Implementation of Electronic Document Management to Support World-class University: A Case Study in Airlangga University

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Implementation of Electronic Document Management to Support World-class University: A Case Study in Airlangga University

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Abstract

In digital age, information technology and the Internet network is no stranger in the community. Almost all the activities in the community of economic activities, education, government to leisure activities, carried out with the involvement of information technology and the Internet. The existence of information technology and the Internet to make someone get in touch with others without being obstructed by time and distance, so a person can communicate and get information effectively and efficiently, therefore many government agencies, educational and private use of information technology and the Internet because it was considered to be help improve the performance and productivity of the company. According to Kang (1998), the information technology system will help the company if the company uses real-time information technology systems and efficient. In college, internet technology used to provide satisfactory service for students and other academics. One embodiment of an effort to provide satisfactory service is the holding of Electronic Document Management (EDM).

Keywords: Electronic Document Management System, EDMS, e-office, Mailing

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1. Introduction

In digital age, information technology and the Internet network is no stranger in the community. Almost all the activities in the community of economic activities, education, government to leisure activities, carried out with the involvement of information technology and the Internet. The existence of information technology and the Internet to make someone get in touch with others without being obstructed by time and distance, so a person can communicate and get information effectively and efficiently, therefore many government agencies, educational and private use of information technology and the Internet because it was considered to be help improve the

performance and productivity of the company. According to Kang (1998), the information technology system will help the company if the company uses real-time information technology systems and efficient. In college, internet technology used to provide satisfactory service for students and other academics. One embodiment of an effort to provide satisfactory service is the holding of Electronic Document Management (EDM).

The study states that 90% of corporate memory is stored in the form of documents, 90% of the documents generated mixed with each other, and organizations spend a lot of money to back-file documents and spend more money to find misfile documents, and more money is spent to produce the missing documents. Organizational documents lost 7.5% and 3% document misplacement during stored, the average employee spent time of 30 minutes to 2 hours to find the document [2]. The results of the research that has long done but still be able to represent the condition of the organization and documents in the digital age. Currently the organization is still experiencing problems related to the storage and retrieval of documents.

Seeing the importance of the document and the amount of funds issued if the document is not managed properly, many organizations are beginning to care with their document management, and many organizations are investing their funds to buy a package of documents management system for managing their documents. Document management companies have also sprung up, such as a services provider Fujitsu is expanding the network to manage digital document. [3]. In addition to utilizing the services of a professional document management, organizations can build their own document management system, with the proviso already have adequate human resources.Airlangga University has begun to implement document management system with the application made by the national archives republic of Indonesia (ANRI), but after the implementation turns out there are problems in implementation. So that created a new application that is E-office. This article aims to discuss the implementation of a document management system in Airlangga University which is the result of development SIKD ANRI and obstacles encountered in implementation is to support the university Arilangga be a word class university.

2. Literature

Document management systems (DMS) refers to the system that is designed for document management activities. Documents here include electronic documents and manual. But in reality, many DMS refer to the management of electronic documents. [1]. Components document management systems, among others:

1. Document repository, in which storage systems are often stored in the hard disk from the network server. This storage must be the central repository for all organizational documents.

2. Integration with desktop applications, an EDM must be integrated with the computer model used in the organization. For example integrates with MS Office

3. Check in check out, a feature EDM control who *mengdeit* document and when the document was edited.

4. Versioning, a mechanism by which the system can track changes made to a document. Usually can be a version number such as 1.1, 1.2, and so on.

5. Auditing, these features are related to version control, that is, to check which users who have made the changes, and any amendments thereto, as well as when changes occur. Here, more on to control the changes that occur in the document.

6. Security, *berkitan* with access/permission to view, edit, and send documents.

7. Classification and indexing, and indexing classification activities to facilitate retrieval document again.

8. Search and retrieval, after the document is classified and indexed, the document is ready to be stored in the repository. The system runs well is the system that has the storage and retrieval mechanism back appropriate information.

3. Research Methods

This study used a qualitative approach with descriptive methods for the purpose of this study is to investigate the implementation of a document management system in university Airlangga which is the result of development SIKD ANRI and obstacles encountered in implementation is to support the university Arilangga be a word class universities. Descriptive qualitative research method was intended to portray a number of variables relating to problems or units studied. Data was obtained through interviews, observations in the field and also from the analysis of existing documents.

4. Results and Discussion

To assist the Rector in carrying out administrative duties University Secretariat was established. The existence of the university arranged in PP 30/2014 Article 66 which

states that the University is an element of the administration carrying out administrative affairs in the field of secretarial, legal and archival. In carrying out these functions of the secretariat in the work unit or faculty run by the administration.

To perform the duties and functions as mandated in Article 66 of the Regulation 30/2014, then Secretary of the University established three areas: administrative, legal field and the field of archives. Field is a field which carry out administrative functions of administrative management (correspondence) in Airlangga university environment, while the Legal Affairs function design and evaluation of university legal product, either Regulation Rector or the Rector. Field of archives is a field at the Secretariat of the University that for records management at the University of Airlangga and implementation of electronic correspondence at Airlangga University.

Based on a brief interview with one of the managers of the agency archives (Arman), Electronic Document Management (EDM), which was first used at the University of Airlangga is the application SIKD (Information Systems Filing Dynamic) derived from the National Archives of the Republic of Indonesia (ANRI) in 2010, but because SIKD considered too general and does not correspond to the needs of Airlangga University, at the end of 2013, Airlangga University started developing the Electronic Document Management (EDM) itself as E-office.

5. Preparation of Application Development of E-office in Universitas Airlangga

Preparations began with a meeting of Trial mailing and Filing Application Development Team Task Force on February 7, 2014 in Courtroom A, 3rd floor of the Office of Management Airlangga University. The event was attended by Chairman of the BPP, Director of Information Systems, Head of Archives, archivists, staff Cyber Campus and Archives Division staff. From the results of the meeting produced a decision will be made E-office applications are in conformity with the needs of the university Airlangga.

On February 10, 2014 in Courtroom A, 3rd floor of the Office of Management Airlangga meeting was held Trial Application Development mailing and Archives which was attended by the Secretariat of the University, Director of Information Systems, Head of Archives, archivists, staff Cyber Campus and staff Fields Filing with the agenda for pilot program E-office applications that have been created by cyber tm campus. From the results of this trial can be said that the E-office can Airlangga University in *ujicobakan* at Airlangga university rector environment.

Before being used by the secretary of the E-office held training Airlangga University. The training is held three times, on 18, 19 and February 20, 2014 in the Plenary, 3rd floor of the Office of Management Airlangga University. Date February 18, 2014 was attended by staff whose job holds incoming and outgoing mail in their respective work units (work units within the Office of Management Unair). Date February 19, 2014 was attended by the leadership echelon 3 and 4 work units within the Office of Management Airlangga University. While Date February 20, 2014 was attended by staff whose job holds incoming and outgoing mail in each work unit (outside the Airlangga University Management Office of the Faculty/Agency/Organization/Unit/Centre/Airlangga University Hospital).

6. Implementation of E-office of University of Airlangga

Implementation of E-office Cyber Campus in the working environment simultaneously used Airlangga University on February 24, 2014, after a meeting held implementation of E-office Airlangga University on February 21, 2014 in Courtroom A, 3rd floor of the Office of Management Airlangga University. The event was attended by the Director of Information Systems, Head of Archives, archivists, and staff of the Archives Division. The launching event E-office Universitas Airlangga do in Space plenary session on February 24, 2014, the 3rd floor of the Office of Management Airlangga University. The event was attended by the leadership echelon 2 Airlangga University.

On February 28, 2014 formed the Task Force Team in accordance with the Decree of the Rector of the University of Airlangga in accordance No. 962/UN3/2014 of the Task Force Team and Filing Application Development mailing Airlangga University. The decree was the replacement of Airlangga University Rector Decree No. 16 326/UN3/KR/2013 on the same subject.

7. Evaluation of E-office of Universitas Airlangga

Evaluation of E-office Airlangga University, this meeting was held 2 times that on March 5 and March 7, 2014 in the Plenary, 3rd floor of the Office of Management Airlangga University. Date March 5, 2014 was attended by the leadership echelon 3 and 4 work units within the Office of Management Airlangga University. Date March 7, 2014 was attended by staff whose job holds incoming and outgoing mail in their respective work units (work units within the Office of Management Unair). From the results of this

evaluation in getting the results that users need for assistance in the implementation of E-office.

Date March 10, 2014 to form a team of Monitoring and Awareness E-office to be carried out in each unit/faculty at the University of Airlangga on March 11 s.d. May 12, 2014 consisting of three staff Archival Field. The results of this monitoring is:

- The E-office outline has to be used by the user, but still needed some improvements to make it easier for its users.

- This app will not run smoothly if it is not supported by adequate infrastructure, are still found in some faculties/unit, which still need the infrastructure that supports it, to the passage of this application properly.

- From the results of these activities can be concluded that the application of E-office users still require the assistance of the incentives, but this time the question is assistance for the leaders on the faculty/unit. Not just stop there, users still feel the need for their assistance on the procedure for correspondence and record keeping is good and right in accordance with the decree of the rector about the official scripts.

In addition to evaluation carried out by the field of archives, evaluation of the use of E-office Univeritas Airangga also done by some university students Airlangga such as research acceptance of information systems by Elsa Suryana Riskadewi on admission of the academic system Airlangga University cyber campus (UACC) in the faculty of Social Airlangga University in 2014 using TAM models find results that mean all variables in the model TAM (Technology Acceptance Model) and of 3.41 is included in the high criteria. Thus, the overall use of academic information systems UACC acceptable to support the process of learning activities conducted by lecturers. Airlangga University lecturer FISIP receiving well for the use of the academic system cyber Airlangga University campus (UACC).

Research on Electronic Document Management (EDM) was made by Madalena Adiyan (2015). Research Madalena analyzes the successful implementation of the E-office at Airlangga University with a model DeLone and McLean, research results show that there is significant correlation between the quality of the system on the intention to use, the quality of information on user satisfaction, system quality to user satisfaction, and intention to use with net profit. Successful implementation of the E-office at Airlangga University has a percentage of 75%, which means the successful implementation of the E-office can be a success this research uses respondent

amounted to 36 people, whereas a person who actively use E-office each work unit and faculty.

8. Application Development of E-office of Universitas Airlangga

From the results of monitoring and evaluation, there are several obstacles aside from the User also of the application itself so that on May 17, 2014 university secretary Airlangga formed a team to help the Task Force Team Application Development mailing and Archives of the University of Airlangga in the manufacturing process business E-office, overcoming trouble user as well as the improvement and development of E-office consists of four officials from the Directorate of Information Systems Airlangga University.

Meeting the development of E-office on June 2, 2014 in Courtroom DSI, 2nd floor Unair Management Office. The event was attended by Head of Sub Information Systems Development, Head. Archival, DSI staff and archival staff. From the results of the meeting then for one month agreed to make it global process business correspondence university yag Airlangga and fixing bugs there. Making Business Process E-office started on June 3, 2014 in Courtroom DSI, 2nd floor Unair Management Office.

9. Conclusions and recommendations

9.1. Conclusion

Letters received the rector and in other work units from year to year will be recorded in the diary of incoming mail. Since 2014 in the Office of Management is no longer recorded manually in the agenda book but using E-office applications in the UACC. E-office (electronic correspondence) was developed to speed up the distribution of letters, control and recording of the letter mail. E-office socialized at the end of 2013 and implemented in February 2014 in the Office of Management. In July 2014 E-office began to be disseminated to other work units and started to be implemented in all spheres of work units although not optimal.

In the implementation, there are several obstacles faced by the field of archives, among others:

• Users/user:

– E-office is run by a secretary or administrative correspondence and have not involved the full. Thus, the letter should still be printed to be checked or known leaders. This situation led to the concept of paperless has not been achieved to the maximum.

• System/application

– E-office at this time can indicate that the user has read, but have not indicated the overall flow of the mail.
– Data UNAIR employee has not updated so often wrong mailing address.
– infrastructure
– There is often constrained by a server error due to power failure or the maintenance of DSI during working hours.
– If there are problems in E-office System field of archives often find it difficult to contact the 'team of cyber campus'.
– There are several units that do not have a scanner.

9.2. Suggestion

• The existence of ongoing training and monitoring/mentoring unit to work in the management of archives and also the implementation of E-office
• Need additional resources *manuasia* with civil servant status or permanent employees so that it can manuasia resources in the field of archives can be functional through certified archivist of ANRI.
• Improvement of infrastructure in order to use E-office is being developed to run smoothly it is of course necessary support from the Directorate of Information Systems (DSI) and the need for evaluation work program regularly to plan activities that have been budgeted to run smoothly in accordance with the time plannedTop of Form

References

[1] Adam, Azad. 2008. Implementing electronic and document and record management systems. Aurbach Publication Taylor & Francis Group. New York.
[2] Coopers & Lybrand, 1998. http://www.scan123.com/blog/index.cfm/2012/9/28/The-Infamous-Coopers--Lybrand-Document-Management-Study

[3] Fujitsu   http://www.fujitsu.com/id/about/resources/news/press-releases/2016/20160317.html

[4] Madalena Adiyan (2015). penerapan sistem *e-office* di Universitas Airlangga dengan model Delone dan McLean. Vol. 4- No. 2/2015-01 TOC: 13

[5] Riskadewi, Elsa Suryana. 2014. *Penerimaan Sistem Informasi Akademik Universitas Airlangga Cyber Campus (UACC) pada Dosen FISIP Universitas Airlangga.* Vol. 3 - No. 2/2014-01 TOC: 11

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