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Electronic Document Management System in the Turkish Public Sector and Recommendations

ABSTRACT

In a world of acceleration of alteration, where management mentality of the society is basing on necessitates of globalization and information, a need of changes came forward in public management systems, the alteration from industrial society to information society has been made public management information systems quite important. Taking into account the necessity of providing public services in the best way, using information technologies is the best way for understanding a new public management. In this context the public sector has been transitioned into electronic document management system during the e-state (electronic government service) period, seems itself of the difficulties to be overcome of make efficiency, reliability and permanency of this system. This study evaluated what the electronic document management system, using in the public sector of Turkey, is and gives the recommendations for overcoming current difficulties.

Key words: *Electronic document management system, e-signature, Document.*

Entry

Rapid developments in information and communication technologies make alterations in public and in functioning of public management as in all spheres of life indispensable. Nowadays, the era of technology has rapid progress in e-applications which are using both in private and public sectors by the widespread of Internet.

Rapid increase and widespread of communications and using of the Internet make individuals to increase their expectations as regards government. As response of the expectations, it has shown that government can not serve without support of understanding what are the classic concept of the state and information technologies. For this reason, in providing public services the government adopted a new system named "e-state" or "electronic state" for to render services to its citizens, and there services are of the best quality, fast and intended for the point.

In the circumstances of accumulation of information which has been produced as a document, its important for the service to be given quickly and of high quality by turning the information into a document when providing instant and safe management without any limitation as regards place and time. For such public institutions as private sector information is the most important life function. Using information in public institutions may be possible with the documents which are registering information, managing within the lifecycle and storing in archives.

In this context, which is the basic point of e-state, electronic document management system has been started in public institutions. In this study we will try to explain application of the electronic document management system in public and ways for solution the difficulties.

Document and Document Management

Document is an information which takes place in institutions network regardless of place and its sort. Document is an important element of evidence for business process and activities. As well it includes information about what is to do, when, how and by whom. In other words, documents provide proofs that individuals and institutions carried out certain types of activities or fulfilled their obligations (Odabaş, H., 2009). Therefore, any document is one of indispensable elements for every institution. In other words, documents are produced by any institutions during its activity or provided from outside, and are used as any written, printed or embedded record regardless of sort and property of recording equipment. The features of the document are: administrative value, financial value, legal value, research value and archival value (Odabaş H., 2004). ISO 15489, described International Standard of Document Management as milestone which aims on using successful methods of management documents in public and private sectors, defined "a document", produced by any individual or any organisation, as information and a proof, accepted and protected information, on fulfillment certain processes or legal obligations (Özdemirci, 2004: 193).

Since 1934 there were improvements in the document management which has been mentioned as a discipline of its existence; in 1990's it gained an international attribute or started to be discussed on the international grade, intended to increase the yield of institution and enterprise, management of the institutional information.

Document management is a discipline as in parallel emerge from the rapid increase of document production on industrialization and urbanization in public institutions, institutions analization and later periods in state institutions. In the second quarter of the last century, in the United States of America and in England, the discipline which has matured and developed, in subsequent periods spread to the whole world and found a field for application. Especially after the World War II, with a rapid increase of quantity of documents in bounded institutions to federal government in the United States of America, archivists in national archives have conducted various studies relating to produced documents in specific order, usage, arrangement and protect, and they have laid the foundation of the document management

discipline (Ham, 1993: 25-26). The document management discipline is through the entire life cycle phases of disciplines from existence of one individual document to destruction, even after the extinction period.

The document management comes out within the activities of institutions' life cycle. About any document which is produced during the institutions activities, application of business and operations regularly and effectively, will make it based on easy regulation, protection and putting into service, which will be gained as an archive document feature in subsequent period (Özdemirci, 2009).

On the other hand, to use document management system effectively in any institution, to employ a qualified personnel is as important as to prepare a good classification plan. No matter how excellent the system is, an impracticable system has no importance for decision-maker and managers. It is the expert personnel who has the responsibility for implantation the system and monitoring it. This personnel should be employed as well as supported with authority and responsibility (Çiçek, 2008).

Electronic Document Management System

Recording and managing the access to the documents at any time that are a result of activities carried out by institutions and organizations, which are serving on behalf of public, make an integral part of institutions' activities and public duties (The Prime Minister's, circular no. 2008/16).

Electronic document has a specific content, a context identifier reflecting the identity of document and a special formation structure of the type of service. The best way of keeping this component of electronic document is managing this document in electronic document record system or electronic document management system (Odabaş, H., 2009). To evaluate these systems as software is not correct. It is a combination of memory of institutional information and electronic environment.

Electronic document has business and operations about recording informations in electronic environment of institution. It is the only criterion for any electronic document that it can be recorded and stored in an environment to be read by a machine unlike a paper document. Electronic environment intends to use information keeping in formats such as text, image and voice. Before defining the electronic document, it is necessary to define some concepts. These are the concepts about data, information and document. Data is processed facts. Information is organized significant data. Document represents a recorded information, regardless of its physical form and property. Electronic document is a recorded information in electronic environment as a result of business process which needs an electronic system to be read and conduction of information regardless of physical form and property (Odabaş, H., 2009).

Electronic document management is managing the document which, from its producing to final liquidation period, it consists of the daily business of institutions, by extracting from any kind of document which is a proof of institutions' activities and keeps these documents' content, format and relational property.

Electronic document management is managing any document from its production to the destruction period. In other words, the concept of managing the life cycle of electronic document is the basic element to effective for all of documents from production to destruction periods.

Some Concepts About Topic and Definitions

Definitions below have been extracted from the law "Electronic Signature Law" which was published on the Official Gazette No. 5070 dated January 23, 2004 and from the 4th article of the "Regulations About Principles and Procedures to be Applied on Official Correspondences" of the law "Reference Model V.2.0 of Electronic Document Management Process Criteria" which was published in the Official Gazette No. 25355, No.29255 on February 2, 2015.

Official Correspondence is "any written text, official document, official information and electronic document for to provide communication between public institutions and organizations themselves and/or with natural person (individual) and legal entity (corporation)."

Document is "a recorded information that is decided to fulfilment any individual or institutional function or a content as a result of produce, a proof of it belongs function with relation and format." Unofficial Document is "a document which has no official property but a source for user can use for information at institutional activities."

Electronic document is "Any kind of document which is generated, sent and saved in electronic environment."

Electronic environment is "A place for document and information on which computer, mobile electronic devices, information and communication technology products."

Reliable electronic signature is "an Electronic signature which is exclusively according to signatory, generated by a safe electronic signature making device that is used from signatory only, to determine any changes has been made or not on data."

Electronic Document Management System is "A system intended to use by extracting from any kind of document which is generated by institutions daily activities and keeping these documents content, format and relational property and managing the document from the producing to final liquidation period."

Archive is "The services that institutions, natural person or legal entities receive, communications they make or document as a result of process and keep for any specific intend, an institution interested these document and places they hosting."

Electronic Document Management System is "Developed system for saving and using the source of institutional information in electronic environment."

Electronic Document Management in Public Institutions in Turkey

The Turkish Project of e-Transformation is defined in the Immediate Action Plan which is prepared by the 58th Government. Undersecretariat of State Planning Organisation (SPO - DPT), has been assigned as coordinator of e-Turkey. For this reason, the Department of Information Society has been established within the State Planning Organisation for monitoring and reporting about the project.

In this manner:

- e-Transformation Turkey Executive Board was created in the year of 2003 (E-Transformation, 2003).
- The Board which was mentioned, prepared the Action Plan,
- The Action Plan was submitted for approval by the High Planning Council,
- The e-Transformation Turkey Project Action Plan was published as notification No.2005/5 on March 24, 2005, after The Action Plan was accepted by the High Planning Council,

The document which is produced in electronic environment how, where and in which conditions to be used was expressed to be provisioned with the 37th Article of Action Plan, "Studies shall be made to compatible with each other and managing effectively, the electronic record systems shall be the subject of recording, forwarding, sharing, terminating and security principles and procedures of electronic information and documents to produced, recorded, forwarded to another departments or institutions, kept or terminated when is necessary in electronic environment."

The duty has been given to the Marmara University Information and Document Management Department after The General Directorate of State Archives.

Finally, the standard was updated on June, 2009.

The information meeting was held on July 13, 2005 for "Reference Model (v.1,0) of Electronic Document Management System Criteria." During the meeting opinions and recommendations have been obtained from participant for implementation the final study as a response to needs of all public institutions and organizations.

"Reference Model V.2,0 of Electronic Document Management System was created in accordance with opinions and recommendations.

The study was submitted to the Turkish Standards Institution on April, 2006, and published as Electronic Document Management Standard No.13298 on June 19, 2007. Subsequently the use of this standard was became mandatory under Notice for all public institutions and organizations (Electronic, 2008).

In the Official Gazette No. 26938 dated July 16, 2008, the Prime Minister Curricula announced to implement the standard by public institutions and organizations.

A large extend of education and awareness activities is carried on by General Directorate of the State Archives and the Marmara University Information and Document Management Department for to widespread use of electronic document as a standard procedure in public institutions (<http://www.devletarsivleri.gov.tr/icerik/246/elektronik-belge-yonetimi-hizmetlerimiz>. 21/03/2015).

Conclusion and Recommendations

A great number of public institutions and organizations have started to use electronic document management system in Turkey.

The Prime Ministry General Directorate of Personnel and Principles has stated to public institutions and organizations that they all have been required to generate their own software in standards and legal regulations including software of the Electronic Document Management System (EDM - EBYS), and this software has to be integrated along with the e-state implementation as soon as possible. In this context, it is not understood that usefulness of using the system in one hald. However, a study has initiated another project for the system which integrates public institutions and organizations together.

It is observed that all of public institutions and organizations in Turkey had generated their own systems when electronic document management system was analyzed. Yet, public institutions and organizations are still corresponding among them in a paper form. Whereas the data exchange can be faster, safer and high quality a single program which includes all public institutions and organizations is given the task to The Scientific and Technological Research Council of Turkey (TUBITAK)

However, there has been very critical elements to aim for application the electronic implementations and 100 % of using of them.

These are:

- Requirement of Infrastructure of the Information and Document Management (IDM),
- Expertise of the Information and Document Management (IDM),
- Legal Infrastructure,
- Standardization,
- Literacy of Information,
- Technological Transformation,
- Focusing Citizens,
- Sustainability.

On the other hand, public institutions and organizations have to generate accumulation for every kind of information and document which are offered as a service by them and including their central organization and provincial organization in the first step of their own program preparation process.

Appropriate techniques should be used and experienced personnel in that field should be employed for protecting, saving and accessing to electronic documents. Precautions should be taken for protecting archive and secret documents which have importance of high value, because it is easier to access electronic document than physical document.

Storage alternatives under appropriate conditions should be generated for electronic documents thinking of next two decades.

All precautions should be taken against any falsification, from the receipt date, and number after generated on electronic environment of the document, form, statement and correspondence. A disaster plan on a level of institution should be prepared for documents, archive and documents produced electronically.

It should be prevented to take retroactive date or number to approval, text and other document which are prepared by institution and it should be practicable to make documents in electronic environment and not accept documents with formal signature because it is possible to give a retrospective number and date after the formal signature stage has been done on the document prepared in word.

It should be taken cognizance of regulations while implementing e-document, e-archive, choosing technology, consistent, integration, security, legislation and numerical signature implementation both level or personnel and senior managers.

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