Influencing Factors of Human Resource Services through E-Municipality

Muhammed Küresad ÖZLEN  
*International Burch University, (kozlen@ibu.edu.ba)*

Meliha HANDZIC  
*International Burch University, (mhandzic@ibu.edu.ba)*

**ABSTRACT**

E-life and the number of relevant e-applications have grown up rapidly depending upon the high speed technology and so high speed economy. Therefore, all the organizations as well as governmental organisations, especially municipalities, have been influenced by the emerging e-trends. On the other hand, Human Resources Management takes an important place within the organizations. The management of the period from selecting the proper staff to their retirement is an important issue and needs to be cared. Hence, in this study the role of Human Resources Information System (as a part of E-municipality applications) on the management of the human resources as well as some e-municipality issues will be studied by the help of a survey-based study which is conducted in some Turkish municipalities. In the conclusion and discussion parts the results of the survey are discussed and future research areas and limitations of the research are addressed.

**INTRODUCTION**

The functions of cities and their impact on human being life started to change with technological improvements by the Industrial Revolution started in 1870s. Information and communication technologies which have improved fast for the last 50 years have changed all aspects of the life (commerce, production, work, education, home life, law, management styles, etc.). This change results innovation and different public management styles such as governments and municipalities (Coruh, 2008).

Especially smaller, intelligent and flexible organizations based on productive economies instead of scale economies have appeared with Information Technologies. Therefore, the autonomous and local management style organizations were preferred instead of hierarchical and bureaucratic management systems. Expansion of Internet and computer networks has removed the coordination and control problems of these autonomous units (Marin, 2004).

Coordination and collaboration are very important for the organizations in order to be successful. These are actually, the reasons of the existence of the organization. The organizations should follow the developments to achieve these reasons. The expectations of the society force the organizations for the developments. The fast adaptation of the public to the developments and increased expectations of digital services from the government have increased the speed of transition to internet phase (Marin, 2004).

According to Steidel (2003), the effect of “Digital Revolution” has increased growingly in American's daily lives. The citizens now can reach a lot of services through e-channels which could only be dreamed before a few years ago. The expectations of the citizens, using electronic services in their daily lives, have been changed. The governmental offices have realized this situation as a result of changing transaction methods among the citizens (Steidel, 2003).

Creating a service environment by using electronic network systems by government has developed the definition of e-government. E-government applications include: government-to-citizen (G2C), government-to-business (G2B), government-to-employee (G2E) and government-to-government (G2G) (Fagan, 2006; Erdal, 2004). Human resources management is necessary in order to find out the required human resources, improving the staff performance, managing personal affairs of employees, retirement and pension issues, etc.

Human Resources Information Systems (HRIS) is the collection of the systems to facilitate the transactions of human resources management activities (Öktem, 1988; Tonus, 2004). Therefore, HRIS can also be considered under e-government applications.

This research tries to identify the agreement levels of municipality employees on the survey items including (1) external e-municipality drivers, (2) internal infrastructure to implement e-municipality applications, (3) motivation of the municipality...
to enhance human resources activities by using e-services, (4) barriers of e-municipality applications, (5) types of e-
municipality transactions, and (6) HRM activities through e-services.

The study starts with this introduction and continues with the relevant literature review. The next section is about the
research methodology. The fourth section provides the descriptive results of the conducted survey. In the discussion, the
findings are evaluated. Finally, the study is concluded with the implications of research and practice.

LITERATURE REVIEW

There is no common definition of e-government (electronic government, also known as e-gov, digital government, online
government or in a certain context: transformational government). Briefly, e-government has been referred to as the
application of internet-based technologies to the commercial and non-commercial activities of the government (OECD,
1998). Broadly, e-government is defined as the different ways in which governments and public managers contact and
interact with their citizens, businesses, and the other arms of government. The final benefits can be less corruption,
increased transparency, greater convenience, revenue growth, and/or cost reductions (World Bank Group, 2003).

There is a need to question the objectives, applications, and benefits and worse outcomes of the applications. Therefore, the
objectives of e-government may be: (1) transparency of the government; (2) providing a fast, effective, and efficient
mechanism for the government; (3) incorporating all the citizens at every level of the management; (4) providing the share
of knowledge; (5) providing easy life to the citizens; (6) establishing a better environment for the Decision Makers to make
fast and right decisions, etc.

E-government provides various opportunities for city, county and state governmental units to facilitate their operational
efficiency and improve their influences to satisfy the needs of citizens. E-government forces organizations to think about
specific constituencies, their problems and their life circumstances to improve solutions through organizational boundaries
in order to address specific needs of their customers (Fagan, 2006). Studies describing e-government initiatives that serve a
range of constituencies include the applications of: government to citizen (G2C), government to business (G2B),
government to employee (G2E), and government to government (G2G) (Fagan, 2006; Erdal, 2004).

Although, e-government concept has improved much, there are some problems on both the government side and the
stakeholder side. In most parts of the world, for many reasons the concept of e-government hasn’t succeeded yet, even, in
England where a large number of English adults who are ready, willing and able to use e-channels as the potential early
adopters of e-government. On the other hand take-up is low, because e-channel awareness is low. One solution to increase
the take-up process is to run purposeful marketing communication campaigns. The gross potential for take-up market is
about 17.5 million above the age of 15 in England (Mellor, 2006).

There are significant differences among stakeholder groups based on their types of organizational membership.
Stakeholders of local governments are quite less optimistic to achieve their goals, and worried more about a variety of
organizational, technological, and financial barriers (Zhang, Dawes and Sarkis, 2005).

The organizations face some problems while converting the old system into an e-government system. The primary issues to
be considered in the transformation are: legal background, technological infrastructure, financing e-government, human,
service background, forming the service mechanism, confidence and security, and construction of a coordination center
(The Premiership (Başbakanlık), 2002). Furthermore, the planned system should consider organisationwide adoption of the
system. In this case, the role of human resources management becomes important.

According to Aydın and Öktem (2009), the strategic importance of human resources activities have been growing and
influencing corporate strategies. Therefore, the focus is going to be on human resources and the related decisions should be
considered in a more rational way. Hence, organisations are keeping human resources information more regularly and
analysing them by scientific techniques and consequently, the importance of HRIS has been increasing.

HRIS is a subsystem of Management Information Systems and it provides the necessary information about human resource
activities to the related managers (DeNisi and Griffin, 2001). HRIS is a complete system which includes the data,
procedures and people during the collection, storing, correcting, searching, analysing and sharing the necessary
information. Therefore, it is more than a computer based application (Tonus, 2004).

Human resources manager should answer some corporate questions to be able to explain whether human resources
functions were properly working (Kaynak et al., 1998). These questions may be about: (1) the necessary duties,
responsibilities, information, capabilities and talents for every position, (2) the future human resources needs, (3) the
sources to be used for possible vacant positions and duties, (4) staff training programs to be planned and (5) measuring the
performance of the staff and the organisation. According to Sabuncuoğlu (2000), the objectives of HRIS are: corporate
flexibility, fluent information flow, corporate contribution, update staff information, integrated management, HRM
efficiency, training planning.

The information which is provided by HRIS should be update, true, complete, relevant, and available anywhere and
anytime (Kaynak et al., 1998; DeNisi and Griffin, 2001; Ömürgönülşen and Öktem, 2004). Otherwise, during decision
processes some problems may emerge. On the other hand, the responsible system manager should be aware of HRM. Furthermore, HRIS should be specifically designed for the organisation (DeNisi and Griffin, 2001).

E-HRIS is the electronic management of HRIS. Alayoğlu (2007) suggests the use of E-HRIS to lower the costs and improve the efficiency. E-HRIS enhances fluent document and work flow, reduces time through the automation of HR processes, increases system use through personal accounts, informs the staff about personal and organisational issues, provides the relevant information, improves and enables time management and improves a flexible HR model.

Aydın and Öktem (2009) suggested the following for an effective e-public system to support E-HRIS: (1) the share of information, (2) determination of all the standards before starting e-government applications, (3) continuous and update data identification, (4) security of corporate data and information, (5) the adoption of E-government models, (6) supportive continuous training programs, (7) preventing corporate knowledge loss, (8) data transactions security, (9) developing politically acceptable and economically sustainable models and (10) providing political and public management support.

RESEARCH METHODOLOGY

A survey based study was preferred to be able to explore the research questions by employing a seven point Likert scale on the employees of four local municipalities in Marmara region of Turkey.

The developed survey includes seven parts which are: (1) demographics information, (2) external e-municipality drivers, (3) internal infrastructure, (4) motivation, (5) barriers of e-municipality applications, (6) types of e-municipality transactions, and (7) HRM activities through e-services.

Demographics

All the employees within the municipalities were targeted for data collection. At the end, 107 surveys were collected and the data was analysed descriptively by using SPSS (18 version) and Microsoft Excel (2007). The respondents are observed to be mostly from operational level by 33.6% and there are 25 respondents from the management, 16 from IT and 13 from Finance departments (Table 1). The majority of the respondents were males (64.5%). More than half (51.4%) of the respondents have clerical roles through the municipalities.

<table>
<thead>
<tr>
<th>Functional Area</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missing</td>
<td>6</td>
<td>5.6</td>
</tr>
<tr>
<td>Finance</td>
<td>13</td>
<td>12.1</td>
</tr>
<tr>
<td>Human Resources</td>
<td>4</td>
<td>3.7</td>
</tr>
<tr>
<td>IT</td>
<td>16</td>
<td>15.0</td>
</tr>
<tr>
<td>Management</td>
<td>25</td>
<td>23.4</td>
</tr>
<tr>
<td>Operational</td>
<td>36</td>
<td>33.6</td>
</tr>
<tr>
<td>Public Relations</td>
<td>7</td>
<td>6.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>107</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Descriptive Statistics

1. External Drivers: The employees are agreed that the citizens want to obtain governmental services through e-channels. Additionally, the laws are believed to be supportive for e-services (Figure 1).
2. Internal Infrastructure for e-services: Internal infrastructure is observed to be in a high level to facilitate e-municipality services. It is understood that to build and sustain e-services, the municipalities need stronger infrastructure and the implementation team should be strengthened. However, the respondents believe that the municipalities can easily afford the projects related to e-municipality (Figure 2).

3. Municipality Motivation for E-HRIS: The respondents considered that their municipalities accept e-municipality services as a supportive and necessary function of human resource management activities. Furthermore, they are willing to implement e-municipality activities in order to improve HRM services (Figure 3).
4. Barriers for E-municipality services: It was observed that there seems no barrier to implement and finance e-municipality services (Figure 4).

![Barriers for E-municipality Services](image)

**Figure 4** Barriers for E-municipality Services

5. Types of transactions through e-municipality: The municipalities are detected to apply e-municipality transactions as in the following order: G2E, G2C, G2G and G2B (Figure 5).

![Types of E-municipality Transactions](image)

**Figure 5** Types of E-municipality Transactions

6. HRM Activities through E-municipality Services

The respondents are mainly agreed on that E-municipality services can be used to enhance (1) the transactions of employee rights, (2) tracking the results of the transactions performed, (3) the communication and collaboration among the staff, and (4) the training activities of the staff. However, they slightly agreed that e-services improves the adaptation of the new staff to working environment (Figure 6).
DISCUSSION

This research has aimed to descriptively study the issues about e-services of four Turkish municipalities. The respondents from the municipalities have in general agreed on the statements positively. It was found out that the external forces (government and citizens) are willing to have services through e-channels and the municipalities are observed to have capability to implement e-projects to support the services. The motivation to enhance HRM activities by the help of e-municipality services seems high. The barriers in terms of building the necessary infrastructure and financing the services are not accepted to be challenging. Furthermore, the municipalities are evaluated to be applying all kinds of transactions (G2E, G2C, G2G and G2B) in high levels. Finally, e-municipality services are accepted to be enhancing human resource management activities through the municipalities. However, the respondents considered e-services as a weak supportive function to improve the adaptation of new employees.

CONCLUSION

The research has achieved generally a positive support on the items to be discovered. The number of respondents may be increased in further researches in order to have more representative results. Some research models can be developed by considering the used research items in this study. The most influencing factors can also be identified on e-municipality and HRM issues. Furthermore, the relationships among the items may be tested in further analyses.

For practice, it can be concluded that the municipalities should give more importance to e-services in order to facilitate their internal and external works. In line with the findings of the current study, they can improve the system’s capabilities to support human resource activities as well as other activities through the municipality. Finally, deeper researches in order to explain the organizational and individual behaviours about e-services and their components (people, data and technology) could be investigated.

REFERENCES


FAGAN, M. H. (2006). Exploring city, county and state e-government initiatives: an East Texas perspective, College of Business and Technology, University of Texas, Tyler, Texas, USA


APPENDIX: Survey Items

<table>
<thead>
<tr>
<th>Variables</th>
<th>Survey Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External Drivers</strong></td>
<td>The expectations of citizens force e-government services</td>
</tr>
<tr>
<td></td>
<td>Federal laws support e-government activities</td>
</tr>
<tr>
<td><strong>Internal Infrastructure</strong></td>
<td>My municipality can afford e-municipality activities</td>
</tr>
<tr>
<td></td>
<td>My municipality has a team in order to implement e-services</td>
</tr>
<tr>
<td></td>
<td>My municipality has the necessary infrastructure in order to build and continue e-government services</td>
</tr>
<tr>
<td><strong>Municipality Motivation</strong></td>
<td>Municipality management accepts e-municipality services as a supportive function of HRM</td>
</tr>
<tr>
<td></td>
<td>Municipality management accepts e-municipality services as necessary in order to facilitate HRM</td>
</tr>
<tr>
<td></td>
<td>Municipality management is willing to implement e-municipality services in order to enhance HRM</td>
</tr>
<tr>
<td><strong>Barriers</strong></td>
<td>It is difficult to build necessary infrastructure for e-municipality services</td>
</tr>
<tr>
<td></td>
<td>It is difficult to finance e-municipality activities</td>
</tr>
<tr>
<td><strong>Types of E-municipality transactions in my municipality</strong></td>
<td>G2C</td>
</tr>
<tr>
<td></td>
<td>G2G</td>
</tr>
<tr>
<td></td>
<td>G2B</td>
</tr>
<tr>
<td></td>
<td>G2E</td>
</tr>
<tr>
<td><strong>HRM activities through E-municipality services</strong></td>
<td>The new staff can easily adapt to working environment by the help of e-services</td>
</tr>
<tr>
<td></td>
<td>The transactions of employee rights can easily be performed through e-municipality services</td>
</tr>
<tr>
<td></td>
<td>The employees can easily track their personal benefits through e-municipality services</td>
</tr>
<tr>
<td></td>
<td>The communication and collaboration among the staff are improved by e-services</td>
</tr>
<tr>
<td></td>
<td>The training activities can easily be managed for the employees</td>
</tr>
</tbody>
</table>