

Adnan YUKSEL

Ministry Of Customs And Trade –GEMLIK Customs Office

Bursa, Turkey.

adnanyuksel3116@gmail.com

E-Municipality Brings Local Social and Economic Benefits for Bursa Metropolitan Municipality

ABSTRACT

Each transformation that occurred in the world is also taking influence upon countries and governments. Today the progress of globalization in economic terms but also in the middle of the border between the information and communication technology in the world is also experiencing rapid developments. Precisely the e-government and e-municipality concept, its application to a local government should be investigated during this process; rendering the e-municipal services to citizens via the internet, to other institutions, companies and also providing information to employees of e-Government / e-Municipality was introduced in this concept.

Information and communication technologies, especially computers and the Internet have become an important part of modern society now and has influenced almost every area of daily life. These developments affect the public institutions as well as businesses inevitable. Expectations of the citizens from public institutions with the widespread use of information and communication technologies in society and their demands have been changed in this regard. Citizens in the information age of communication and information sharing expectations are always interactive with the public institutions using the internet. Therefore, e-government and e-municipality efforts to serve citizens more efficiently and effectively have been recognized worldwide. E-municipality and e-government concepts are discussed in this study. Diversification of the use of technology and the expansion hereof and facilitating access to the Internet resulted in citizens' developments through technology, of course, such developments in technologies bring services in municipalities closer to the people.

E-municipality can provide not only the services they announce in their ads. Some of the municipalities are still unable to reach all the people by the use of technology and the internet; but some municipalities made good use of this opportunity and began delivering services to the public via the Internet much faster. Municipalities have engaged private organizations possessing the modern technology in their work and so they will increase the efficiency of rendering the e-services.

Key words: *E-Government, E-Municipality.*

1. Introduction

Today we can see a very rapid technological development of information and communication technologies indicating development. Technologies have penetrated every area of people's activities and people's access to information was easily achieved. By developments in computer technologies, increased penetration of internet usage levels thanks to the proliferation of smart phones with cheaper price and through the use of the internet, education, entertainment, business areas have experienced life transformations. The changes occurring in the communications technology sector have been easily harmonized with the life of other people. Communication facilities and computer technologies, the information circulating in parallel to increase the speed of changing the competitive environment, also caused a phase transition to changes in the manufacturing methods and ways to compete. Social changes as a result of the development of computer technologies and the implementation of the transformation has also affected private sector enterprises, these are also to affect public institutions and organizations. The spreading of information and communication technologies among members of the society and the prevalence of winning is the result of the increase of the level of penetration of technology in everyday's life of citizens of the country; the citizens are experiencing changes compared with the services provided by the state. State was obliged to provide services to citizens technologically. With the development of technologies for rendering municipal services among public institutions, an e-municipality concept made itself a name. The demands for the control of the services was driven by emerging information and communication technologies. The system is not transparent and expensive, it can ensure the quality of decisions and render more functional support to the design of public bureaucracy.

2. E-Government

For citizens and private companies it is the implementation of the process through information and communication technologies by public institutions. The information in these processes is usually circulating in virtual environments, ensuring the exchange of goods and services (Aktan, 2003).

In another definition of e-Government, the relationships of citizens and private enterprises and government agencies are performed by using the internet in a network (Erdem, Erdinc, & Özlem, 2004).

3. History of E-Government

Internet usage in Turkey has started to expand since 1993. E-government was introduced in 1998, first started to be used by public

institutions and organizations. The work began by taking into payroll systems officers, was strengthened by the personal information entered into the system as well. In 1997, under the leadership of the Ministry of Transport and with the TÜBİTAK – BİLTEN, participation the global development and trend plan “Turkey’s National Information Infrastructure Master Plan (TUENA)” aimed to establish the infrastructure project has been adopted. In February 2001 the European Commission was invited to Turkey for the 23-24 March 2001 for preparation of an action plan for Europe under the e-Europe initiative; such plan has been discussed and adopted. Participation on June, 15-16 2001 in the official e-European unity (<http://www.edevletkapisi.net/e-devlet-tarihcesi.html>).

4. Objectives of E-Government

Reduction of Costs: Each year, reduction of the burden of treasury expenditures incurred will take place after the full implementation of an e-government. Expenditures made by the state will show decreases in many areas. Expenses that made in the service area will be greatly reduced.

The reduction of transactions with paper: Health, taxes, population, many public services such as customs procedures will be transferred to the virtual environment thus reducing the costs. In addition, a database that allows the analysis to be carried out will be set up.

Transparency: Clear understanding of the state of affairs with the information they requested will be easily reached by all people. Increased confidence between public institutions and the citizens will be provided. In this way, government relations with citizens will gain positive changes.

The quality of services provided: The high standard of quality and level of transactions in the electronic environment will facilitate the access of citizens to the services to be provided.

7/24 services: The quality of services to be rendered for citizens by the state as per “one click” will be high enough and the services will be accessible 24 hours a day and 7 days a week.

Increase in the number of participants: Changes made by the state to enable its citizens to benefit from the services provided will result in increase in demand. The abundance of the rights granted to citizens shows that the state is interactive.

Easily, and quickly provided access: the Internet usage with the introduction of the state structure in the provision of services in public institutions has become a form of government portal. The benefits from all of the services to be provided led to the concept of equality. Providing services in all regions of the country has also brought equality (Demirel, 2006).

5. E-Government Properties

Electronic Government is a Government Information

It has brought science-based opinions within the framework of E-government. This phenomenon is evident in the production of new knowledge and technology. Although there are systems installed in a particular area, it is generally considered to be established in all nations to assist in the development of civilization (Erkan, 2000).

Information society is the community described as consumers or citizens demanding from the public sector any information to be presented in clear, objective form, to be used appropriately, the date must be accurate and complete. For the maximum level for the benefit of information technology systems and the structure of private enterprise organizations, the central government needs to establish infrastructure that enables the appropriate operation of this system. There are individuals dealing with e-government system in public institutions and organizations. People sending requests to the system are expecting proper service from the system. The system should deliver proper services to the citizens (Yomralıoğlu, 2000).

Electronic Government is a Government’s Technical Problem

Nowadays, the development of computer technology helps the individuals to send the service requests for to provide information easily, quickly and transparently. Transactions are maintained easily. The operations done by the computer results in less staff. Bureaucracy decreased, loss of time is minimized.

6. E-Municipality in Conversion Process in Turkey and E-Municipality as one from the Reasons herefor

In today’s world, with the transition of industrial society to information society, the world is experiencing an incredible rate of conversion. Information and communication technology, economy, social life and culture are influenced by the process that creates lasting changes. Countries that have relied on the development of knowledge economy and competitive strategies; science, technology are rearranging existing structures and creating new institutional structures to be in accordance with the requirements of economy (Polat, 2006).

The impact of developments in information and communication technologies constitutes the physical infrastructure of globalization. Although primarily explained from economical, cultural point of views, it must be examined in the reflection of the legal and numeric fields (Akgun, 2003).

To produce public institutions and services created to regulate social relationships is one of the most affected areas of these developments. Contacts and developments in information technology, impact of globalization are forcing shaping the new world order in the parallel conversion of these structures by changing their way of seeing the business units provide public services (Akgun, 2003).

The urbanization process in recent years, rapid developments in information and communication technology, diversifying needs and demands are also differentiated in nature. Municipalities are now faced the growing and complex demands. By using traditional management approach it would not be possible to overcome these problems with the current operation costs. Municipalities have started to provide services via the Internet as e-services and therefore they are to continue increasing the volume of their e-services (Nergiz ve Saraçbaşı, 2012).

7. E-Municipality Transition Process

As to the problem of switching the municipal information systems to e-municipal system, it is necessary to pass through the following stages:

- Computerization
- Automation
- Internet usage
- Creating the Web sites
- Services transfer to the Internet

If municipalities still do not know how to use the Internet, or municipal employees with an automation system and municipalities are still setting up a website, even if the e-municipal system of the city council was previously created, it would be impossible for the people to benefit from this vehicle. Automated techniques for accessing the municipalities and financial support should be provided quickly. In addition, the transfer of municipal services to the Internet alone is not sufficient. It is useful to use the Internet in all sections and they must be connected to the Internet. Alone to go to the municipality's e-municipality it is not enough to set up e-municipal services sites, the citizens must understand how to use them, they should be taught to use the e-municipality and should be encouraged to do this (Henden and Henden, 2005).

8. E-Municipal Applications: Bursa Metropolitan Municipality

E-Payment

By visiting the Bursa Metropolitan Municipality website and using the e-municipality application one can query our debts from the e-payment systems, and payment of debts can be made. By entering social security number and tax identification number debt query can be made, and e-payment for the debt information being reached can be made. In this way, without any loss of time, it can be easily done without the limitations of time and place of operation (<https://e-belediye.bursa.bel.tr/eodeme>).

Bus on e-Payment

E-payment of water bills from the municipality of the City of Bursa Metropolitan Buski by E-transactions can be made. As participants in the system by entering our mail address and password or participant's number we can find out our debts and respective payments can be made. Information acquisition, reception of receipts, e-failure notification, notification of leakage water, subscribing process changes can be made, as well as debt transactions and queries, complaints and suggestions sending etc. (<https://ebuski.buski.gov.tr>).

Always Actual Status

With the Bursa Metropolitan Municipality's e-municipality services the daily prices status can be monitored. Example of Category: pelagic fish, other aquatic products, fruits, daily prices status of food products such as vegetables can also be followed. This price list of goods to be monitored by Bursa Metropolitan Municipality is foreseen for the goods sold by wholesaler brokers in the state complex and is published as determined by the commission formed by associations of wholesalers of state complex opened every day. For informative purposes and for to learn more about the official documents (<http://www.bursa.bel.tr/hal-fiyatları--günlük-/sayfa/91>).

Engineers, Architects and Surveyors Records

Engineers, architects and surveillance records can be ordered in Bursa Metropolitan Municipality council via the e-application and general information can also be obtained (<https://e-belediye.bursa.bel.tr/index1.asp>).

Mobile Municipal

A future-aimed project will be carried out by Bursa Metropolitan Municipality, depending on keeping pace with changes in information technology, renewing day by day the technological infrastructure. The presentation of the necessary municipal services for to ensure easier access of citizens to the service mobile website, SMS inquiry system and e-municipal applications to track the Municipality life with the Android operating system mobile phones and tablet computers using Android and IOS mobile applications was made. Bursa Metropolitan Municipality, Enterprise Mobile Application was introduced in the Apple Store and the Google Play Store.

Contribution to Tourism

By software experts in the Municipality within the application implemented, citizens having tablets with android operating system now can easily get the latest news on their mobile phones, announcements, informations on events, auctions, e-publications, projects, council decisions, transportation lines, stops, travel cards dealers, debts, travel cards, documents, state prices, burial place, request notification of complaints and inquiries; Bursa Metropolitan applications and corporate information of the Municipality are easily accessible from anywhere you want. In addition to facilitating access to municipal services, applications provide significant contributions towards the development of Bursa's tourism potential. In practice sculpture, new stadium, inside and outside view of the metro stations and Osmangazi viewing live images of landmarks are provided.

Through the application of Emirsultan, Green, Town Square, images of historical and touristic places such as the Great Mosque can be viewed in live modus. Thus, historical places of Bursa can be monitored from any corner of the world (<http://www.bursa.bel.tr/mobil-belediyecilik-ile--bursa-cepte/sayfa/879>).

Plan Changes

E-development plan of Metropolitan municipalities and progress in development plans of the changes can be monitored (<http://www.bursa.bel.tr/imar-plani-degisiklikleri/sayfa/1282/>).

3D City Guide

Bursa Metropolitan Municipality is the Web-based presentation of the data collected while preparing the 3D City Guide project. Satellite images owned by the Municipality of the project, address data, the important places (hospitals, schools, tourist facilities, etc.) and public transport data can be reached quickly and clearly. 3D realization of the city guide developed by Turkish engineers with the CitySurf software national program has been used. Sheduled projects in Bursa (eg. Bursa-Ankara High Speed Train Project) are also represented. Geographic analysis necessary for realization of social and cultural projects by examination of Bursa 3D imaging possibilities can also be made.

Aerial Photographs

3D image is based upon the data from the city of Bursa book, from the images dated with 2002, 2004, and from the satellite image of 2007, aerial photos of the year of 2009 can also be viewed. Comparison of development of the city can now be viewed. Buildings in

the city can be seen in 3D modus. Places can be easily accessed by clicking the building information. In addition, a detailed 3-dimensional models of major structures can be viewed.

Making Calls

3D information retrieval in the information contained in urban information systems can be made with the ready-made templates. The screen to find the address of a selected point-to-point address can be accessed immediately. One thing to do, is to drag the point on the screen to "Find Address" button for to click.

Distance Measuring

Distance between two points, length of the selected area and its surroundings can be measured (<http://www.bursa.bel.tr/3-boyutlu-kent-rehberi/sayfa/1286>).

Master Plan

Bursa Metropolitan Municipality Master Plan prepared in the 1/25000 scale can be opened as a base. Thus floor building permits issued according to the real estate development plan, which will be held around the green space or recreational facilities, can be seen. The owned plots or state in development plans based on location of the land or buildings planned to be purchased can also be examined (<http://www.bursa.bel.tr/imar-plani-degisiklikleri/sayfa/1282/>).

Border and Transportation

Bursa province, district and neighborhood boundaries can be displayed. Bursa paths can be examined in stages. Bursa rail routes and bus stops can be seen. Thus transit plan can be created. Screenshots came to a desired area on the map screen to save the image to your computer in the following formats: JPEG, GIF, BMP, PNG, TIF. The standard tools from the screen are enough to save the image by clicking the button (<http://burulas.com.tr/>).

Payroll Tracking

Municipal employees can get information about their salaries by following the instructions in the window, entering the user name and password, and then they can receive the result.

Busmek to Online Registration

Reference made to the arts and vocational training courses can be obtained from the municipality's e-applications and informations about education (<https://e-belediye.bursa.bel.tr/busmek/>).

E-Offers

By reaching the municipality's e-application support services department an e-procurement prices quote can be requested from the branch manager. Bursa Metropolitan Municipality is required by protocol to provide a price quote.

(<https://e-belediye.bursa.bel.tr/satinalmafiyateklifi>).

Cemetery Information System

By accessing the cemetery information system, one can get information on burial place of any persons who was buried today, information about manners and visiting shrines can provided (<http://mbs.bursa.bel.tr>).

Pharmacies

Addresses of all pharmacies on duty in Bursa Metropolitan Municipality boundaries and phones can be tracked (<https://e-belediye.bursa.bel.tr>).

Results

They map the practices through technology development, the outdated methods have been transformed into a more effective process and presentation of cost of services performed will result in more efficient and faster provider presentation. E-municipal initiatives, easy to use, provide a support to other web-site being a single point of service delivery. A great progress in the quality of presentation of information and services has been made. Knowledge accessibility has been expanded. Individuals were able to get a more easy access to provision of information. E-municipal sites are rendering the questions related services 24 hours per day, 7 days per week. Different levels in the income of citizens can be observed, also the low level of education, lack of news concerning the benefits of e-municipal services rendered by e-municipality opposes to the implementation of technological changes. Municipalities with a e-municipal system are able to deliver information exactly. Presentations made for the municipal services online will raise the level of communication between citizens and municipalities. The use of e-municipality system in communication with municipalities will provide citizens with a tool enabling the levelling of local differences, making their life easier. E-municipality services offering for all citizens are among the most important duties of municipalities. At this stage, the access to a wider area of information through the use of advertising tools will be provided. The way the E-municipal system is functioning will bring benefits for a great number of people; but they need to be trained for this, that, panels, training or introductory seminars should be organized to justify people's expectations, they also should be informed about the usability and reliability of the system. E-municipality should be safe to use and building of trust in e-municipality must be provided. Increase in the rate of computer users is associated with the rise in people's incomes. Increase in the number of people using computers is connected with the people associated with the use of computer facilities. Bursa Metropolitan Municipality e-services offered by the municipality are used in many areas. Provided services are inadequate, although positive. Technological changes have taken place, so there will be growth in rendering the e-municipal services. In particular, the city's central location will enable only benefits from e-municipality. Although there is only a limited number of those who will benefit from the system now, the use of e-municipality is estimated to have a positive influence subsequently.

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