

THE RELATIONSHIP BETWEEN E-MUNICIPALITY, INFORMATION SYSTEMS AND QUALITY OF SERVICE AND THEIR REFLECTIONS IN TURKEY

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-Abstract-

Among local governance units, municipalities carry out important functions in meeting local needs and they have a big role in Turkish local governance system. It is difficult to say that the municipalities which was included in Turkish governance system after the Tanzimat revolution have exact Western type of local governance unit. However in this historical process, it is a fact that important developments have been achieved. Especially during the last period municipalities have been experiencing structural and functional transformation through legal regulations.

Within this process, municipalities with corporate business identity started to game and electronic understanding and this trend become increasingly widespread. IT systems, especially rising importance of internet and electronic, caused utilization of this system in municipalities, in effective projects were replaced by projects which technological, flexible and offering high quality services and local communication and presentations were carried out through internet. In our country, especially in metropolitan municipalities, e-municipality has become a rising trend in recent years. This development caused improvement in the quality of interaction with citizens and offering of services and paved the path for further developments of municipalities. Nowadays, internet is known more a luxury but it is a necessity for municipalities.

In this theoretically designed study, e-municipality and information systems are analyzed in theoretical framework and their effects on service quality have been mentioned and this three topics have been related to each other. The evaluation based on the relation of the three topics and their effects and reflections in Turkey have been investigated.

Keywords: *Local Administration, E-Municipality, Service Quality*

JEL Classification: M10, M15

1. INTRODUCTION

1.1. E-Municipality

This concept represents the management of the data related to the city through practices supported by current information technologies and the production of various pieces of information for the welfare of the society and the presentation of this information into the service of the citizens in an effective way. The organization process of the e-municipality at the municipality level basically consists of three dimensions: (Peltekoğlu, 1998:271)

- The automation of financial, staff, editorial department, development planning and similar management processes within the municipality,
- The online management of services such as the delivery of complaints, wishes and views of the residents living in the city; requests for information regarding the practices and procedures that are under the

authority of the municipality; applications that are submitted to the municipality regarding permits-approvals-legitimations for starting a business and implementing a project; the collection of legal payments by the municipality,

- The sharing of primary data and information regarding the local governments in association with other public institutions and organizations.

1.2. Information Systems

1.2.1. Information Systems in the E-Municipality

Problem solving systems that focus on e-municipality practices are being developed by the public and private sectors. Some of these systems are summarized below:

1.2.1.1. Internet-Based Infrastructure Coordination

The urban infrastructure of our country, which has been divided among different institutions, faces numerous problems due to lack of coordination. The most remarkable and recognized of these problems is the digging up of a newly paved road by another institution, or sometimes by the same institution. A system has been developed to minimize such problems. The developed system is internet-based. The users of the system are the institutions that are in charge of the urban infrastructure.

1.2.1.2. Monitoring and Optimization of Garbage Collection Services

This is a system devoted to the satisfaction of citizens and the fair use of the resources through which the average tour times and average waiting periods etc. of the garbage trucks are determined, the use of appropriate routes is monitored and the emerging problems are solved (Bilişim Şurası, 2008).

1.2.1.3. City Guide Internet Applications

These applications are aimed at the publication of all types of sub-graphic and verbal information created by the municipality through the internet/intranet within the permitted criteria and opening such publications to the use of the public. City

maps, development plans can be published through this system and the zoning status of a building or a plot can be accessed by the public.

1.2.1.4. KIOSK Terminal Applications

All types of sub-graphic and verbal information created by the municipality can be brought to the use of the public through the specially designed kiosk terminals with touch displays placed at the entrances of buildings and other appropriate places determined in the city. Services such as providing information regarding address inquiries, post offices, cinemas, shops, hospitals, night-pharmacies and other searched locations can be offered to the use of the citizens (Bayraktar, 2005:48).

1.2.1.5. Access and Security in Using Maps

This is a system that examines and determines the access and after access rights of different units and agencies to maps within the municipality.

1.2.1.6. Geographical Archive System

This is a system that can archive and query any data including information regarding geographical location (Raster data, satellite images, vector data, raster plan, application sheet, scale etc.).

1.2.1.7. Document Management System (DMS)

Document Management System is a system that basically manages and controls the storing of all types of documents within an organization and the circulation of the stored documents.

1.2.1.8. Crisis Management System

Pre-disaster planning and preparation; instant fast and correct response procedures for minimizing losses at the time of disaster, post-disaster reconstruction and returning to the normal state as soon as possible constitute the three stages of the system (İstanbul Büyükşehir Belediyesi, 2008).

1.2.1.9. CBS&KBS Integrated System

In the system;

- whether those who are obliged to submit a tax return do so are determined in order to prevent tax evasions. While detecting the tax returns, the processes of detecting ownership, the existence of a building on the plot, matching the owner and the property in case of a building, controlling the address information of the property subject to the return,
- examining the land registrations collected through land excursions and stored in the magnetic medium and completing the missing data and analyzing with the existing return data are conducted. Furthermore, base and cadastral maps that are digitalized and stored in the magnetic medium can be organized in a way that allows linking to verbal data in accordance with the purpose of KBS.

2. SERVICE

Services can be defined as economic activities that do not result in possessing a physical good when consumed, are comprised of abstract activities that do not necessitate any possession offered by one party to another and provide benefits in terms of the variety of products or time, place, form and psychology. Collier defines services as “an activity or action, a performance, social event or effort that is consumed at the place of production”.

2.1. Service Quality

Service quality aims to organize the services provided particularly at labor intensive businesses according to the desires and needs of the citizens through the perspective of the customers and the public.

Today, the increasing importance of service businesses, the differences between industrial and service businesses, the understanding of high quality service that has become a rising trend in service businesses and the characteristics of the service sector and features and activities that are carried out regarding the use of information systems in marketing and providing services have changed the perception of public services and established a strong connection between information systems and the institutions providing public services.

2.2. The Place of E-Municipality in the Services Provided by Local Governments

E-Municipality is the management of the data related to the city through current technology based practices supported by current information technologies and the production of various pieces of information for the welfare of the society and the presentation of this information into the service of the citizens in an effective way (Henden, 2004:169). Information society sociologist Manuel Castells characterizes the paradigm shift created by the “global network effect” in these words: “Globalization is activated through an instrumental information network which links governments, cultures and institutional structures in different ways.”

In the same vein, politics and governance also become “informational”. And the concept of “e-municipality” emerges in this context. It is obvious that there will be a serious increase in the level of information flow between the municipality-other public institutions, municipality-citizen and citizen-citizen and in the level of awareness within the e-municipality environment.

By this way, it is aimed to provide high-quality services and develop local democracy through mutual interaction and information exchange between the municipality and the local community. Charged with the responsibility to provide services to the local community, municipalities are required to transfer technological developments to their institutional functioning in order to be able to fulfill such a responsibility. Improvement in governance makes improving effects on the real services provided by the local government. Clearly suggesting that “moving to the internet” does not mean moving the services but the governance is highly important in that it enables the perception and design of urban information systems specific to municipalities in a realistic and correct manner and the formulation of expectations in accordance with such a perception and design (İnet-tr Yerel Yönetimler Konferansı, 2008).

When we look at the social, economic and technological dimensions of the issue in addition to the aspects given above, the necessity of becoming an e-municipality emerges more obviously (Bilişim Şurası, 2008). E-municipality creates a great environment that provides the participation of the citizens in governance, transparency and accountability. It allows for the decrease of unnecessary procedures and repetitions in the bureaucracy through simplifying the exchange of information among public administration institutions. The basis of e-municipality is the understanding of “citizen oriented service”. This is directly

related to the principles of the phenomenon of *governance*, which is expected to provide an insight into the public administration of the 21st century. Maintaining democratic participation through electronic systems would remove the obstacles hindering direct democracy like time and place and decrease the cost of democratic participation (Bilkent Üniversitesi, 2008).

Local authorities who want to switch to e-municipality practices should examine the experiences of other local governments and focus on information and services that are the most appropriate for the capacity and needs of their unit of management; set goals appropriately, work citizen-oriented, carefully conduct cost-benefit analysis, act gradually rather than providing all the information and services all at once, take lessons from previous experiences and gain new experiences from pilot practices (Bilgi Yönetimi, 2013).

2.3. The Change in the Presentation of Services by Local Governments in Line with E-Municipality

The perception of “governance” held by the information age society, which carries the principles of participation, transparency, being citizen-oriented and accountability shows itself in the reorganization of local governments as in all areas. Local governments are units of public administration that are the closest to the people. The reorganization of local governments stands out also by way of transferring their service providing practices to the electronic environment.

Integration with the world brings along an international competition that gradually increases in all areas. Self-review of states within the scope of the public services they provide and the execution of the ideas on reorganization is among the primary necessities to be performed in order to keep up with this competition. This is because the countries that have less problems in state-citizen and state-private sector relationships can grow faster. For this reason, the improvement and practice of reorganization, sustainable development and the understanding of citizen oriented service in public administration is an urgent mission to be accomplished in our country.

Local governments that exhibit changes and improvements in their understanding of governance resort to certain means of application in order to convey this understanding to the people. The efforts for realizing the phenomenon of “*governance*”, which represents the transparent understanding of administration

of our age endowed with the mission of customer satisfaction and the principle of accountability can show itself in practices like local agenda 21, total quality management and e-municipality, which are implemented by local governments.

The understanding of “organization and method” that dominates public administration has gradually given way to the idea of productivity management, which is based on the participation of the stakeholders and functions through the objectives of “total quality” and “customer satisfaction”; the citizen, who has an increasingly active role in governance and increased expectation is seen as a “customer” whose satisfaction is targeted; the activities of public administrations are regarded as “services” whose quality standards need to be continually improved (Uçkan, 2003:38).

Significant changes have occurred in the expectations of the society from the system of governance also in our country. The society expects the governments to produce the services they undertake by using the resources effectively and efficiently. Contemporary principles, bases and practices of management are of higher importance for the public administration that acts based on the principle that “*Service continues as long as there are social benefits*” (Öztürk, 1996:146).

It is necessary for public administrations to implement governance practices aimed at effectiveness, efficiency and the satisfaction of the needs of citizens. The characteristics of the rapid urbanization observed in developing countries and the concept of “governance”, which is seen as a rising value by today’s society and the participative, transparent, democratic, human and service-oriented governments which comprise this concept are in harmony with the philosophy of local governance (Görmez, 1997:81).

3. CONCLUSION

In modern-day local governments, social demands regarding the supply of services are presented through the principles of efficiency, effectiveness, speed and decrease in bureaucracy, and the demands regarding administration are suggested through the principles of transparency, accountability, sharing of administrative audit and governance. These concepts have come into our lives as the requirements of reorganization in public administration and particularly in local governments.

As the units of public administration that are closest to the people, local governments are also among the areas where such a change can reveal itself. In an effort to meet the demands and needs of the local community in the most effective way, transition to a system through which local governments provide their services in an electronic environment yields positive results for both the employees and the citizens. In Turkey, important developments have been observed in this regard.

In fact, this issue was emphasized in the eighth five-year development plan and its scope was extended in the ninth five-year development plan (Resmi Gazete, 2013). The creation of the local government information network, which targets the formation of a close relationship among local governments with the support of respective ministries, also emphasizes the importance given to the issue. E-state and e-municipality applications attracted the interest of not only government agencies but also TUSIAD (Turkish Industrialists' and Businessmen's Association) and TBV (Turkish Informatics Foundation) and these two associations approved to organize an annual convention to present eTR awards to successful applications. The 10th eTurkey (eTR) awards of TUSIAD and TBV were given to their owners at a ceremony held at the Grand National Assembly of Turkey on December 17, 2012. Accordingly; (eTR Ödülleri, 2013)

In the “Category of Local Governments”;

- “Konya City Guide Application” project of Konya Metropolitan Municipality was granted an award in the category of Large Scale Municipalities,
- “Augmented Reality Supported Disaster Management and Mobile Municipality Applications” project of Bakırköy Municipality was granted an award in the category of Middle Scale Municipalities.

Among the “applications that support the concept of modern state and have adopted the principles of transparency and social responsibility”, the “Fire Engine Training Simulation” project of the Fire Department of Ankara Metropolitan Municipality was given the Special Award by the TUSIAD-TBV eTR Executive Board.

In our country, the importance of e-municipality has been rapidly realized and the number of applications has been gradually increasing. The prevalence of the idea of participatory local governance should be maintained among the members of the information age society as individuals who can reflect technological developments to their lives; local governments holding the idea of a transparent,

easily accessible and accountable administration which provides citizen and quality oriented services should be appreciated and supported.

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