

## Research Article

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# Digital Archive Management Procedure Through Google Spreadsheet in The Staffing Unit of Politeknik Kesehatan Kemenkes Tasikmalaya

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**Abstract:** *Digital technology has become the main driver of change in various aspects of life, including digital archive management. Digital archive management is a major operational activity throughout university units, especially in the Staffing Unit of Politeknik Kesehatan Kemenkes Tasikmalaya. Archive management in this unit is currently in the transition period from conventional archiving to digital. As a result, the archiving process is still done double, first done conventionally and continued with the digital process. This is the background of the research to review archive management through Google Spreadsheet in the Staffing Unit of Politeknik Kesehatan Kemenkes Tasikmalaya. This research uses a qualitative method based on interviews with archivists in the Staffing Unit of Politeknik Kesehatan Kemenkes Tasikmalaya and also observation from September 2023 - January 2024. The result shows that the digital archiving process in this unit is carried out sequentially starting with moving documents, storing documents, indexing documents, controlling access and ending with document retention. So, digital archive management through google spreadsheet in the Staffing Unit of Politeknik Kesehatan Kemenkes Tasikmalaya has been carried out well. Thus, the digital archiving that has been carried out in this unit facilitates the process of finding the information needed and also streamlines the archivist's jobdesk.*

**Keywords:** *management, archive, digital, google spreadsheet.*

## Introduction

Digital technology has become the main driver of change in various aspects of life. This condition, of course opens up new opportunities, provides convenience, affects the way people work, learn and interact. As a result, the role of technology in digital archive management has become fundamental in the archival field. The role of technology can change the process of storing, searching and utilizing information in this field. Technology can replace conventional archive with digital archive that can be stored efficiently and accessed quickly. According to (Husnita, 2020) the effectiveness of archive document management in a company is influenced by several factors, such as lack of awareness of the importance of archive document management among employees, lack of knowledge or skill of employees in managing archive document and others. Whereas with technology, digital archive management system skill and information serach can be completed in second so that this contributes to employee productivity. This is reinforced by the result of research (Faruk & Almahdi, 2020) entitled Electronic Archive System Management as a Determinant of Employee Work Productivity in Solokuro sub-district of Lamongan Regency, that the electronic archiving program is effective in increasing employee productivity. This is obtained based on data processing from respondent's responses to the employee work productivity variable with the highest percentage score of 82%. Research related to digital archive management that affects productivity has also been conducted by (Devi et al., 2023) with the title *Optimizing Employee Performance through Digital Archive Management at KADIN Bali*. This study proves that digital archiving has an impact on increasing work productivity, especially in the process of recording incoming and outgoing letter to be faster and more accurate.

Archive can determine the credibility of an institution so having a complete archive is very important and necessary. Not only in a company or organization, archive management also has an important role in ensuring continuity, transparency and efficiency in a university. Minister of State Apparatus Empowerment and Bureaucratic Reform, Tjahjo Kumolo explained that archive management in higher education is very important because the archive created can describe all aspects of activities that occur in university, both as scientific, research, and public service institution (ald / Public Relation of Menpan RB, 2020:19). Various archives created in university environment are not only evidence of accountability for the implementation of higher education, but can also be a source of learning and reference for lecturer, student, and the general public. Thus, archive has a big role in supporting the vision and mission and become a crucial activity in a university.

The importance of the role of archives must also be supported by archivists with competence, expertise and a national archival system so that the organization of government archive can be carried out comprehensively and integratedly. In addition to the Archive Law, to ensure good archival management, the government has determined that archive is one of the elements of assessment that also support indicators of the success of bureaucratic reform. Archives also serve as a source of information to support decision-making, organizational history, fulfillment of legal requirement and better public service.

According to (Nyfantoro et al., 2019) information and communication technology plays an important role in facilitating archival system so that digital archive stored in computer system can facilitate and minimize error in archive management. One of the simple archival systems that is often used in digital archive management is *Google Spreadsheet*. The system is also used by Politeknik Kesehatan Kemenkes Tasikmalaya, especially in the Staffing Unit which is the object of this research. Based on the result of preliminary observation, it is known that there are problems in the archive management process, such as some damaged and unknown archives, so that it becomes the background of the research. The novelty of this research is to directly observe digital archive management procedure in the Google Spreadsheet system which allows several parties to gain access even if only to supervise. Thus, the purpose of this research is to find out the procedure for managing digital archive through Google Spreadsheet in the Staffing Unit of Politeknik Kesehatan Kemenkes Tasikmalaya.

## Literature Review

### Archive Management

The concept of archive management consists of word of management and archive. According to (Terry G. R., 2016) said that management is a typical process consisting of planning, organizing, moving and controlling action out to determine and archive predetermined goal though the use of human resource and the other resources. (Rustam, 2014). Archive management is a field of management that is responsible for implementing efficient and systematic control over the creation, receipt, storage, and use and disposition of archive, including processes for capturing and maintaining evidence and information on business activities and transactions in the form of archive. Meanwhile, according to Barthos in the journal (Bengi, 2021) archive is commonly referred to as note, which is written record in the form of chart and image that contains information on a matter or information as the main tool of a person's or organization's memory. In Law Number 43 of 2009 concerning archive, archive is defined as record of activity or event in various forms and media in accordance with the development of information and communication technology made and received by state institution, local government, educational institution, company, political organization, community organization, and individual in the implementation of social, national and state life. In detail,

archive management in Indonesia has actually been regulated in the National Archive of the Republic of Indonesia (ANRI) Number 20 concerning Guideline for the Management of Archive Unit at State Institution (2012) which contains archival Standard Operating Procedure (SOP). So that it can be concluded, archive management is defined as the activity of organizing information or data record in various forms and media whose implementation begins with the creation, use and maintenance, up to the depreciation of archive, both for conventional and digital archive.

### **Digital Archive**

According to the National Archive and Record Administration (NARA), digital archive is archive that is stored and processed in a format, where only computer can process it. Electronic records are information contained in digital files and media, which are created, received, or managed by organization and individual and store them as evidence of activities (Rahayu, 2013). This digital archive is then known as a digital archive. According to (Endra, 2017) defines digital archive as archive that has changed their physical form from paper to digital sheet. The process of converting archive from paper to digital sheet is called media transfer and the process uses a computer device assisted by a high-speed scanner device. According to (Nyfantoro et al., 2019) Digital archive is information document that is created, recorded, processed, or transferred using digital equipment and can be stored in various digital formats, such as text, image, audio, and video. Meanwhile, according to (Dr. Siti Marwiyah, 2023) defines digital archive as a system or procedure for collecting information in the form of document that is recorded and stored using digital computer technology with the aim that document is easy to view, manage, find and reuse. So it can be concluded that digital archive in this study is a collection of data stored and processed using computer technology in the form of electronic document or digital file.

### **Digital Archive Management**

According to (Zulhakim, 2023) Managing electronic or digital archive (Contimsum Model) has several stages as follows:

#### 1. Moving Document

According to (Apriana Dwi Kusuma; C. Dyah S. Indrawati, 2021) moving document has several methods, namely, Scanning (scanning or scanning document), Conversion (changing document such as word to pdf format and jpg to pdf format), and Importing (moving data from other sources into an electronic filing system).

#### 2. Saving document

According to (Donni Juni Priansa dan Agus Garnida., 2013) explains that the archive storage system is a system used to store archive so that it can be found quickly if the archive is used at any time. The filing system must be able to keep up with technological change, increase the number of document to be stored, and be able to last a long time (Tjptasari, 2018).

#### 3. Indexing Document

Indexing in archiving is the activity of determining the name, subject or other capture word on the letter/document to be stored (Yushi, 2022).

#### 4. Control access

According to (Purwanto dan Ramadhan, 2016) the ability to control access is one of the important capability in a digital archive system, because in this ability there is access restriction with different level between users.

## 5. Document Retention

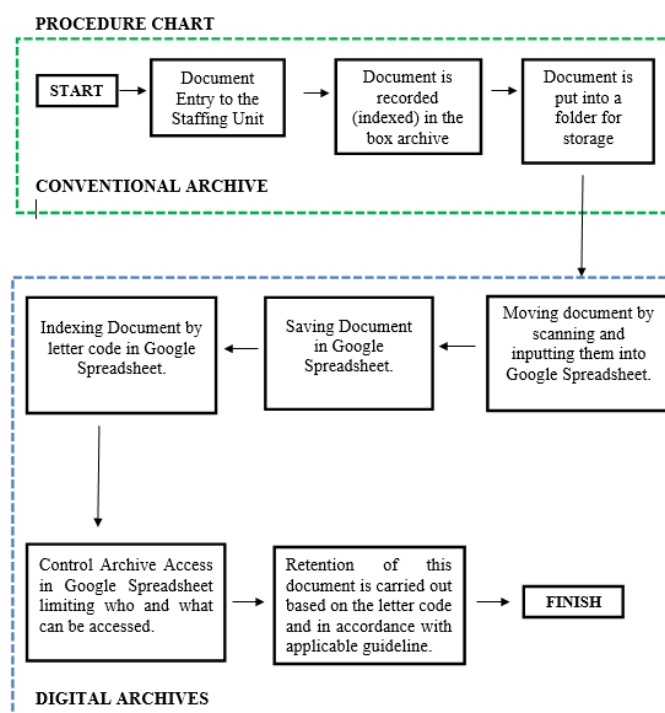
Every organization or university, the Archive Retention Period (JRA) in document shrinkage is needed in accordance with the JRA (PP No. 28 of 2012, article 53, clause 3) that in order to carry out shrinkage, every organization must have a JRA.

## Method

This research is a descriptive study that describes the object of research verbally through the data that has been collected using a qualitative approach. According to (Moleong, 2017) states that qualitative research is on data collection in a scientific setting using natural method, and is carried out by naturally interested people or researchers. This descriptive research collects information collected in the form of picture and word (not in the form of number), so that all data becomes the key to something that has been studied. The method used in this study uses qualitative as explained by Fiantika (2022:1) qualitative research is descriptive research and tend to use analysis using theoretical foundation as support to match the fact in the field. This research uses data collection techniques such as observation, interview, documentation and literature review which were conducted for 4 months, namely September 2023-January 2024. The subject of this research is the archivist in the Staffing Unit of Politeknik Kesehatan Kemenkes Tasikmalaya and to obtain valid data, triangulation is carried out or using other objects, namely data user to check the data that has been obtained in the field.

## Result and Discussion

Based on the result of the writer's observation, digital archive management through Google Sheet in the Staffing Unit of Politeknik Kesehatan Kemenkes Tasikmalaya is still in the transition stage from conventional to digital. Therefore, the archive management carried out still uses double procedure, namely initial archiving carried out conventionally and continued by digitalizing the archive. The archiving process is illustrated in the chart below:



**Chart 1.** Conventional to digital archive management procedure.

From the chart above, it can be seen that the first step taken by the archivist is conventional archiving. When the document is received, the document is recorded or indexed, then the document is stored in an oddner according to the applicable code. Furthermore, the process of digitizing archives through Google Sheet with the following steps:

**1. Moving Document:** The process of moving document in hardfile form into softfile with the help of a scanner, and the result is stored in archive folder according to categorization, such as Decree Letter, Director General Entry Letter, Personnel Leave Letter, Employment Contract, Determination of Personnel Credit Score (PAK), Letter of Assignment and others. Folder is stored annually on a personal computer (PC) dedicated to archiving. This activity must be carried out when document enters the staffing unit of Politeknik Kesehatan Kemenkes Tasikmalaya. Document that has been scanned is stored neatly in the personnel unit folder, classified by year and type. Information about the document is also inputted in a structured and detailed manner in the Google Spreadsheet database, starting from categorization, letter type, classification code. year, archive retention period and others.

NO	KODE KLASIFIKASI ARSIP	JENIS SERIES ARSIP	TAHUN	JUMLAH	INGGAT PERKEMBANGAN	JO BO	MASA AKTIF	MASA INAKTIF	KETERANGAN
1	00095/KEP	Surat Masuk Nomor 00095/KEP/01/13015/11 Tentang SK	2011	1	Fotokopi	0	#ERROR!		
2	005/37413	Surat Masuk Nomor 005/37413/PPK Tentang Undangan Pdt	2011	1	Fotokopi	0	false		
3	01T/PS	Surat Masuk Nomor 01T/PS 05 02 214 5441 2011 Tentang PI	2011	1	Fotokopi	0	false		
4	01T/PS	Surat Masuk Nomor 01T/PS 20 03 214 5721 2011 Tentang PI	2011	1	Fotokopi	0	false		
5	01T/PS	Surat Masuk Nomor 01T/PS 20 03 214 5284 2011 Tentang B	2011	1	Fotokopi	0	false		
6	01T/PS	Surat Masuk Nomor 01T/PS 16 11 214 59282010 Tentang PI	2011	1	Fotokopi	0	false		
7	01T/PS	Surat Masuk Nomor 01T/PS 05 02 214 5441 2011 Tentang S	2011	1	Fotokopi	0	false		
8	04PC-IBI	Surat Masuk Nomor 04PC-IBI/ISM/2010 Tentang Permof	2011	1	Fotokopi	0	false		
9	042/H7.4	Surat Masuk Nomor 042/H7.4/MPOLL/2011 Tentang Penyet	2011	1	Fotokopi	0	false		
10	040/ST/Kea	Surat Masuk Nomor 040/ST/Kea/02011 Tentang Surat Ke	2011	1	Fotokopi	0	false		
11	073/0238	Surat Masuk Nomor 073/0238/SD/02011 Tentang Perlem	2011	1	Fotokopi	0	false		
12	082/589/KEPEG	Surat Masuk Nomor 082/589/KEPEG Tentang Pindah Belke	2011	1	Fotokopi	0	false		
13	119/D	Surat Masuk Nomor 119/D/2011 Tentang Data Dosen dan	2011	1	Fotokopi	0	false		
14	1438/E4.3	Surat Masuk Nomor 1438/E4.3/K/2011 Tentang Usulan Keni	2011	1	Fotokopi	0	false		
15	1440/E4.3	Surat Masuk Nomor 1440/E4.3/K/2011 Tentang Usulan Keni	2011	1	Fotokopi	0	false		
16	161/III	Surat Masuk Nomor 161/III/PM/2011 Tentang Surat Ketera	2011	1	Fotokopi	0	false		
17	1680/L/140.7	Surat Masuk Nomor 1680/L/140.7/KP/2011 Tentang Ketera	2011	1	Fotokopi	0	false		

Figure 1. Display of archive data inputted in Google Spreadsheet

**2. Storing Document:** The use of Google Spreadsheet as a database storage media allows the archived document data to be accessed by authorized party. So, the archive data is stored in Google spreadsheet and the softfile archive (scanned) is stored in a special PC folder for archive.

Name	Date modified	Type	Size
01. JANUARI	03/05/2024 7:03	File folder	
02. FEBRUARI	03/05/2024 6:59	File folder	
03. MARET	03/05/2024 6:59	File folder	
04. APRIL	03/05/2024 6:59	File folder	
05. MEI	03/05/2024 7:00	File folder	
06. JUNI	03/05/2024 7:00	File folder	
07. JULI	03/05/2024 7:00	File folder	
08. AGUSTUS	03/05/2024 7:00	File folder	
09. SEPTEMBER	03/05/2024 7:00	File folder	
10. OKTOBER	03/05/2024 7:00	File folder	
11. NOVEMBER	03/05/2024 7:00	File folder	
12. DESEMBER	03/05/2024 7:01	File folder	

Figure 2. Display Folder Data Archive 2023

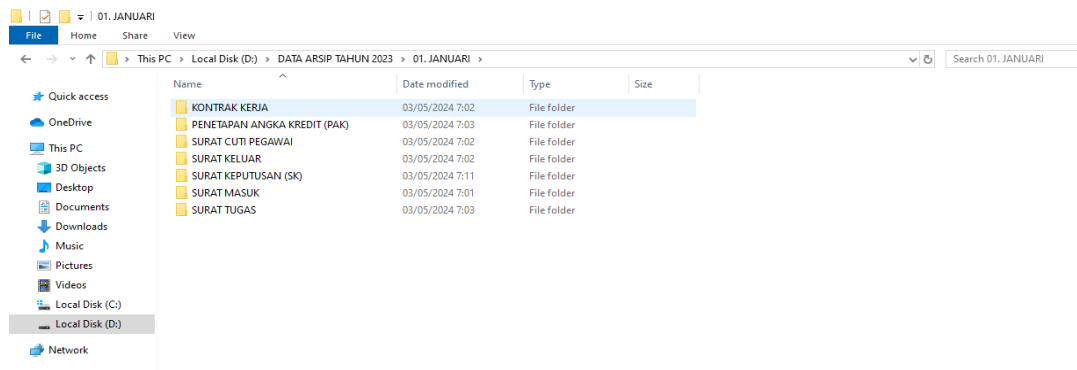


Figure 3. Display Folder Data Archive January 2023

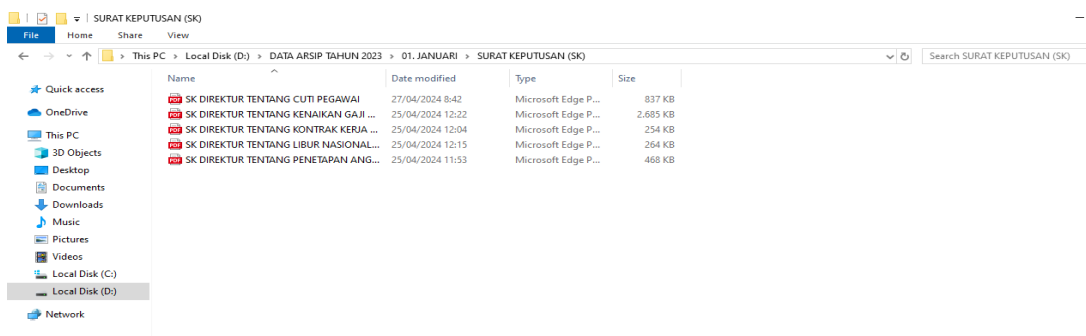


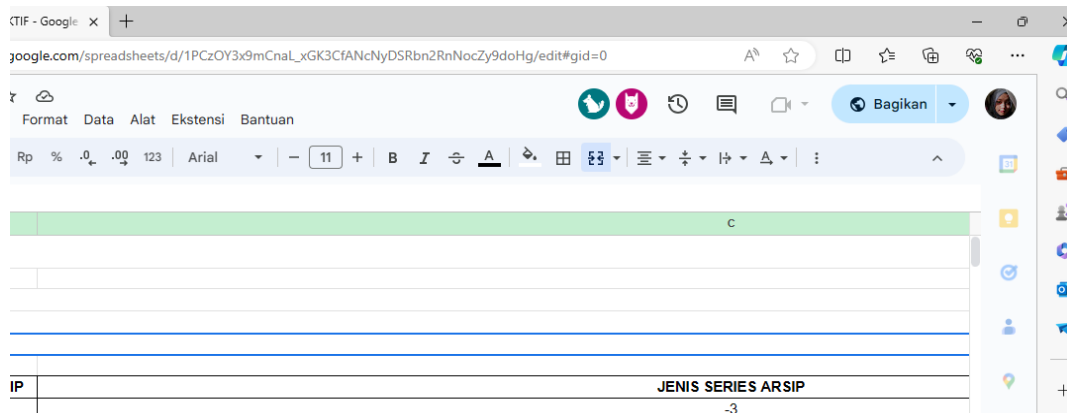
Figure 4. Display Folder Surat Keputusan (SK) January 2023

**3. Indexing Document:** The incoming document is inputted in Google Spreadsheet. The first thing to do is to index the document based on the applicable classification code. The coding is formulated based on categorization abbreviation (indicating the subject matter) followed by number (indicating issue sub) in accordance with the applicable SOP. For example, the code KP.01.02 explains that KP stands for Personnel and indicates the subject matter of Personnel, 01.02 is a issue sub which means Appointment of Civil Servant. Meanwhile, the data entry sequence is adjusted to the cronological system based on the date of entry of the document.

NO	KODE KLASIFIKASI ARSIP
-1	-2
1	
2	KP.02.07
3	KP.02.07
4	KP.02.07
5	KP.02.07
6	KP.02.07
7	KP.02.07
8	KP.02.07
9	KP.02.07
10	KP.02.07
11	KP.02.07
12	KP.02.07
13	KP.02.07
14	KP.02.07
15	KP.02.07
16	KP.05.02
17	LB.02.01
18	KP.05.02

Figure 5. Display of Archive classification Codes in Google Spreadsheet 2023

**4. Controlling Access :** Document access control is carried out by archivist on a regular basis. The access control process is also seen from the determination of the Archive Retention Period by using a specially created formula so that it is easier to search for document. Document data stored in Google Spreadsheet can also be accessed by the archivist so that it can be controlled by authorized party. Apart from the archivist, access to archives stored on PCs and Google Spreadsheet is the responsibility of the Head of Administration of Politeknik Kesehatan Kemenkes Tasikmalaya.



**Figure 6.** View of access conmal in Google Spreadsheet 2023

**5. Document Retention:** the Archive Retention Period applicable at Politeknik Kesehatan Kemenkes Tasikmalaya follows the ANRI Regulation No 12 of 2016 concerning Archive Management. So, if a document has an active period of 1 year, for example starting from 2018-2023, the document will be destroyed in 2024. Thus, the document that has reached its active period is automatically identified as inactive archive in the Google Spreadsheet database. So, for hardfile document will be destroyed using a shredder. Softfile document will still be stored on the archive PC, although in the Google Spreadsheet data will say "DESTROYED" in the description column. This process is in place to ensure that only relevant and necessary document is retained, so that storage space is kept orderly and maintained.

The explanation above shows that the archiving process carried out in the Staffing Unit of Politeknik Kesehatan Kemenkes Tasikmalaya, which is began conventionally and is continued digitally, is able to complement the existing archive management process. It is evident from the routine management process starting from moving document, storing document, indexing document, controlling access, to document retention so as to facilitate the process of finding the required document information.

We still maintain the conventional archiving process that is backed up with data in Spreadsheet, although it is complicated because it it twice the work but it is faster in finding the file needed" said the Personnel Unit Archive, Maya Sofia

## Conclusion

The conclusion of this study shows that the procedure for managing digital archive through Google Spreadsheet in the Staffing Unit of Politeknik Kesehatan Kemenkes Tasikmalaya has been implemented properly, even though it is began with conventional archiving. So, the implementation of conventional archive management followed by a digital process is still being carried out as an effort to back up the archive in the Staffing Unit of Politeknik Kesehatan Kemenkes Tasikmalaya. The archive management process has made a positive contribution to the archivist's work. Based on the result of observation and interview, it can

be concluded that the digital archiving process is carried out sequentially, starting from moving document, storing document, indexing document, controlling access, to document retention.

The implementation of this digital archive management procedure also allows some parties to gain access even if it is only for monitoring, thus ensuring transparency in archive management. In addition, the use of Google Sheet as one of the simple filing systems has facilitated the archive management process in the unit. Thus, the use of digital technology in archive management is beneficial to facilitate the process of finding information, minimizing damage and loss of archive documents.

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