

E-Transformation of Municipalities and Social Media's Role on e-Participation in European e-Municipalities

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Abstract

The advancements in information and communication technologies (ICT) have created a solid transformation in each governmental organization such as municipalities. The electronic transformation of governmental organizations, for instance e-municipalities, have transformed offline services into online. The goal of the electronic transformation of governmental organizations is to create a citizen centric government with high accountability and transparency rates. To sustain the goal of the governmental e-transformation, e-democracy should be implemented in depth; and to implement e-democracy, e-participation of citizens should be encouraged. Municipalities are a feasible governmental organization to identify the existence and e-participation support level in a country because of the propinquity between the citizens and municipalities. In this article, at first e-municipality, e-democracy and e-participation concepts are discussed and social media's role on creating e-participation is emphasized with United Nation's digital participation reports. Finally, social media usage research that is conducted on municipalities of European capitals is shared to identify the e-participation level in European local governments.

Keywords: E-Government, E-Municipality, E-Participation, Social Media and Government

1. Introduction

E-government is certainly one of the most important developments of recent years in terms of governmental information processing. It makes several promises such as reducing fraud, increasing productivity, promoting democracy and citizen participation. As of 2011 all United Nations countries have e-government programs on different stages of development. (Whitmore, 2012)

The progress in the information and communication technologies changes the way of public service distributions. Due to this progress, state – citizen relationship becomes bi – directional and the development of e-government advances rapidly. This opportunity of interaction can be described as a great improvement in terms of increasing the effectiveness of public organizations. Two important outcomes arise from the advancement of e-governments. First, the spread of e-government services allow citizens to save both time and money. Second, the governments' effective usage of social media provides both accountability and transparency for the government from citizens' perspective. In fact, e-government is often seen as an effective means to create public value for citizens. (Karunasena, 2012) According to this point of view it can be understood that the e-government formation will gradually grow stronger and will play an important role all over the globe.

In this study European capitals' municipalities' will be observed and analyzed from different aspects to see if they fit the standards of a citizen centric e-municipality. These web sites will first be observed and analyzed according to the usage of social media and secondly the adequacy in terms of the 4 – stage model by Baum & Maio (2000).

2. Application of the 4 – Stage model to e-municipalities and Ways to Move Forward to E-Democracy

Gartner defines e-government as the continuous optimization of service delivery, constituency participation and governance by transforming internal and external relationships through technology, the Internet and new media. They also present an e-government model with four stages. In their e-government model Gartner describes these stages as web presence, interaction, transaction and transformation. (Baum & Maio, 2000)

- **Web Presence:** The first stage is the basic form of e – government. At this level, the governments will share explanatory and descriptive information about themselves. Since this level is only about information sharing, only static information is provided through the government web sites.
- **Interaction:** At this stage the static web site switches to a simple interactive web site. Providing search functions or form downloading are examples of this interactivity. But still governmental services are not provided.
- **Transaction:** The main purpose of this level is to allow citizens to conduct all governmental services online. Services mentioned herein may include visa applications, filing tax renewing licenses, complete online transactions, etc.
- **Transformation:** While first three levels are mainly about digitizing the existing governmental services, transformation level is about changing the way governments' services. The transformation level involves both vertical (i.e. governments in different levels) and horizontal integration (i.e. different departments or governments in different locations). (Al-Khatib, 2009) This level ideally defines a portal that integrates all e-government services.

These e-transformation stages can be applied to every governmental organization. In this study, municipalities will be considered because of their closeness to the citizens. The assessment in ICT brings a great potential for governments such as municipalities to transform for more effective and efficient governmental services and for prove their citizen centric apprehension.

E-Municipality covers a number of mechanisms, which convert the paper procedures of a traditional municipal office into electronic processes, with the goal to create paperless office, to increase productivity and performance of municipalities. Its objective is to introduce transparency and accountability leading to better e-Government within municipalities. (Lee & Neff, 2004)

According to (Rasoulani, Bagheri, & Rasooli, 2012), Specifications and advantages of e-municipality are listed as:

- Excluding paper files and converting them to digital information
- Excluding sections relating to telephone operator in the organization
- Considering electronic communication and applying it in operator section
- Creating a place for exchanging views of citizens about performance of the mayor and municipality organization
- Paying duties for renovation, etc. through internet
- Excluding trends of municipality files and reducing physical traffic to the organization
- Informing activities of the municipality and affairs relating to city on a daily basis

E-municipality provides the advantage of high higher transparency and accountability rates which are mandatory for being a citizen centric governmental organization

It is a fact that efficient and modern public services stimulate economic growth so successfully implementation of e-government will lead the success for the Lisbon strategy, which aims to transform the EU into "the most competitive and dynamic knowledge –based economy in the world" by 2010. (Europa.eu, 2004) Thus analyzing the municipal transformation is extremely important to understand the level of development in Europe according to Lisbon process.

The 4-stage model's purpose is to sustain a citizen-centric e-government system. The municipalities are the closest governmental organization to the citizens thus status of European Capitals' municipalities in four stage model is listed as:

	Presence	Interaction	Transaction	Transformation
Netherlands	1	1	1	1
Turkey	1	1	1	0
Greece	1	1	1	0
Azerbaijan	0	0	0	0

Serbia	1	1	0	0
Germany	1	1	1	1
Switzerland	1	1	0	0
Slovakia	1	1	0	0
Romania	1	1	1	0
Hungary	1	1	0	0
Moldova	1	1	0	0
Belgium	1	1	0	0
Denmark	1	1	1	0
Republic of Ireland	1	1	1	0
Finland	1	1	1	0
Ukraine	1	1	1	0
Portugal	1	1	1	0
Slovenia	1	1	0	0
United Kingdom	1	1	1	1
Luxembourg	1	1	1	0
Spain	1	1	1	1
Monaco	1	1	0	0
Russia	1	1	1	1
Cyprus	1	1	1	0
Norway	1	1	0	0
France	1	1	1	0
Montenegro	1	1	0	0
Czech Republic	1	1	1	1
Republic of Kosovo	1	1	0	0
Iceland	1	1	1	0
Latvia	1	1	0	0
Italy	1	1	1	0
Bosnia and Herzegovina	1	1	0	0
Republic of Macedonia	1	1	1	0
Bulgaria	1	1	1	1
Sweden	1	1	1	0
Estonia	1	1	1	0
Georgia	1	1	0	0
Albania	1	1	0	0
Malta	1	1	0	0
Austria	1	1	1	1
Lithuania	1	1	1	1
Poland	1	1	0	0
Armenia	1	1	0	0
Croatia	1	1	0	0

Table 1. 4 - Stage Model Application to Metropolitan Municipalities in Turkey

(Siau & Long, 2005) suggested five different e-government stage models capturing the whole vision of e-government (using Meta-synthesis method). Their e-government stage model has the following five stages: web presence, interaction, transaction, transformation, and e-democracy.

As e-democracy is added as the fifth level to the four stages explained above it is defined as follows:

E-democracy: This is a long-term goal for e-government development. Governments attempt to improve participation and transparency by offering online participation tools such as online voting and surveys.

In order to achieve e-democracy as defined citizen participation must be obtained. At this point this participation takes the name of e-participation.

E-participation can be described as taking active role in political decision making via using the new information and communication technologies particularly the Internet. The citizen involvement with information and communication technologies can be understood as technology-mediated interaction between civil society and formal politics. The focal point of e-Participation is the citizens; the primary goal of this concept is increasing citizen participation in digital governance. (Sæbø, Rose, & Skiftenes, 2008)

According to (Macintosh, 2006) Macintosh (2006), e-Participation has three different levels: e-Enabling, e-Engaging and e-Empowerment. E-enabling level of e-participation is the process of creating access and citizen knowledge to the e-government services. E-engaging is allowing deeper contributions from a wider audience in order to support mainly deliberative debates on policy issues and the e-empowerment can be seen as active two-way participation.

To sustain e-enabling, e-engaging and e-empowerment for creating a proactive citizen in digital environment, these activities should be actualized (Sæbø, Rose, & Skiftenes, 2008)

- E-voting
- Online Political Discourse
- Online decision making
- E-activism
- E-consultation
- E-campaigning
- E-petitioning

Social media has a great potential to develop these activates successfully. Social media with the time and place independency, multi-way communication availability and digital structure, has great potential to start developing these activities. Using social media can sustain accountability and transparency thus e-democracy as the last phase of governmental e-transformation process can be considered.

United Nation's researches over years show that social media tools' usage in governmental bodies is increasing the e-participation rates. In UN e-government Survey 2012 (Nations, 2012), information and communication technologies potential of ensuring efficacy, transparency, responsiveness, participation and inclusion in the delivery of public services is emphasized. Many developing countries have adopted citizen inclusion as key in providing citizen centric governmental services. Governments have started using Web 2.0 to complete their digital transformation, such as Kazakhstan's blog usage for higher citizen participation. UN's (Nations, 2012) e-participation index of European countries is shown in Table2.

Rank	Country	Index Value	Rank	Country	Index Value
1	Netherlands	1,0000	22	Malta	0,2632
3	United Kingdom	0,9211	23	Liechtenstein	0,2368
5	Estonia	0,7632	23	Serbia	0,2368
5	Germany	0,7633	24	Latvia	0,2105
6	Finland	0,7368	24	Slovenia	0,2105
7	Norway	0,6842	24	Georgia	0,2105
7	Sweden	0,6842	25	Poland	0,1842
8	Russia Federation	0,6579	26	Iceland	0,1579
11	France	0,5789	26	Ukraine	0,1579
12	Denmark	0,5526	27	Ireland	0,1316
13	Lithuania	0,5243	27	Slovakia	0,1316
14	Spain	0,5000	27	TFYR Macedonia	0,1316
16	Hungary	0,4474	27	Azerbaijan	0,1316
17	Luxembourg	0,3947	27	Belgium	0,1316
17	Republic of Moldova	0,3947	28	Albania	0,1053
18	Austria	0,3684	29	Belarus	0,0789
18	Portugal	0,3684	29	Cyprus	0,0789
19	Greece	0,3421	29	Romania	0,0789
19	Switzerland	0,3421	30	Turkey	0,0526
20	Montenegro	0,3158	31	Bulgaria	0,0263

21	Croatia	0,2895	32	Armenia	0,0000
22	Czech Republic	0,2632	32	Bosnia and Herzegovina	0,0000
22	Italy	0,2632			

Table 2. UN's e-participation Index

Americas	0,2579
Asia	0,2738
Europe	0,3482
Oceania	0,1147
World	0,2225

Table 3. UN's Regional e-participation Rate

Developed	0,3990
Developing	0,2223
Least Developed	0,0428
Small Island Developing	0,0875

Table 4. UN's e-participation rates according to countries' development status

Municipalities are the closest governmental structure to the citizens so e-participation processes should be implemented urgently in this governmental body to sustain citizen-centric e-municipality structure. In order to develop efficient e-participation, the use of social media and Web 2.0 tools is must for the municipalities.

The tools that should use to sustain e-participation for e-municipalities can be listed as (Bonsón, Torres, Royo, & Flores, 2012):

- Blogs
- Wikis
- Social Networks
- Social Bookmarking Sites
- Widgets
- RSS

	Web 2.0		
	RSS	Blog	Widget
Amsterdam	1	0	1
Ankara	1	0	1
Athens	1	0	1
Baku	0	0	0
Belgrade	0	0	1
Berlin	1	0	1
Bern	1	0	0
Bratislava	1	0	1
Bucharest	0	0	1
Budapest	1	0	1
Chişinău	1	0	1
City of Brussels	1	0	1
Copenhagen	1	0	0
Dublin	1	0	0
Helsinki	1	0	1
Kiev	0	0	0
Lisbon	1	0	0
Ljubljana	1	0	1
London	1	1	1
Luxembourg City	1	0	1

	Web 2.0		
	RSS	Blog	Widget
Nicosia	1	0	1
Oslo	1	0	1
Paris	1	1	1
Podgorica	0	0	1
Prague	0	0	1
Prishtina	0	0	0
Reykjavik	0	0	1
Riga	1	0	1
Rome	0	0	0
Sarajevo	1	0	1
Skopje	0	0	1
Sofia	1	1	1
Stockholm	1	0	1
Tallinn	1	1	1
Tbilisi	0	0	1
Tirana	1	0	1
Valletta	0	0	1
Vienna	1	0	1
Vilnius	1	0	1
Warsaw	0	0	1

Madrid	1	0	1
Monaco	0	0	1
Moscow	0	0	1

Yerevan	1	1	0
Zagreb	1	0	1

Table 5. Usage of Web 2.0 technologies in Turkish metropolitan e-municipalities

61.3% of the European population uses the internet (MiniwattsMG, 2013; MiniwattsMG, 2013) and according to Mashable (2012) there are 223 million Facebook subscribers and Europeans actively use Twitter, Google+, LinkedIn, Badoo and Odnoklassniki among other social networking services. Social Media subscription and usage levels are expanding with a high pace and in Table 6 the presence of social media channels are shown.

	Social Networking Sites		
	Facebook	Twitter	Other
Amsterdam	1	1	0
Ankara	1	1	0
Athens	0	0	0
Baku	0	0	0
Belgrade	0	0	0
Berlin	1	0	0
Bern	1	1	0
Bratislava	1	1	1
Bucharest	0	0	0
Budapest	1	1	0
Chişinău	0	0	0
City of Brussels	1	1	1
Copenhagen	1	0	0
Dublin	1	1	0
Helsinki	0	0	0
Kiev	0	0	0
Lisbon	1	1	1
Ljubljana	1	0	1
London	1	1	1
Luxembourg City	1	1	0
Madrid	1	1	1
Monaco	1	0	0
Moscow	0	0	1

	Social Networking Sites		
	Facebook	Twitter	Other
Nicosia	1	0	0
Oslo	0	0	0
Paris	1	1	1
Podgorica	0	0	0
Prague	1	1	1
Prishtina	1	0	0
Reykjavik	1	0	1
Riga	0	1	0
Rome	1	1	1
Sarajevo	0	0	0
Skopje	1	0	0
Sofia	1	1	1
Stockholm	0	1	0
Tallinn	1	0	0
Tbilisi	0	0	0
Tirana	1	0	0
Valletta	0	0	0
Vienna	1	0	0
Vilnius	1	1	1
Warsaw	1	0	1
Yerevan	1	1	0
Zagreb	1	1	1

Table 6. Usage of social media tools in European e-municipalities

70% of the municipalities have an official Facebook page, and 40% of the European municipalities have an official Twitter account. %28.9 of the European Municipalities have no social network account to communicate with their citizens and only 13.3% of the municipalities have a blog.

3. Conclusion

In theory participation is the fundamental principle of democracy and more proactive citizens will create more democratic environment. The assessment in information and communication technologies, particularly Internet has generated a digital opportunity for governments to transform themselves into a more effective and efficient working organizations. This transformation, the e-transformation, has 5 stages: starting with the digital presence of the governmental and ending with a stage called e-democracy.

The opportunities came up with the ICT have created a chance for governments to prove their democracy and citizen centric government apprehension. As the last stage of e-transformation the e-democracy is about the citizen participation in digital environment. The e-democracy will bring accountability and transparency to the governmental bodies such as municipalities.

The municipalities are the closest governmental organizations to citizens thus municipalities' electronic transformation with e-democracy can be assumed as the right organization to start questioning the e-participation level.

According to Lisbon strategy, every European country should achieve successful e-governmental infrastructure. The vast majority of European countries have successfully marching through a successful e-government. It must be emphasized that effective usage of social media will create a great help for governments to sustain transparency and accountability; e-participation rates show that there are noteworthy number of European countries needs the help of social media.

"Citizens for governments versus the governments of citizens" is one of the oldest dilemmas of the human history. The e-participation would bring at least a chance for citizens to raise their voice however effective usage of social media can only provide an ignition for e-Participation.

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