

## **EFFICACY OF INFORMATION SYSTEMS IN MANAGING ARCHIVES IN INDONESIA'S MINISTRY OF RELIGION'S OFFICE**

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### **Abstract**

The exponential growth of data, which occurs every day, can wreak havoc on records management. The more data, the more important the data collection process. It is very important to have reliable records management so that the records management process can run well. Information technology is one solution that can be used. Archive management using information technology is a method that allows archives to be easily organized according to their purpose and search. Information technology-based archive applications are very useful in terms of archive administration and the process of sharing archives with other units. The purpose of this study is to see how effective the use of information technology is in managing archives at the Ministry of Religion Office of Lhokseumawe City. Qualitative descriptive technique was used in this study, with data collection through interviews or conversations, as well as literature study. The results of this study indicate that the use of information systems in archive management, as well as the use of technology in archive management at the Office of the Ministry of Religion of Lhokseumawe City, is very useful and effective. Network constraints and the lack of human resources at the Office of the Ministry of Religion of Lhokseumawe City are one of the obstacles to its management.

*Keywords: Effectiveness, Information Technology, Archives*

### **Abstrak**

Pertumbuhan data yang eksponensial, yang terjadi setiap hari, dapat mendatangkan malapetaka pada manajemen arsip. Semakin banyak data, semakin penting proses pengambilan data. Sangat penting untuk memiliki pengelolaan arsip yang dapat diandalkan agar proses pengelolaan arsip dapat berjalan dengan baik. Teknologi informasi merupakan salah satu solusi yang dapat digunakan. Pengaturan arsip dengan pemanfaatan teknologi informasi merupakan suatu metode yang memungkinkan arsip mudah diatur sesuai dengan tujuan dan pencariannya. Aplikasi arsip berbasis teknologi informasi sangat bermanfaat dalam hal administrasi arsip serta proses berbagi arsip dengan unit lain. Tujuan dari penelitian ini adalah untuk melihat seberapa efektif pemanfaatan teknologi informasi dalam pengelolaan arsip di Kantor Kementerian Agama Kota Lhokseumawe. Teknik deskriptif kualitatif digunakan dalam penelitian ini, dengan pengumpulan data melalui wawancara atau percakapan, serta studi pustaka. Hasil penelitian ini menunjukkan bahwa pemanfaatan sistem informasi dalam pengelolaan arsip, serta pemanfaatan teknologi dalam pengelolaan arsip di Kantor Kementerian Agama Kota Lhokseumawe, sangat bermanfaat dan efektif. Kendala jaringan dan minimnya SDM di Kantor Kementerian Agama Kota Lhokseumawe menjadi salah satu kendala pengelolannya.

*Kata Kunci: Efektifitas, Teknologi Informasi, Arsip*

## **A. Introduction**

Records management is critical in any business, whether it is in education, offices, or other industries. Where the archive acts as a source of information as well as a repository for material or data that may be used to make sound decisions<sup>1</sup>. In administration, data acquisition, finance, and other disciplines where archives are the center of memory in all activities, both in government agencies and elsewhere where effective archiving is required. As a result, an institution must, of course, focus on an archive system that is consistent with the organization's progress toward its goals in good archive administration<sup>2</sup>.

Today, there are still government entities in Indonesia, particularly the Ministry of Religion, that have not prioritized archive preservation. The vast majority of archives are created on paper (print)<sup>3</sup>. This increases the number of paper documents, which causes issues with storage, maintenance fees, management resources, infrastructure, and other factors that contribute to archive degradation<sup>4</sup>. As a result, managing paper documents will necessitate large funds and resources. The technology of today is a digital or electronic technique of keeping records. This system has a number of advantages and can help to streamline the procedures for keeping records electronically. Using computer equipment, traditional archives are transformed into digital archives, a process known as archive digitization<sup>5</sup>.

Archive administration through the use of information technology has gotten easier and faster as technology improves. The information system is a component in the input-output process that collects, processes, stores, and outputs data<sup>6</sup>. In other words, an archives information system is required by the institution or organization to aid in the success and efficiency of archive management<sup>7</sup>. As a result, electronic records management has grown in importance. This is because among the benefits of records management are the advantages that computers provide, such as the speed with which information is processed, the quality of the information given, and the simplicity with which users may communicate. Existing information technology is expected to aid in the effective and efficient management of archives, particularly electronic archives<sup>8</sup>.

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<sup>1</sup> Saeroji A, Andriyati R, Muhsin M. ANALISIS EFEKTIVITAS APLIKASI E-ARSIP SEBAGAI MEDIA TEMU KEMBALI INFORMASI. 2021 May 4;18(1):1-14. 0

<sup>2</sup> A, Ashari TN. Pengembangan Aplikasi Elektronik Arsip (E Arsip) Pembelajaran Jurusan Administrasi Perkantoran 2018 Jun 4; 4(1):17-28. 1

<sup>3</sup> Laksono R. Pemanfaatan Teknologi Digital dalam Proses Alih Media Arsip Statis 2018 May 22];1(1):47-60

<sup>4</sup> Suryadi A. PERANCANGAN SISTEM INFORMASI MANAJEMEN KEGIATAN SIVITAS AKADEMIKA UNIVERSITAS TERBUKA.9(1):116-30. 4

<sup>5</sup> Jonny J, ambarwati awalludiyah, Darujati C. Penilaian Risiko Data Sistem Informasi Manajemen Puskesmas dan Aset Menggunakan ISO 27005;10(1):1-12. 7

<sup>6</sup> Endra RY, Rizal U, Ariani F. E-Arsip Berbasis Image Archives Management Process Model untuk Meningkatkan Efektifitas Pengelolaan Arsip. 2017 Oct 31 [cited 2021 Aug 18];7(2). 8

<sup>7</sup> Zheng B, Chen X. Application research of electronic archives information service system based on data mining technology. 2019 Nov 1 [cited 2021 Aug 18];1345(5):052071. 1

<sup>8</sup> Putri PP, Purwanto P, Rusdiyanto W. PENGELOLAAN ARSIP DINAMIS DI KANTOR BADAN PERTANAHAN NASIONAL (BPN) KABUPATEN KLATEN. 2020 Feb 1 [cited 2021 Aug 18];17(1):42-

Every administrative action performed by an organization or agency on a daily basis cannot be isolated from archive management, because archives are essentially records or recordings of all actions performed. Manuscripts, notes, or recorded material, which might take the form of text, photographs, or sound, are common components of the archive<sup>9</sup>. The recent rapid growth of technology has had a favorable impact on the smoothness and convenience of people in carrying out various jobs; it also has a positive impact, particularly in the field of archives that must be used promptly<sup>10</sup>.

Digital file systems have advanced to the point that they now provide a wide range of options and make archiving tasks more straightforward. The introduction of modern or electronic technologies, such as systems or programs, can undoubtedly ease or simplify archive administration for offices that require quick service with a big number of archives<sup>11</sup>. Modern technology has been used in archive management for a long time in diverse industrialized countries. Current information technology has enabled the storage of all existing archives in a whole document, or the preservation of certain data, depending on the demands and capabilities of the computer utilized<sup>12</sup>.

Electronic (digital) archives are becoming increasingly important as a result of improvements in information technology and can aid the success of public and private institutions and organizations. The use of digital and computerized media for archive storage will give benefits in terms of archive management speed and ease, as well as cost savings<sup>13</sup>. "Speed" refers to the employment of apps or technologies to accelerate the process of discovering, searching, delivering archives, and processing data. Ease of accessing archives, sharing data, and processing data, all of which can be directly presented. While being frugal implies reducing the amount of energy, time, space, ideas, and money spent on archival storage<sup>14</sup>.

Hadira Latiar (2016) did a previous study to examine the effectiveness of information systems in archive management, specifically the Effectiveness of Digital Archive Retrieval in Software 2.0.0. The findings of this study's measurement of effectiveness in the usage of digital archives have a beneficial impact on employee

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<sup>9</sup> Sholikhah F, Kumalaeni D. SISTEM INFORMASI PENELUSURAN PERKARA (SIPP): PENELUSURAN ARSIP BERKAS PERKARA DI PENGADILAN AGAMA TEMANGGUNG. 2018 May 22 [cited 2021 Aug 18];1(1):38–46.

<sup>10</sup> Akbar M. Metode Penyimpanan Arsip Digital Berbasis Autodidak di Indonesian Visual Art Archive Yogyakarta. 2017 [cited 2021 Aug 18];

<sup>11</sup> Iswandi N, Nazifah N, ... HK-DJ, 2018 undefined. Sistem Manajemen Arsip di MTS Aulia Cendikia Palembang. 2018 [cited 2021 Aug 18];2(2).

<sup>12</sup> Mailanda N, Informasi NS-... dan I, 2020 undefined. Efektivitas Sistem Informasi Kearsipan Dinamis dalam Pengelolaan Arsip Dinamis di Dinas Perpustakaan dan Kearsipan Kota Pekanbaru. [cited 2021 Aug 18];

<sup>13</sup> Ngazizah YN, Rismayeti R, Latiar H. ANALISIS SISTEM PENATAAN DAN TEMU BALIK ARSIP INAKTIF DI DINAS PANGAN, TANAMAN PANGAN DAN HORTIKULTURA PROVINSI RIAU 2021 Jul 2 [cited 2021 Aug 18];8(2):119–26.

<sup>14</sup> Sholeh M, Muhammad L harun. Efektifitas Temu Kembali dalam Pengelolaan Arsip Berbasis Teknologi Informasi. 2018 Oct 6 [cited 2021 Aug 18];1:116–25. 8

performance in maintaining archives<sup>15</sup>. Mulyadi (2018) did another study that is comparable to this one in that they both seek to see the effectiveness of the system in archive management. The findings of his research indicate that the information system utilized might encourage archive users to use SIKD to make it easier to identify the needed archives and to be more efficient and effective. Based on the findings of this study, the effectiveness of using SIKD as a way of retrieving information at the Archives Agency is critical in assuring the use of an adequate archive system<sup>16</sup>. Mailanda (2020) did research on the efficacy of information systems in records management, which found that the effectiveness of information systems in records management has a favorable and effective impact on the adoption of SIKD.

The effectiveness and use of information systems in archive management at the Office of the Ministry of Religion of Lhokseumawe City are examined in this study to ensure that the use of information systems in archive management is appropriate, by reviewing Archive Management, Use of Information Systems, and Effectiveness and utilization of information systems in archive management.

## **B. Metode**

The descriptive qualitative method was used in this study. Several methodologies were used in this study, including observation, interviews, and a review of the literature<sup>17</sup>. The research sample was drawn from administrative personnel at the City of Lhokseumawe's Office of the Ministry of Religion, particularly archive managers, including those who understand the use of technology in the office and those who still utilize manual archive management.

## **C. Result**

The findings and discussion of this research were carried out in order to respond to the formulation of the problem that was stated in the previous discussion, namely "How Effective is the Use of Information Systems in Archive Management at the Office of the Ministry of Religion of Lhokseumawe City." This study's data collection methods included observation, interviews, and a review of the literature.

In this study, the effectiveness of the use of information systems in archive management was assessed at the Office of the Ministry of Religion in Lhokseumawe City using indicators for archive management, use of information systems,

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<sup>15</sup> Latiar H. EFEKTIFITAS SISTEM TEMU KEMBALI ARSIP DIGITAL UNIVERSITAS LANCIANG KUNING PEKANBARU. 2019 Jan 23 [cited 2021 Aug 21];6(1):9–15.

<sup>16</sup> Mulyadi M. Efektivitas Sistem Kearsipan Dinamis (SIKD) Sebagai Sarana Temu Kembali Arsip di Dinas Arsip, Perpustakaan dan Dokumentasi (ARPUSDOK) Kota Palembang. JIPI (Jurnal Ilmu Perpust dan Informasi) [Internet]. 2018 May 31 [cited 2021 Aug 18];3(1):50–73. Available from: <http://jurnal.uinsu.ac.id/index.php/jipi/article/view/1493>

<sup>17</sup> Albi Anggito JS. Metodologi penelitian kualitatif - Albi Anggito, Johan Setiawan. CV Jejak. 2018;214.

effectiveness, and utilization of information systems in archive management. The effectiveness of the usage of information systems in archive management at the Ministry of Religion Office in Lhokseumawe City can be seen based on interview data from respondents.

### **Management of Documents**

According to the findings of field research, the office of the Ministry of Religion of the City of Lhokseumawe did not carry out the real archiving procedure. Furthermore, there are several hurdles to the installation of administrative archives at the Ministry of Religion's office. The first is that the Human Resources personnel at the office is not very informed about archives, and the second is that there is no archiving training. The administration at the workplace is managed by delegating the primary responsibilities and functions to the personnel, followed by meetings and discussions about administration. The benefit of using the administrative archive system at the Ministry of Religion office is that the administration runs smoothly because it is carried out in accordance with archival procedures such as collecting, checking, indexing, coding, providing cross instructions, sorting, and storing documents, all of which must be done properly and correctly. It will be easier and less time consuming to find the document if it was done in accordance with archiving procedures. However, the office occasionally has difficulty identifying letters because it lacks human resources who truly understand archival science, resulting in a deficiency in the usage of the administrative filing system at the office of the Ministry of Religion of Lhokseumawe City.

The Lhokseumawe City Ministry of Religion Office does not have experts, but there are eight ordinary workers who cannot be named as experts since their fundamental understanding of education does not include archiving and can only handle light work such as arriving letters, outgoing letters, and agenda letters. Then, in the near term, the results obtained from administrative archives at the office of industry, trade, and cooperatives are a type of neatly prepared letters, classified letters, such as dynamic archives, static archives. Furthermore, training and human resources are required for archives at the office, and cooperation between education and the government is necessary so that educators can carry out office tasks in the form of training.

There are several facilities and infrastructure that help employees of the Office of the Ministry of Religion of the City of Lhokseumawe manage archives in the environment, including a management information system management system in managing archives at the Office of the Ministry of Religion of the City of Lhokseumawe. One of the uses of the information system in managing archive management at the office of the Ministry of Religion of the City of Lhokseumawe is the usage of the Electronic Document Information System (E-Archive). The use of this information system can make it easier for personnel to process manuscripts, documents, or active archives digitally in order to speed up and simplify performance in the City of Lhokseumawe's Ministry of Religion office.

### **Utilization of Information Systems**

Today's advancements in science and technology are causing changes in all parts of life. The administration of electronic documents is one of the most significant effects of technological improvements in the archives industry nowadays. Electronic archives are collections of information that have been collected and saved in digital form on electronic media. Electronic archives, like traditional archives, have a life cycle that begins with creation and ends with shrinkage and annihilation. The usage of electronic media in archive management will benefit from increased speed, convenience, and efficiency.

One of the uses of electronic media in the management of archives at the office of the Ministry of Religion of the City of Lhokseumawe is the usage of the Electronic Document Information System (E-Archive). Incoming letters, outgoing letters, and electronic filings are all controlled by the E-Archive application. The E-Archive program is one of the government's e-government implementations, particularly in government administration that meets the standards of effectiveness, efficiency, and accountability, as well as to simplify communication between regional offices within the Ministry of Religion. An archive management information system is said to be effective if it can carry out actions that require the use of information systems in a timely and exact manner. E-Archives that have been run and exploited at the office of the Ministry of Religion of the City of Lhokseumawe can be used to measure the utilization of archive management information systems.

It is defined in the perception of usefulness that if someone believes in information systems in their work, it will boost user work performance. As a result, if a user believes that an information system is beneficial, the information system will be useful for his task (Davis, 1989). The usefulness of the archival information system used in archive management activities at the Ministry of Religion office can be studied using several indicators, including: speeding up work (work more quickly), improving performance (improve job performance), increasing productivity (increase productivity), effectiveness (effectiveness), making the job easier (make job easier), and usefulness (useful).

The use of information technology aids in the concentration of attention on relevant factors and speeds up the analytical process. Information technology has a role in shortening the stages of work so that the time required to complete the main task is reduced<sup>18</sup>. One of the purposes of using information technology is to reduce the amount of time required for a work in order to save time and effort. This goal is also expected by the City of Lhokseumawe's Head of the Office of the Ministry of Religion, so that management operations such as structuring and searching archives can be

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<sup>18</sup> Bresciani S, Eppler MJ. The Pitfalls of Visual Representations: A Review and Classification of Common Errors Made While Designing and Interpreting Visualizations. 2015 Oct 14 [cited 2021 Aug 21];5(4).

accomplished more quickly by employing the archival information system. With improved performance, the outcomes of the work acquired will be maximized and will be able to reach the aims or goals to be met.

The use of information technology within the scope of archives improves the performance of archive officers on archive management operations. Work gets easier, faster, and saves time and energy with the assistance of information systems. According to the informant, by leveraging the archive information system, it is able to increase its work performance, resulting in more effective and efficient work completion. The goal of performance in this context is to attain success in terms of finishing work. As a result, more work was completed swiftly.

### **Efficacy and usage of information systems in archive management**

Because every element has been carefully regulated, the use of information systems in the management of archives in administrative services at the Office of the Ministry of Religion of the City of Lhokseumawe goes well, effectively, and efficiently. Work can be completed quickly thanks to information technology. Work completion with technology gets more efficient.

The relationship between the output and the goal is defined as effectiveness; the larger the impact or contribution of the output to the goal, the more effective the results of the activities obtained. As a result, effectiveness is a link between output and goals that influences the outcomes of an activity. The use of information technology in management at the Office of the Ministry of Religion of the City of Lhokseumawe must improve staff productivity. The effectiveness of this archival information system can be seen in the information system provided, such as E-Archive, which has been adapted to the work of employees, particularly in the field of archives, to make it easier and faster to complete, so the goal of creating this information system is to make work more effective. According to the informant, by employing the archival information system, archive management activities become more efficient in terms of time, because archive search becomes faster with the help of the system. The activities of sorting archives for storage become more efficient with the help of the system because the archival information system enables archive management so that the time and effort required is reduced, so achieving the principle of effectiveness. As a result, the use of information systems in archival administration is seen to be very useful and can assist complete work more quickly, as well as facilitate the job of employees, particularly in the field of archives, in managing archives to be more effective and efficient. This is consistent with one aspect of the use of using information technology in archive management, namely efficacy.

### **C. Conclusion**

Based on the findings of the research and discussion, the authors can draw the following conclusion: The use of information systems in the archive management of the Office of the Ministry of Religion of Lhokseumawe City becomes more effective and efficient for employees, particularly those working in the field of archives. The

effectiveness of information systems in archival management includes the ease of understanding and studying archival information systems (E-Archives), the ease of control, and the use of archival information systems that are simple, clear, easy to understand, flexible, and easy to master quickly. The effectiveness of the use of information systems in archive management at the Office of the Ministry of Religion of the City of Lhokseumawe is beneficial to archive management employees because it has been able to speed up and simplify the work of archiving officers, improve performance, and increase work productivity. Archivists' work becomes more effective with the assistance of information systems in maintaining archives. The information system is a supporting facility with various benefits in managing archives at the Office of the Ministry of Religion of the City of Lhokseumawe. The use of information systems in archival management includes: performing definitive numbering, as a substitute for archive retention schedules to determine archive storage periods, archive retrieval facilities, and as an archive database owned. The archival information system also serves as a manufacturer of inactive archive list book goods, which are typically printed quarterly with the priority of perpetual reports.



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