

Approaches of E-Records Management in E-State Transformation Process in Turkey

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Abstract. In Turkey, e-state transformation has gained speed since 2002 with the reforms of public administration. In this frame, an important part of the targets determined on the activity plan of information society strategy has been realized. However, there are difficulties in structuring of electronic records management system, which is within the e-state components. Considering the OECD indicators, deficiencies in applications which will provide information and service sharing between citizen and institution and inter institutions attract attention. It can be possible that the institutions open their records and services to public on a national portal in the frame of the standards and the laws forming the background of e-record management. Furthermore, there is a need for a national policy which should watch how the adaptation to the mentioned standards and laws realizes and should guide the institutions in this way. This study aims at exposing the principles of national records management and directing the forming of a policy that will give speed and function to the integrated state structuring in the public.

Keywords: e-state management, e-state transformation, national e-records management, Turkey.

1 Introduction

Like the other countries, Turkey has passed various stages on the way to become e-state, as well. In this process dealt with targets of transformation to information society, communication with interaction based on information and records on every field has gradually increased and gained more importance. For this reason, in the first section of the study, introducing the stage in which Turkey is in e-state transformation briefly, e-records management as an e-state component is taken into consideration. Evaluating the existing situation, determining national policy and strategy principles, which will provide working together in e-records management programs for institutions, is considered.

2 E-Transformation Process and E-Transformation Components in Turkey

Turkey is a big country which has a population of 72 millions whose 30 % live in the country. In spite of the difficulty in organization of services and units for increasing

life quality of citizens by modernizing public administration in the structure of information society due to its bigness, Turkey has realized important progresses in e-transformation in a short time.

Development process of e-state in Turkey has followed different stages. In 1970s and 1980s, studies intensified on the automation of back office of some functions such as taxes and population procedures. In 1990s, studies on defining information society and economy based on information were given importance. In 2000-2002, discussions on application of e-state gained importance. The existing stage of e-state application started with beginning work of a reformist government with an agenda having reform of public administration, political and economic stability in November 2002 [14].

E-transformation in the level of the country is provided by Turkey Executive Board of E-Transformation in the presidency of deputy president [16]. An important success level is reached by applying national based projects in basic public services such as health, judgment, education, tax, social security and bid.

In 2003, "E-Transformation of Turkey Project Short Period Action Plan" [9] and then "2005 Action Plan" [7] were put into practice and concluded for the purpose of bringing analyzing approaches and supporting public institutions, private sector and the citizens. Studies on legal and technical substructure were carried out with 2003-2004 Action Plan projects, studies on spreading reflections of activities on daily life were carried out with 2005 Action Plan, and Strategy of Information Society and Action Plan-2006-2010 targeting 2010 has been prepared [5], [6], [16].

"The Strategy of Information Society 2006-2010" [1] forming the road map Turkey will follow in transforming to information society in the Period till 2010 and "The Strategy of Information Society Action Plan 2006-2010" [2] consisting 111 actions under 7 titles were put into practice in 2006 [24]. Actions were mostly started in 2006, finishing dates of the projects were spread. 2006-2007 was planned as substructure preparation and fast acquiring period; 2007-2008 as basic and comprehensive actions providing transformation to information society period; 2009-2010 as application stage and receiving the results period. It is estimated that necessary budget for the projects in the 2006-2007 Action Plan will be much more than the whole public investments [2], [1].

There are targets among the basic targets of The Strategy of Information Society as following:

- Providing modernization in public administration and functioning by considering work processes in the public,
- Presenting services of the public for citizens and business world as more effective, faster, easy available and productive,
- Making the citizens take advantage of the opportunities of information society in maximum level, reducing the numerical gap, increasing the employment and productivity,
- Making the business enterprises use information and communication technologies widely and effectively,
- Establishing competitive milieu which will provide wide, high quality services with appropriate fees, and making the sector of information and communication technologies grow and locating as a global competitive sector.

Actions in the fields of “Citizen Focused Service Transformation” and Social Transformation” started to be realized as prior [2]. These targets determine realization strategies of not all of them but an important part of them. We can summarize the components of e-state as making communication in electronic realm with the citizens and the institutions by using informatics technologies, founding network systems, reducing cost price and sharing information [13]. Taking into consideration the e-transformation indicators until today, it can be said that a part of the determined targets has been realized with various projects; in another part of them projects and substructure works have still been continuing. Due to firstly giving importance to using information and communication technologies, important cost disposition on public services has been aimed. Considering the OECD indicators, it is understood that important dispositions on health spending, financial functioning and control, tax revenue and banking procedures have been gained [14].

Such progresses on structuring of e-state bring organizational change in public administration and accelerate the democratizing processes. Development of e-services is given priority by intensifying on internet as major communication mechanism especially between the public and citizens and business world [8], [1], [14]. Turkey has a technology having a wide band network structures in point of internet substructure. The universities (ULAKNET-National Academic Network) [21] and National Judgment Network Project (UYAP) [23] have their own wide band networks. E-Health [10] enterprise started founding its own network for data receiving and giving [14].

From the point of applications on providing communication between the public, private sector and the citizen, which we give within the components of e-state, having a computer and internet opportunities is a preliminary condition for the citizen but it is not enough in servicing for this purpose. Considering the indicators about the theme in point of using information and communication technologies, the availability level of the citizen to information and technology services is on the 52nd line among 100 countries according to the indicators of 2006-2007 [12]. Workings carried out in the frame of EU also give ideas on using electronic services. EU has determined 20 basic public services for contrasting the developments in using electronic service of the member countries, and made an evaluation effectively measuring the rate of 12 services consisting of sending application form and paying on internet for citizens and 8 services for business world. OECD makes same measurement for Turkey and gives its comparison with EU countries. The rate of online services Turkey presents to the business world is higher than it presents to the citizens. In fact, rate of full-interactive e-service presented to the business world is close to the average of AB-28 (including Norway, Iceland and Switzerland) and higher than AB-10 countries [14].

Table 1. Rates of interactive service presented on internet.

The rate of 20 EU basic public services presented as interactive (%)	Turkey	EU-18	EU-28	EU-10
Services for citizens	25	37	36	33
Services for business world	63	74	67	55

Source: Turkey OECD data and Cap Gemini “Online Availability of Public Services: How is Europe Progressing?”(June 2006).

E-State Gate [4], which was designed for presenting necessary integrated public services for citizens and business world from one gate, was opened in 2008. It is planned that it will present a wider service in future. In e-state gate, online presentations of 22 public services are made in addition to informing the citizens and the business world about various public services. Today, working on widening of interactive services for the public are encouraged, yet the level of the citizen can take advantage of it is lower than the level of the business world.

A certain success has been gained in applications of e-state projects of Turkey that we can regard as national scaled. Among them, there are Ministry of Justice UYAP (National Judgment Network Project), Ministry of Internal Affairs-MERNİS Project, Deed and Cadastral Information System (TAKBİS), Security General Directorate POLNET, Ministry of Finance Tax Offices Automation Project (VEDOP), Government Material Office E-Sale, Ministry of Labor E-Declaration, Undersecretary of Customs Modernization of Customs Administration (GÜMOP), Ministry of Finance Say2000i Project, Prime Ministry Laws Information System [14], [2].

Public institutions also support the e-transformation process with their own projects. One of the important repulsive powers on this theme is encouraging ICT (information and communication technologies) projects in public institutions as an e-state transformation device. Considering the 2002-2008 Investments of Public Information and Communication Technologies, it is determined that 271 ICT projects consisting different services in government institutions have been supported. In the content of this project, there are innovations such as software, hardware, information process network, founding information system, transferring public information accumulation into e-milieu, digitizing, and forming e-archive [20].

It can be said that deficiency in technologic substructure of public has entered in a solution process. However, there are still deficiencies about e-transformation decisions of ICT. Although e-records workings are taken among e-state components and e-records management applications are regarded as a part of e-transformation, deficiencies in integration of the control of information and records on business processes in the public with e-state forming policy attract attention.

3 E-Records Management as an e-Transformation Component in Turkey

E-records applications present service to e-transformation devices in point of giving opportunity to watch business processes and records in office and out of office, increasing total service quality of the institution, reducing serious costs such as paper, toner, work force and time costs, and physical depot costs of archives. For this reason, e-records management is among e-state actions as an important component. E-records management applications make e-state more accessible, more responsible and faster.

The evidence of activities and services of institutions are records. From this perspective, one of the most important components of e-transformation is e-records management. There is a need for e-records management system in institutions in order to provide access to all past and update records for production and usage of e-records. Planning the process of registering and using of current and semi-current records and archive records, organizing and executing should be taken as a managerial activity

field as the other administrative works of the institution and e-records management should be seen as a part of e-transformation. In addition to managing e-records for legal, managerial and cultural reasons in the institutions, they should be preserved for archive purpose, as well. In e-state structure, there is a need for electronic records management system that will provide managing all processes from the production of e-records. For this reason, in transition period to e-state, e-records procedures necessitate more important strategic approaches and applications than the records produced in traditional media need. Today, transferring of information accumulations and memories of nations to the next generations is depended on management of e-records.

In institutions, keeping and using every kind of information and record as evidence of works in electronic media are as necessary as executing work processes in electronic media. Realistic approaches on producing, storing and sharing of institutional information and records in electronic media safely in the e-transformation process, are needed. Appropriate systems for the needs of the institutions need to be developed in order to follow and preserve information and records belonging to current and past work processes in the same system. E-records management is an application that consists of all records and information flow, life period of each record and e-archiving processes in an institution.

Following production processes of records produced for inner and outer activities of institutions is both legally worthy for institutional productivity and also for preserving interests and prestige of the institution. In this point, the most important element reflecting the indicator of legal worth is using e-signature. The connection between e-state and e-signature is provided with e-records management. E-signature is a legal process which provides executing of e-archive applications safely and making them gain legal validity. E-signature is the most important thing for solving legal dimension of e-records management applications. E-signature also has an important role for archive program and strategies consisting of national approaches. Existence of a valid, reliable, institutional e-archive cannot be thought without an effective e-signature application which is integrated with e-records management structure.

In Turkey, with Electronic Signature Law [11] numbered 5070, safe electronic signature (e-signature) usage having same legal effect with wet signature according to the concerned secondary law was placed in a legal basis in 2004. Then, with Prime Ministry Circular numbered 2004/21 [17], it was decided that high quality electronic certificate needs of public institutions and foundations will be meted by Public Certification Center founded in body of TÜBİTAK-UEKAE (National Electronic and Cryptology Search Institute) [22]. Moreover, institutions, where private foundations and persons apply for e-certificate, were determined [8].

UYAP executed by the Ministry of Justice in Turkey founded an outstanding information network system in e-signature application. Furthermore, institutions such as Banking Regulation and Supervision Agency (BDDK), Ministry of Labor and Social Security, Turkish State Railways (TCDD) and Turkish Statistical Institute (TÜİK) have made e-certificate applications to Public Certification Center for using in their projects that are in preparation and test stages. This application constitutes the substructure of policies that will provide inter institutions integration.

Considering studies on e-state applications, not enough realizing sharing of information and records in institutions and between institutions in electronic media are among the frequent problems. In e-state transformation, e-records integration means

presenting public activities and services in electronic media in a way of finding solutions and working together.

Public institutions and foundations can present service in different settlement places and consist of different departments and units in a hierarchical structure. Institutions also have different working flow systems, methods of records treatments and arrangements according to their works' types and features.

For possibility of information share between institutions, exposing various information, the institutions have and need, in an open and clear way is necessary. After defining the available sources, the institutions should determine a methodology on who can access which information under what conditions.

So, harmony with standard and laws will be real if institutions know that which ways, methods and rules they should follow in information and records share both inner and outer communications and also in work processes. However, technical guides and application procedures prepared by the institutions themselves may prevent developing of standard applications in working together, secrecy, security and data share.

Developing e-records management standards in back office applications for working together has also great importance in fulfilling of determined criteria in the action plan.

In 2005 e-Transformation Action Plan [7], determining minimum standards about working in a harmony of electronic record systems of institutions and effective management of them. In the result of the studies of General Directorate of State Archives which is responsible for the mentioned action, Criteria of Electronic Records Management Systems were prepared and they were published as TSE standard [3] in 2007. With Prime Ministry Circular [18] dated 2008 it was asked the institutions for making their e-records management systems compatible with this standard in two years and obeying this standard in newly found systems was made an obligation.

1,0 demand of Guide of Working Together Basis, which had been put into application in 2005, was nullified with the circular dated 28 February 2009 and numbered 2009/4 [19], and 2,0 demand was put into practice in 2009, and the basis and standards in the guide were made obligations for institutions to obey [8]. The standards which have to be obeyed in e-records management systems for working together are given in 2009 Guide.¹

Turkey should continue to develop data standards and technical standards with the aim of encouraging data change and working together. However, cooperation with private sector has importance for providing harmony between data standards of public sector and the data standards developed in private sector [14].

Although publishing these standards is a positive step, any mechanism that supervises application of them in institutions has not been formed yet. For this reason, developing national policies and strategies on e-records management including necessary standards and legal arrangements of institutions with a high level structuring should be in public administration of the state.

¹ ISO 15489/1-2:2001 Information and documentation -- Records management -- Part 1: General and Part 2: Guidelines was translated into Turkish and published by TSE in 2007. TSE 13298: 2007 Information and Documentation--Electronic records management. ISO 15836:2003 Information and documentation--The Dublin Core metadata element set. ISO 23950:1998 Information and documentation--Information retrieval (Z39.50)--Application service definition and protocol specification. ISO/IEC 11179 Information technology--Metadata registries (MDR)--Part 5: Naming and identification principles.

4 Policy of National Records Management

In developed countries, e-state applications are considered as an crucial component of knowledge society strategy. “A *knowledge society strategy will ensure that all business operators and the public sector have sufficient skills needed in a rapidly developing information society*” [15]. An important part of public institutions has technologic structure that can operate information in electronic media. However, they have not completed the studies that must be done on management of information processed in electronic media.

National policy and strategies should be defined for success of e-records management in e-state applications. A national action plan should be prepared with these definitions. Three basic needs should be met with means of the action plan. First, each institutions adaptation to the given standards should be followed and reported, and the deficiencies on this subject should be met. Beginning of making projects in the institutions which has not records management substructure should be planned. Second, a supervising and guiding mechanism for controlling whether the institutions, which have records management systems, have “criteria of working together” should be formed. Third, new standards and laws needed in meeting the needs that will occur in this process should be determined.

The duty of executing and continuing the action plan consisting of these steps should be given to National Archive. There is a need a national archive law which will strengthen the institutional structure of National Archive in order to execute this duty effectively.

Taking the prior countries in e-transformation into consideration, it is seen that e-records management policy and strategies are determined by national archives of that country and they direct the public institutions. National archives of these countries announce their rules as a guide in order to facilitate supervising of records produced in public institutions in an integrated structure. Information needed to be underline in such a guide as following:

- There should be standards and laws, which provide public institutions with forming institutional records management systems and information share between institutions.
- There should be directing information on production for inner procedures providing supervising of applications on the existing records management and archive systems of institutions.
- The necessity of planning educational activities on forming institutional culture for the determined procedure should be stressed.
- The necessity of defining and employing qualifications of human power for e-records management of institutions.
- The necessity of organizing of e-records management and archive program and policies as a part of institutional records management should be mentioned.

5 Conclusion and Suggestions

Turkey has taken important steps in widening ICT projects in all sectors especially in public institutions since studies on e-transformation process began. The reports of OECD shows that ICT services and productions has more interactive usage fields in business world than citizens and the developments are in an unbalanced distribution in the existing situation. For this reason, Turkey has given importance to improving services for citizens and increasing the usage.

In Turkey, a national portal, which provides access to public information and services in one gate, was opened in order to overtake the difficulty of presenting information and services to citizens from many different web sites. This development is a turning point in transition to “integrated state” in which institutions share business and information processes in e-transformation process. Such an enterprise also will provide opportunity for functioning of structure providing information and records share within and between institutions and between institutions and citizens. For Turkey, completing e-state maturing stage will be realized by forming information management systems including e-records management approaches.

The biggest gap in electronic records management applications in our country is some institutions’ lack of information and conscious in forming records management systems that are compatible with laws and standards. In this point, adopting institutional culture should be taken into consideration as prior step. It is very important to make senior administrators adopt that the matter has a process on common policy and applications needing scientific and administrative approaches beyond a technological necessity. Therefore, widening of e-records management applications in national level can be provided. It will be possible to integrate records management with e-state applications with changes in laws and standards in the frame of these policies.

It is a fact that important problems will occur in records share and access between institutions if there is no standards, technical guides and legal arrangements that provide integration. For this reason, central management should prevent institutions from developing separate and repeated e-records management applications by preparing standards, guides and necessary laws for cooperation in using common database and services and developing electronic service. Central management should give authority and duty to National Archive as a pioneer and authoritative institution for developing and practicing e-records management solutions in a common way. National Archive should take a role supervising and directing the compatibility to the principles of working together and data share in projects of transferring institutional records into e-media. In the frame of the concerned laws and standards, e-records management program should be formed, it should be structured within managerial functions, and it should be defined as a part of national records management policy.

The purpose of national records management is to provide working together between all institutions, firstly public institutions, presenting service to public in electronic media and to provide executing a guiding structure by supervising the adaptation to technical standards formed with authority, responsibility, method and criteria of institutions in this frame.

An e-state transformation integrated with national e-records management policy can provide forming a public administrative structure having an effective, transparent and simplified business processes, and present a higher quality, and faster public service to business world.

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