective information management; hence it needs an e-archive. It would enable the government administrations to achieve the goals of egovernment development of increased efficiency, transparency, and accountability and hence deliver high-quality services to the citizens.

In paragraph 1 number 2 of Law Number 43 concerning records and archives administration, archives/records shall mean records of activities or events in a variety of forms and media in accordance with the development of information and communication technology which are made and received by state institutions, local governments, education institutions, companies, political organizations, social organizations, and individuals as part of the community, nation, and state. Furthermore, human resources, infrastructure, and facilities, as well as other resources support in paragraph 1 number 24, records and archives administration, shall mean all activities, including policy, guidance, and management of records and archives in a national records and archives system (Republik Indonesia, 2009).

Many studies have examined the implementation of the Dynamic Archives Information System (SIKD), but each region has its characteristics related to the theme. It includes the cause of the implementation, the steps, and the results obtained from the research. Besides those involved, the passed stages during the research, commitments, passed obstacles, and the authority of each party involved.

The focus of the problem studied is related to the implementation of (SIKD) in an archiving agency in various regions, which many previous researchers have yet to do. Problems that occur based on observations made by direct researchers of a regional archiving service system, especially in the Purwodadi Grobogan area, are no new system development due to the old systems used. Hence, researchers are interested in conducting a new study examining how a new governance system can be implemented in related agencies. Therefore, this study aimed to determine the Dynamic Archive Information System (SIKD) implementation in managing electronic records at the Regional Archives and Library Office or Dinas Kearsipan dan Perpustakaan Daerah (Dinas Kearsipan dan Perpustakaan Daerah Kabupaten Grobogan, 2022).

Along with technology development, dynamic archives management must use technology to make archive management accessible and faster. This more technology-based archive management is called electronic archiving. The electronic filing makes it easier for employees to manage records (Astri, 2020). Electronic archives can be used to manage storage, processing, distribution, and archive maintenance so that they are more effective and efficient, and the archive retrieval process is fast (You, Pollack, & Long, 2005).

The creation, storage, distribution, and use stages are different. In manual dynamic archive management, each stage is an activation process. In managing dynamic electronic records, the creation and storage process takes place in one stage. The distribution and use process also runs in one stage to manage dynamic electronic records more efficiently. The presence of this SIKD causes the management of dynamic records to run in one stage, so management becomes archive more efficient. Archives are widely used as a source of information that can support the implementation of management functions.

Organizations, both state institutions or government and private institutions, both central and regional, cannot be separated from the activities of creating, managing, and carrying out the tasks and functions of the organization. The archives created by the organization have a very decisive role and can even be the organization's heart. Loss of records will result in significant losses for an organization because it will affect the process of achieving organizational goals (Baron & Thurston, 2016).

Digital filing systems have many variations systems, all designed to facilitate the performance of archiving tasks. Four critical components can be used as guidelines in choosing an archiving system: the speed of scanning documents; the ability to prepare documents; the ability to index documents; and the ability to control access (Irmalasari & Mayesti, 2017). With various problems in conventional archive archive management, the current management solution uses information technology with electronic archive management. In essence, electronic records management is information that is recorded and stored on electronic media in digital form based on the use of computers. The electronic filing system has not been used in organizations or agencies. Organizations or agencies are generally still lagging and unable to adapt to the times. On average, they still use the old-style governance that does not use current technology, both conventional and electronic archive systems. However, at this time, the management of electronic-based archives has begun to enter the regional level agencies.

The rapid progress of innovation today significantly affects life in the public arena in various exercises, especially in the workplace (Iswandi, Nazifah, Khotimah, Anggraini, & Okshi, 2018), which affects the public's need for data. Data is the main thing in daily life for individuals when they complete different exercises. This innovation is one form of hierarchical goals the achieving in workplace, one of which is in archiving exercises. One type of action accomplished by multiple government and private workplaces is keeping reports, files, or archives. This movement is also called recorded organization. Archives can be considered one of the significant sources of data in workplaces and associations because documents have different capacities and use assets whose data is still expected to assist managerial work and steps the implementation of executive capacities (Yunita & Rahmah, 2015). The variety, structure, and medium for storing reports have changed to make it simpler as far as the capacity, board, and historical record recovery have long-term use rewards.

Based on research, according to Wardah (2016), various types of records and media are created to work with capacity, data and dissemination retrieval, to have substantial usability value as evidence in legitimized exercise execution. The advantage of association documents is that there is data contained in the files that can be used as dynamic reasons as evidence in the event of a misunderstanding between correspondence, as an apparatus in charge of administration, and as a matter of regulatory candor (Kuswantoro & Hartati, 2019). Archives have a significant usability value in data media and are recommended evidence. Document records of events in the structure and media adapted to the innovation progress of data and

correspondence carried out by state institutions, environmental governments, educational institutions, political associations, local communities, and communities in the implementation of regional and state life. Good notes are needed to be used adequately and productively in the office.

Thus, some research examines the archive activities in offices, analyzed from the process of archivists, archivists, and institutionally. Previous studies that examine archiving activities can be used as a comparison with the author's research, including the following: First, a study conducted by Kartini, Sukaesih, and Budiono (2019) at the Ministry of Public Works of the Republic of Indonesia. Records management in this institution has yet to be carried out correctly and still has constraints. А dynamic archive office management system for administration in the Ministry of the Public Works Republic of Indonesia should focus on creating and receiving archives, storage, maintenance, and depreciation. The archival equipment is dynamically good enough and still worth to be used. Dynamic archive management, there are five obstacles faced by office administration in the General Bureau, i.e., budget funds, facilities supporting dynamic archive management, security system, lack of employees in the field of archiving, and activities in optimizing Resources Human dynamic (HR). Legal basis archive management administration offices in the General Bureau in the form of policies, and **Operational Standards Procedures (SOPs)** regarding management dynamic archive" (Kartini, Sukaesih, & Budiono, 2019).

The second study by Bawono, Darmagara, and Parikesit (2022) was conducted in the Archives section. This study reports that the archive management in this institution still needs to be improved. It is due to the lack of staff or archivists and facilities in the archive room; the previous studies show that human resources determine the smooth running of activities in archives in an institution. Staff or archivists in such institutions should be able to analyze the appropriate documents for archiving or be observant of quality viewing documents. In addition, staff or archivists must actively communicate with various fields in distribution documents to get to the archive unit. Thus, the role of archives the primary as tool for organizational memory, authentic material or evidence, the primary material for planning and decision making, and barometer of organizational activities daily activities related to generally produces records and material information for other scientific purposes.

Archives undergo changes and advances in the electronic structure. As Rifauddin (2016)in Indonesia, notes, few organizations still have considered documenting their management, especially electronic files, so the items made are mostly paper-type files. It results in large volumes of paper documents causing various identified problems with capacity, maintenance costs, board, office, or other components that can cause file damage. As Aryani, Suratno, Mauladi, and Utomo (2019)pointed out; the electronic documentation framework can improve workers' performance and increase the productivity of representative work, where all work actions are assisted by utilizing today's electronic media.

Archives are referred to as highlights or depictions of how the workplace stores or organizes records that are conveniently stored and can be recovered (Tjiptasari,

2017). As data innovation increased, board files began to be merged with the executive framework's electronic files. With advances in this area of innovation, on-the-job training in information archiving will be more successful and proficient and save time in managing work in the workplace. Document stacking by utilizing innovation is a principle of proof in archival supervision, for example, limiting the shortage of essential data in the workplace and authorized agencies (Zuliyanti, 2021). An existing framework can assist in workplace training, one of which is retrieving and saving files. Data stored in paper reports tend to be unprofitable or tucked away and require space for capacity. With the use of frameworks and a drive for innovation, it is possible to complete manual note-taking using paper. The novelty of this research lies in the aspects studied, the object of study, methods, and collection techniques. data Previous research only analyzed the ability of archival officers to manage archives, while this study examined how dynamic archive management implements in implementing dynamic archival systems for information services. This study aimed to determine the use of the Dynamic Archival Information System (SIKD) in managing electronic archives implemented at the Grobogan DINARPUSDA Office and the obstacles to the SIKD in managing electronic archives implemented at the Grobogan DINARPUSDA Office.

RESEARCH METHODS

The research method used qualitative descriptive is used to understand various phenomena during the study to produce a scientific conclusion on a particular study. According to Sugiyono (2014), a research strategy is a method to obtain information with an explicit purpose and use. The study describes and explains how to present data about the information extracted by emphasizing the researcher who acts as the leading researcher who determines the research's success. This descriptive research included the types of research using interview techniques for two months and a literature study.

Subjects in this study comprised three people, the Archivist, the Head of Archives, and the Archive Manager. The researcher chose the informant because the informant assisted him in collecting data. Besides, it was determined based on data needs and suitability in the profession. The object of this research was the implementation of the Dynamic Archival Information System (SIKD) in the performance of dynamic archives at the Purwodadi Grobogan Regional Archives and Library Office.

Data collection techniques used in this study included observation, interviews, and literature study. Observations made in this study were direct observations of activities of the electronic archives management in Puwodadi Grobogan Regional Library and Archives Services. Observation is observing and recording a systematic approach to symptoms. Observation can measure a phenomenon or symptom of an event that we will examine as a form of data presentation in scientific research.

In this study, the researcher used structured interviews to make it easier to process the data. The sampling technique was purposive sampling, namely the sampling technique of data sources with specific considerations. For example, the person who responded to this particular consideration knew the most about dynamic archives. A structured interview is an information search that the researcher has carefully prepared. Moleong (2018) states that a literature study is a scientific study obtained from various scientific literature that explains various things or events, all of which can be justified scientifically based on formal considerations in a scientific study.

The data analysis technique in this study used the following techniques: Data Reduction, a summarizing activity that focuses on the essential things, looking for themes and patterns (Sugiyono, 2014). Data display in qualitative research; data presentation can be in the form of a brief description, charts, relationships between flowcharts, and the like. categories, Sugiyono (2014) means that the data can be presented in a discussion or research presentation with a description of the results describing the scientific conclusion. Then, concluding. The initial conclusions are still temporary, meaning that the data presentation must be reasonable and will be changed if there is no strong evidence supporting the data collection stage (Sugiyono, 2014). Analysis of the data used in this study was a test method; the validity of the data used triangulation. In this study, the researcher used triangulation by using sources. Source triangulation means comparing and checking back degrees of the trustworthiness of the information obtained through different times and tools. Qualitative means that the researcher crosschecks the data to produce data wetness.

RESULTS AND DISCUSSION

Implementing SIKD in dynamic management is one way to assist the administration of dynamic archives at the Regional Archives and Library Services. The researcher explained the implementation of SIKD in dynamic archive management. This section explained how the Regional Archives and Library Services implemented and changed the management files with SIKD rules. The electronic recording framework at the Regional Archives and Library Services has been upheld by equipment and programs, considering the consequences of perceptions and meetings. The Purwodadi Grobogan Regional Archives and Library Office has built the application program adapted to the organization's circumstances.

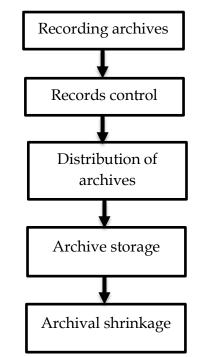


Figure 1. SIKD archive management process Source: Research results, 2021

The first research finding; the process of recording SIKP archives was the process of recording archives. Record-keeping is identifying incoming or outgoing records from the start. The goal is to simplify the search and management of archives. Archives are recorded in various methods as an initial management step, including books, agenda control cards, and manuscripts. The archiving process began with file retrieval, followed by archive collection, document coordination, and archive recording. After the archive was obtained, the documents were collected in three meetings: essential and confidential data. The archive collection was carried out by separating directly when the archive was obtained. The resource person, an archivist, stated as follows,

"In the process of recording archives, the main thing to do is to check the letter. Check the emails identified by the letter's location, attachment, and nature. After that, the letter could coordinate with the unit, the agency, or the unit to handle the Regional Secretariat. After determining the letter constituent the units, classification is equipped with a letter code depending on the code file layout. After completing the letter arrangement action, the letter is recorded on the control card structure in the SIKD implementation system" (D. Armiati, Interviewed, March 10, 2021).

The following resource person, the Head of the archives, said,

"Archive recording is done by logging in as administrator, archivist, or supervisor in the archive document system. After logging in, the document is focused on the control card for records that the handling unit must follow up. For ordinary files that do not require follow-up and archives that are confidential, they are entered in the introductory sheet menu" (Murdesi, Interviewed, March 10, 2021).

The recording process was based on the results of interviews. The administrative structure significantly arranged general official writings and those confidential when recording the used document archives. Important official documents were script originals whose substance was limiting, needed follow-up, contained essential data, and contained strategic ideas. The ordinary official document was an official document whose contents were not binding, did not require follow-up, did not contain essential data, and did not contain an idea strategy.

After going through how to compile the official original copy, the next step was creating an area of good governance. This area was expected to complete the original handling for further follow-up with script service. The management unit was the Regional Secretary and Assistant Regional Secretary. In addition to determining the unit of preparation, coordinating the original copy of the manuscript was to decide on simultaneously and include the order code on the official document. Classified recording of archival information is usually operated by writing it down on the front, taking notes, and documenting information of character or essential data. These were especially files that needed to be followed up and were completed by recording them on the control card structure contained in the SIKD application system. After going through three cycles, the archive recording was completed. The archival recording was an information account document including a problem index document, code sequence, summary of archive substance, archive sender, date recorded on file obtained, the number of documents, and the number of attachments. As expressed by Iswandi, Nazifah, Khotimah, Anggraini, and Okshi (2018), the recording process starts with entering information or notes by entering (catchwords) or capturing words in the application. Information Documentation Recording on identity is solved using control cards, specifically by writing it down in the system. The process is carried out in the introductory section for confidential and ordinary data/files documents that do not need to be followed up.

The second research finding was records control. Records control is the process of incoming and outgoing mail recorded using a predetermined system. Furthermore, the letters are directed or controlled for further processing. Letters can be managed using two systems, namely, the control card system and the agenda book system (Stuart, 2017). This topic described records control that is completed to avoid the loss of documents or the unknown whereabouts of files. Records control is carried out through administrative files. Then how to control the archives at the Purwodadi Grobogan Regional Archives and Library Office after completion, and go to document recording. It is because the process is carried out to find the file's location in a data management system to ensure that the file is highly protected and safe (Mulyadi, 2018). One source, an archivist, said that,

"The controlling records process might be performed differently. One of them is by using this SIKD. Utilization of a working system equipped with a login will be safer than traditional archiving. In addition to using an electronic documentation work system in the controlling records process, control cards are also a method for controlling records. With control cards, documents in the control process can be controlled effectively" (D. Armiati, Interviewed, March 10, 2021).

Based on these data, it is known that the document management measures used are a control card system, spreadsheet introduction, and the SIKD framework application, which is equipped with a login. The process of conducting recordings of essential files/archives needs following up. This is due to a need for more document data, which impacts deficiency data and identity information from these documents. The records control process at the Purwodadi Grobogan Regional Library and Archives Services was strengthened by the clarification of the informant as the archive manager who stated that,

"Before the advent of the electronic recording system, archive supervision was centralized, meaning that the file was executed in an executive way. After the presence of the electronic document filing system, especially SIKD, the file management is changed to decentralization; more specifically, record administration is carried out by each work unit." (W. Lestari, Interviewed, March 13, 2021).

The difficulty level of archivists in supervising archives decreased because each work unit provided an electronic file system. The officials who manage the archives also include records control processes for their respective work units. Archivists can practice control by looking at the management of the work unit from interview exposure. Governance was carried out after important documentation. It was necessary to carry out further processing and an introduction of ordinary and confidential documents, both as control cards and introductory sheets contained in the SIKD application system and forms on paper structures (physical).

Indirectly, the SIKD application system became a method of assistance while controlling archives at the Regional Archives and Library Services. So, the recording process used the control card system, scratch sheets, and the SIKD framework with various wrong systems. Sign-in was only done using a control card, basic sheet, and SIKD. The way to control records with card control was performed essential reports/documents on that needed follow-up. This process was expected to have no data, which impacted the absence of data regarding the character of the archive. Managing confidential data and archives usually used a cover sheet since mysterious records and files were spread directly to specialists through these documents. Control using the SIKD application framework made recording associations in the regional secretariat documentation unit implemented in a decentralized manner. Space decentralization records the are organization of records completed by each work unit, including recording, flow, hoarding, and devaluation, by normalizing the normalized framework, strategy, and stages of work (Xiao, Xu, & Liu, 2021).

The third research finding was the distribution of archives. The distribution of archives was a series of activities for storing, receiving, recording, and recording

files that were still classified as active. Once the archive list was found, the archive could be used or distributed as needed. The process of distributing archives at the Purwodadi Grobogan Regional Archives Library Services is known by the informant as the Head of the archives as follows,

"The distribution process in the archive electronic system is not completely done using electronic archives. The recorded archives will automatically see their identity data on the system. That way, the steps of the archive management work can be followed up immediately. However, the follow-up file cannot run without a control card and an introductory sheet" (Murdesi, Interviewed, March 15, 2021).

A subsequent exposure by another informant as an archivist in the archive's distribution said:

"Regulations in the rules of the registered framework in disseminating documents require a control card so that recording is not carried out using electronic documentation an framework but by utilizing 2 (two) frameworks, namely electronic and ordinary. Printing the control card or scratch sheet structure completes the regular circulation. The control card structure is printed to disseminate important notes or those that require follow-up. From the beginning, the printing of structures is carried out to circulate conventional and confidential documents" (D. Armiati, Interviewed, March 15, 2021).

The interviews with the two sources showed that the archiving management process still needed to be used by technological developments that followed the development of the SIKD era. Archive management used identification cards in SIKD after taking advantage of new developments and using conventional process combinations. The Regional Archives Information System plays a vital role in the process of procedures in archive management. In addition, to this role, SIKD has a system that can provide information quickly. Part of the archive management process is carried out using SIKD, a newly created system. Another process, a further procedure, unites the conventional system that has been carried out. The user can select the required archive. Users typically read and print (Nahariyah & Alamsyah, 2016).

The fourth research finding was archive storage. Archive storage is one of the functions of archive management that ensures the retrieval and use of archives in the future. Archive Storage is a series of archive management so that archives are maintained, safe, and well maintained. Archival storage is used to store archives appropriately and can be reused whenever they are needed again. Files can be recovered correctly and quickly in connection with storing archives. Storing archives at the Purwodadi Grobogan Regional Archives and Library Office was made to provide identity information and active archives. For archive storage, both active and inactive records used the usual storage process that relied on the classification code recorded on the control card. The source, an archivist, said,

"Data of archive identity information registered with SIKD is therefore entered into the SIKD application system automatically stored, for actual evidence recorded will be stored in the Processing Unit. The processing unit is the work unit's responsibility for preparing documents. Each work unit that turns into a handling unit has its stockpiling area. The non-permanent record storage action for records in each managing unit uses a capacity that storage system relies on structuring or classification codes. For non-permanent documents, storage is by inputting the identity of the information archive at SIKD" (D. Armiati, Interviewed, March 15, 2021).

According to the informant's statement, the file in question was a dynamic document. At the same time, inactive file storage was also clarified by monitoring files, through interviews, mainly by changing the active archive status on the control card to inactive depending on the files archive retention schedule. The documentalist and the chairperson should make this progression. Regarding the capacity of inactive archives, the informant, as the archive manager said,

"Inactive archives are stored in records stored in file rooms that have met the need as inactive archives with space, depending on regulations regarding the format of inactive archives" (W. Lestari, Interviewed, March 15, 2021).

Based on the interview results, the size of the existing system was divided into two types, active, and inactive. Active archives are documents with high and constant usage, while inactive archives are files whose usage has decreased. Barthos (2016) indicates that dynamic archive storage is unique in terms of convenience and is separated into two parts: active archive and inactive archive. Active archive storage is completed in the processing unit, a work unit in dynamic files to document storage sizes. The logging unit completes inactive file storage. In this way, the DINARPUSDA office, as a documented unit, completed the way inactive files are stored, both personal

information in the SIKD application system and actual inactive files.

The fifth research finding was archival shrinkage. Archival shrinkage is an activity that aims to reduce the number of archives by moving inactive archives from the processing unit to the archiving unit, destroying archives that are no longer useful, and submitting static archives to archival institutions. Shrinking it will reduce files that are unimportant or no longer needed because the period has expired. The decrease in SIKD depended on the Automatic Retention Schedule (JRA). Shrinkage is the stage where records are surveyed to decide whether they should be re-evaluated, permanently removed, or destroyed. A re-evaluation must be based on use value administration, research use value, fair use value, and review usefulness value; to decide whether a document should be destroyed. Extermination is not only carried out by the cancellation process but should be done absolutely, both stored in the media support or other media.

One of the informants, an archivist, said, "Electronic file shrinkage has never been done because the archive shrinkage will be evaluated first by asking for approval from the Bappeda of Central Java Province" (D. Armiati, Interviewed, March 16, 2021).

Another source, a film director/archives manager, said,

"The evaluation of the archives was completed by moving and destroying the archives. The depreciation process in the electronic archive system, where the archive is still a document, has been carried out at the Purwodadi Grobogan Regional Archives and Library Office. To delete records, archivists need to confirm with the handling unit for document management and follow-up. After confirming and deciding on the option to cancel, the personal information of the file in SIKD is deleted authoritatively" (W. Lestari, Interviewed, March 16, 2021).

These interviews showed that the archive shrinkage process at the Purwodadi Grobogan Regional Archives and Library Office was completed by moving and destroying archives under the Archives Retention Schedule (JRA). JRA contained the period maintenance archive used as a guide for archive shrinkage. The period capacity for recorded capacity was settled based on the usage value of each document. Depreciation was conducted on the identity information of active archive documents in the SIKD application system and inactive

Table 1

Number of archive field resources	Number	of archive	field	resources
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archives on the actual or physical structure.

Regarding the obstacles to implementing the Dynamic Archival Information System (SIKD) the in Electronic "Archive Management Process" at the Purwodadi Grobogan Regional Archives and Library Office, the solution to these obstacles, according to the Head of Archives was to overcome obstacles related to staff limitations. They provided technical training in archiving science and systems, providing computer science and insight. One of the implementing systems in daily activities whose application was not only carried out by one work unit, but all work units so that there was an encouragement to start understanding all archival work using SIKD.

Position	Amount	
General subsection	1	
Functional librarian	1	
Archives	2	
Records management section	1	
Archives development and supervision section	1	

Source: Research analysis result, 2021

Archival management regarding solutions in overcoming obstacles related to the implementation of SIKD management is the development of a new system arrangement accompanied by the use of existing technology. Setiawati, Aulia, Johan, Hadiapurwa, and Ardiansah (2022) said that has assisted the management of dynamic archives in each institution. For this reason, it is necessary to upgrade all archivist employees. Archiving has a role as a memory center, a source of information, and an effective monitoring tool. It is necessary for every organization in the context of planning, development, policy formulation, decision-making, reporting, accountability, assessment, and control activities as precisely as possible. Each of government these and private organizations' activities has something to do with archives. Files have an essential in the process role of presenting information for leaders to make decisions and formulate policies. Therefore, to complete fast and correct provide information, the archives must have a sound work system and procedure.

Archives play an essential role in various activities, especially in the process of presenting information, because the presentation of this information is instrumental in making decisions and formulating policies in an organization. Solutions considered for the progress and achievement of a system change in an institution can be given to the leadership to add and adapt to technological advances currently proliferating in developing governance systems in the archives sector.

CONCLUSION

The implementation of SIKD at the Purwodadi Grobogan Regional Archives and Library Office has not carried out the stages of a dynamic archive management process with the SIKD application, starting from creating archives to shrinking archives. Due to limited human resources to manage dynamic archives, not all dynamic archives are digitized. Furthermore, if there is a problem with the internet network, they still are happy to use agenda books, as not all processing units use SIKD because not all processing units have a computer. Thus, not all processes can be conducted due to difficulties with the internet network. By entering SIKD earlier before conducting an archive alignment search, it can meet the needs of the parties in need, with insignificant differences. Electronic archival system devices, special tools, and programming support the Regional Archives and Library Office electronic filing system. The Dynamic Archive System (SIKD) is optimized for archive retrieval by improving facilities and infrastructure, especially computers and networks. The researcher's next research plan is to improve the big data-based archive distribution system, to become fully online.

REFERENCES

Adawiah, R. (2017). Pengelolaan arsip pada Kantor Dinas Perpustakaan dan Kearsipan Daerah Polewali Mandar (Skripsi) [UIN Alauddin, Makassar]. http://repositori.uinalauddin.ac.id/7797/

- Aryani, R., Suratno, T., Mauladi, & Utomo, P. E. P. (2019). Implementasi sistem informasi manajemen arsip di Fakultas Sains dan Teknologi Universitas Jambi. *Jurnal Ilmiah Media Sisfo*, 13(2), 146–159. https://doi.org/10.33998/mediasisfo. 2019.13.2.713
- Astri, E. (2020). Pengelolaan arsip dalam menunjang profesionalisme kerja pada Pengadilan Tinggi Agama Mataram (Skripsi) [Universitas Muhammadiyah Mataram]. Retrieved from https://repository.ummat.ac.id/877/
- Baron, J. R., & Thurston, A. (2016). What lessons can be learned from the US archivist's digital mandate for 2019 and is there potential for applying them in lower resource countries? *Records Management Journal*, 26(2), 206–217. https://doi.org/10.1108/RMJ-04-2015-0015
- Barthos, B. (2016). *Manajemen kearsipan: Untuk lembaga negara, swasta, dan perguruan tinggi*. Jakarta: Bumi Aksara.
- Bawono, H., Darmagara, R., & Parikesit, R. A. (2022). National movement for good recordkeeping awareness and commitment to archiving in Indonesia. *Jurnal Kajian Informasi & Perpustakaan*, 10(1), 29–46. https://doi.org/10.24198/jkip.v10i1.3 4644
- Dinas Kearsipan dan Perpustakaan Daerah Kabupaten Grobogan. (2022). *Rencana strategis DINARPUSDA tahun* 2016-2021. Dinas Kearsipan Dan Perpustakaan Daerah Kabupaten Grobogan. Retrieved September 15, 2021, from https://dinarpusda.grobogan.go.id/i ndex.php/22-profil/renstra/65-

rencana-strategis-dinarpusda-tahun-2016-2021

- Irmalasari, F., & Mayesti, N. (2017). Strategy of National Archives of the Republic of Indonesia (ANRI) in improving service quality: A case study of Sub Directorate of Archive Services. *Record and Library Journal*, 3(2), 158–171. https://doi.org/10.20473/rlj.V3-I2.2017.158-171
- Iswandi, N., Nazifah, N. A., Khotimah, H., Anggraini, M., & Okshi, J. J. (2018). Sistem manajemen arsip di MTS Aulia Cendikia Palembang. *Diplomatika: Jurnal Kearsipan Terapan*, 2(2), 1–10. https://doi.org/10.22146/diplomatik a.42038
- Kartini, Sukaesih, & Budiono, A. (2019).
 Kinerja pengelolaan arsip Kantor Pelayanan Utama Bea dan Cukai Tipe A Tanjung Priok. Jurnal Kajian Informasi & Perpustakaan, 7(2), 175–190. https://doi.org/10.24198/jkip.v7i2.21 250
- Kuswantoro, A., & Hartati, S. (2019). Pengaruh kompetensi pegawai dan sarana prasarana kearsipan terhadap pengelolaan arsip dinamis di kantor kelurahan se-Kecamatan Gunungpati Kota Semarang. *Khazanah: Jurnal Pengembangan Kearsipan*, 12(2), 171–185. https://doi.org/10.22146/khazanah.4 8843
- Moleong, L. J. (2018). *Metodologi penelitian kualitatif*. Bandung: Remaja Rosdakarya.
- Mulyadi. (2018). Efektivitas Sistem Kearsipan Dinamis (SIKD) sebagai sarana temu kembali arsip di Dinas Arsip, Perpustakaan dan Dokumentasi (ARPUSDOK) Kota Palembang. *JIPI: Jurnal Ilmu Perpustakaan Dan Informasi*, 3(1), 50–73. http://jurnal.uinsu.ac.id/index.php/jip

i/article/view/1493/1235

- Nahariyah, N. Y., & A. (2016). Implementasi Sistem Informasi Kearsipan Dinamis (SIKD) dalam pengelolaan arsip dinamis di Subbag Umum dan Kepegawaian Bappeda Provinsi Jawa Tengah. *Jurnal Ilmu Perpustakaan*, 5(4), 341–350. https://ejournal3.undip.ac.id/index.ph p/jip/article/view/15481
- Republik Indonesia. (2009). Undang-Undang Republik Indonesia Nomor 43 Tahun 2009 Tentang Kearsipan, Pub. L. No. 23 Oktober 2009. Lembaran Negara Republik Indonesia Tahun 2009 Nomor 152. Jakarta (2009). Retrieved September 15, 2022, from https://peraturan.bpk.go.id/Home/De tails/38788/uu-no-43-tahun-2009
- Rifauddin, M. (2016). Pengelolaan arsip elektronik berbasis teknologi. *Khizanah Al-Hikmah: Jurnal Ilmu Perpustakaan, Informasi, Dan Kearsipan,* 4(2), 168–178. https://doi.org/10.24252/kah.v4i27
- Setiawati, L., Aulia, E. S., Johan, R. C., Hadiapurwa, A., & Ardiansah, A. (2022). Studi analisis website Sistem Informasi Kearsipan dinamis (SIKD) Universitas Pendidikan Indonesia dengan metode WebQual 4.0. *Khazanah: Jurnal Pengembangan Kearsipan*, 15(1), 84–97. https://jurnal.ugm.ac.id/khazanah/art icle/view/72775/pdf
- Stuart, K. (2017). Methods, methodology and madness: Digital records management in the Australian government. *Records Management Journal*, 27(2), 223–232. https://doi.org/10.1108/RMJ-05-2017-0012
 - Sugiyono. (2014). *Metode penelitian pendidikan: Pendekatan kuantitatif, kualitatif dan R&D.* Alfabeta.
 - Tjiptasari, F. (2017). Persepsi kegunaan pengelolaan arsip digital menggunakan

SIKD (sistem informasi kearsipan dinamis). *Jurnal Kajian Informasi & Perpustakaan*, 5(2), 111–126. https://doi.org/10.24198/jkip.v5i2.126 45

- Wardah, M. (2016). Pengelolaan arsip dinamis. LIBRIA, 8(1), 51–68. https://jurnal.arraniry.ac.id/index.php/libria/article/v iew/1223/917
- Xiao, Q., Xu, X., & Liu, P. (2021). Security status of electronic records preservation in central China: The survey results of 34 archives in Wuhan City. *Library Hi Tech*, 39(1), 22–36. https://doi.org/10.1108/LHT-04-2019-0088
- You, L. L., Pollack, K. T., & Long, D. D. E. (2005). Deep store: An archival storage system architecture. *In 21st International Conference on Data Engineering (ICDE'05),*

1–12. Retrieved from https://ieeexplore.ieee.org/abstract/do cument/1410194

Yunita, & Rahmah, E. (2015). Penerapan arsip elektronik di Kantor Perpustakaan, Arsip, dan Dokumentasi Kota Bukittinggi. Jurnal Ilmu Informasi Perpustakaan Dan Kearsipan, 4(1), 326-334.

http://ejournal.unp.ac.id/index.php/ii pk/article/view/6183/4806

Zuliyanti, F. (2021). Pengolahan arsip dinamis inaktif sebagai upaya efektivitas dan efisiensi temu kembali arsip di Pembangunan Badan Perencanaan Daerah (BAPPEDA) Kabupaten Bantul. Informatio: Journal of Library and Information Science, 1(3), 241-258. http://jurnal.unpad.ac.id/informatio/a rticle/view/35257/16670