

# InterPARES 3 Project

International Research on Permanent Authentic Records in Electronic Systems

TEAM Turkey

## E-mail Management in the Context of Enterprise Content Management: Reflections from Turkey

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# About the study

- *This study examines the universal usage and management of e-mail communication from data gathered from 28 Turkish institutions.*
- *This is descriptive research in nature and the quantitative data were collected through surveys.*
- *It is expected that the results on e-mail communication and its usage styles will shed light on the issue e-mail usage and management for other researchers who are working on systems development.*



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# Some findings

- *The survey results of this study show that one of the most problematic areas of organizational environment is e-mail management systems, from creation of the message to maintenance, disposition, long-term preservation and archiving.*
- *Also, integration of different organizational information systems such as human resources, financial and administrative management, communication, archival and records management--including e-mail management, is one of the most important challenges facing contemporary organizations.*



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# At the Beggining

- ‘e-mail’ communication, which has become an inevitable part of daily life, is used to refer to communication of messages through electronic nets.
- The concept of e-mail has affected many dimensions of life for more than the past thirty years.
- E-mails are the central ‘nervous’ system of modern institutions. Compared to telephone, e-mail communication provides advantages such as written communication and the lack of time constraints. It is much safer than social networks and instant messaging; as well, it has permanent characteristics.
- It is also possible that e-mail messaging has significant effects on our life styles. Now, few people feel uncomfortable when they get e-mail messages at night.
- It is known that much of today’s professional activities are performed through e-mail messages.



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# E-mail and records management

- Beyond the personal information exchange, e-mail systems are a part of institutional communication and are regarded as a part of records management activities.
- E-mail messages have been studied within the field of records management in terms of certain problems such as e-mail communication speed and the difficulties encountered in controlling e-mail processes.
- This study deals with conditions of institutional e-mail systems in terms of the approaches of records management and institutional content management.



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# Value of e-mail

- It is emphasized that e-mail management has become one of the most significant elements in an institution's information management system.
- Research indicates that a mean user receives approximately 54 e-mail messages per day. The storage space required for these e-mail messages is approximately 100 MB.
- Storage space and servers seem to experience serious problems as a result of the increasing number of e-mail messages received.
- Today, e-mail systems are affected directly by many factors such as market pressures, definitions of legal terms, expectations about work activities and technological trends.
- Nowadays for institutions, messages produced or provided within e-mail systems are an integral part of records management systems.



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# Affects on e-mail

- Today, e-mail systems are affected directly by many factors such as market pressures, definitions of legal terms, expectations about work activities and technological trends.
- Institutional e-mail systems face numerous challenges such as access problems, technological obsolescence, legal problems, security and authenticity problems, and login and privacy issues.
- Now for institutions, messages produced or provided within e-mail systems are an integral part of records management systems.
- Under these conditions, many institutions have begun to develop policies and guidelines towards e-mail systems as a part of their records management systems.



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# Importance of e-mail

- On the other hand, it is argued that e-mail records are one of the records types that are the worst managed.
- Many significant e-mail messages exist in personal inboxes following the retention or disposition strategies determined by individuals.
- E-mail messages have critical importance in personal productivity as well as in professional performance.
- Much of the information that is critical for current working conditions as well as for future professional use is transferred through and included in e-mail messages.



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# Research on e-mail systems

Research concerning e-mail systems indicates the significance of these systems. Major findings of these studies are briefly given below.

- Osterman Research Inc. has issued more than sixty reports between 2007 and 2009 based on previous studies on the topic.
- It has found that 64% of the institutions surveyed plan to employ an e-mail retention policy.
- It is also reported that most of the institutions are not ready for this transition. Moreover, institutions experience serious problems in regard to the provision of e-mail findings and the use of electronic evidence.



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# Research of the Association of Information and Image Management

AIIM, which has 65,000 members worldwide, performed a large-scale study concerning e-mail management. The major findings of this study are as follows:

- Employees spend at least one hour on e-mail systems each day.
- 28% of the employers deal with professional e-mail activities out of the working hours.
- Major problematic areas for e-mail systems of the institutions are e-mail archives, legal inspections, availability and storage capacity.
- Only 10% of the institutions sampled have an institutionalized e-mail management system. 20% of them have initiated projects to develop an institutionalized e-mail management system. 29% of them are planning to design such a system within the next two years.



# Other survey results

- A study carried out in 1992 found that only 2% of the population employed e-mail communication, whereas this rate increased to 15% in 1998.
- Now it is stated that e-mail use increases 30% annually and that a significant portion, namely 70%, of this increase occurs due to spam messages.
- Peter Lyman and Hal R. Varian from the University of California at Berkeley conclude that the annual information production worldwide is approximately four exabytes; equal to 37,000 times the holdings of the Library of Congress.
- Swartz (2006) argues that e-mail messages produce data 500 times more than new Web sites. Annual e-mails in working environments total more than one exabyte.



# Other survey results

- Another study carried out in 2004 states that 59% of the employers regard the use of e-mail messages in the professional life as a waste of time, whereas 28% of them regard it as a barrier for their performance.
- 61% of the employers reported that they use e-mails for personal reasons.
- It was also found that most of the institutions do not have necessary provide opportunities for searching for and storing the e-mails.
- Research by the US Management Association in 2007 concludes that misuse of e-mails leads to discharge of personnel.



# Research on the use of e-mail systems in Turkey

- In that circumstance, we wanted to survey the condition of e-mail systems in Turkey.
- This survey, carried out by TEAM Turkey of the InterPARES Project, aims at evaluating the current conditions of e-mail use and the management of e-mail systems.
- The data of the study were collected through literature review and a survey questionnaire.
- The questionnaire was administered to twenty-eight institutions, more specifically to 505 employers in 28 different institutions.
- Of these 28 institutions, 5 are private, while 23 are public institutions. The questionnaire was administered with the help of undergraduate students in Hacettepe University, Department of Information Management in Turkey.



# Employment status of the survey participants

Based on their employment status, the percentage of the participants is as follows:

- 7.9% administrators, 19.6% specialists, 23.6% technical personnel, 25.7% administrative personnel.

In terms of their educational background, the findings are as follows:

- 65.8 % undergraduate education,
- 17.9% graduate education,
- 10.3% two-year higher education.

The working experience of the participants is as follows:

- 18.1% less than two years,
- 30% between two years and five years, and
- 7.5% more than twenty-one years.



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# Context of e-mail

- The findings of the survey questionnaire reveal that participants most of the e-mail messages received regard the notification of meetings or professional activities (79%).
- The second most frequently received e-mails are about confirmation or delegation (69%).
- Other frequently received e-mail messages are concerned:
  - with institutional policy and related activities (63.7%),
  - with initiation of a professional activity or continuation of it (58.8%),
  - with information that can be employed in decision-making processes (51%),
  - with institutional confirmation or delegation (48.5%), and
  - with institutional controlling processes and evaluative practices (48.3%).



# E-mail storage

- The rate of storage of the institutional records received via e-mail messages under personal files was found to be 37.8%
- 20.2% of the participants reported that they store these e-mail messages in the institutional electronic information and records management system.
- E-mails can be also stored in the shared files (12%)
- The rate of storing the e-mail messages with institutional value in the servers that other persons can access was found to be 10.6%
- The rate of copying e-mail messages to platforms other than the mailbox in the users' personal computers was found to be 19.4%





# Attachments and integration

- 48.9% of the participants report that they store e-mail messages with important attachments in the original form.
- 26.3% state that they store such messages after converting their forms into those that are frequently used by their systems.
- The participants argue that the weakest dimension of their institution's e-mail systems is the definition of the elements and sub-elements of the e-mail management system.
- It was found that there are serious problems in regard to integration of e-mail systems with the institutions' information and records management systems.
- In general, 38.7% of the participants think that the e-mail system of the institution functions well.



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# Problematic areas

Today, e-mail systems are being used commonly for job-related practices.

In the survey questionnaire, the following areas are stated to be problematic issues in these systems:

- overloading (39.5%),
- spam messages (27.7%),
- weakness in security and related issues (26%),
- finding or saving the old messages (17.7%),
- messages that are suspicious in terms of security (17.4%),
- identity hijacking in regard to job e-mail accounts (15%).



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# Institutional problems with e-mail

Institutional problems experienced related to e-mail systems are found to be as follows:

- the most serious problem is found to be e-mail archiving (38.7%);
- It is followed by security and threats (31.7%);
- misuses of the personnel (20.8%);
- spam message filtering (19.9%); back-up (18.5%); and storage (18.1%).
- It was further found that 10.8% of the participants employ records using electronic signature certificates.
- Those who use e-signature communication and correspondence processes are found to be 28.3%, whereas those who receive e-mail messages with e-signature was found to be 26.8%.



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# Insecure and secure dimensions

- The most insecure dimension of the institutional e-mail process is found to be e-mail messages with confidential content.
- It is followed by e-mail messaging with content about contracts, agreements and other legally binding records (28.6%),
- Similarly, the following types of the e-mails are also thought to be improper in terms of security concerns:
  - e-mails about administrative processes such as personnel relationships within the institution or customer relationships (43.8%);
  - e-mails about administrative processes outside the institution (46.4%);
  - delivery of institutional directives through e-mail messages (57.9%).
  - The most secure dimension of the e-mail communication within an institutional context is found to be the e-mails within the institution concerning mere communication (66.8%)



# Expectations

- The use of e-mail archiving programs is found to be 35.2% as a general rule in the 28 organizations that we interviewed.
- Such a program is used to copying of significant e-mail messages in the mailbox to e-mail archiving system; classifying of these e-mails based on certain topic categories; retention of the e-mail messages based on predefined storage plans as well as debugging of e-mail messages; storage of the e-mails for necessary period of time; and accessing these e-mail messages when necessary.
- The need for such a e-mail archive system is found to be 77.7%.
- A majority of the participants, specifically 81.3% of them, state that solutions should be developed towards having an integrated platform including an e-mail message archive system, electronic records management system, management information system, personnel and financial affairs information system.



# Conclusions

- In general, e-mail systems are regarded as a critical part of job-related process in the institutions in Turkey, like in other countries.
- E-mail messages are mostly used as a part of the institutional communication system.
- However, these messages are also frequently used as a part of delegation and confirmation process and even a part of support for the decision-making process.
- Institutions may also use these messages in their control and evaluation activities.
- Therefore, e-mail systems are being actively used.



# Conclusions

- The study indicates that e-mail systems in the institutions sampled function as a part of institutional information and records management activities.
- On the other hand, 10% of the institutions send significant e-mail messages through shared servers.
- Storing the e-mails in their original forms indicate that they are regarded as secure and viewed as having the quality of evidence.
- However, it is found that 26.3% of the participants store these messages after converting them into other formats, which indicates a serious problem.
- The participants state that most of the institutions do not have a defined practice towards production, use, protection and archiving of the e-mail messages.

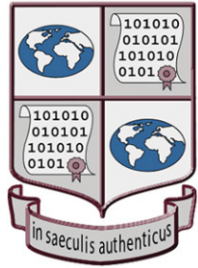


# Conclusions

- It was found that archiving of the e-mail messages is the most problematic side of the e-mail systems.
- As stated previously, e-mail archive systems may provide necessary security and back-up terms as well as efficiency in institutional e-mail messaging practices.
- The participants also state that communicating of the other topics in regard to job load as well as information exchange should be performed through e-mail messages.
- In this process, all information systems should be integrated, all elements of the functioning of the systems should be defined and the principles of production, use, protection, debugging and archiving of the e-mail messages should be identified.
- It is also needed that all factors for efficient functioning of the system should be structured. These are clear expectations of the participants sampled.







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*Thank you for your attention*

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