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The Impact of ICT on Reinforcing Citizens' Role in Government Decision Making

Hosein Jafarkarimi^{1,2}, Alex Sim², Robab Saadatdoost^{2,3}, Jee Mei Hee⁴

¹Department of Computer, Damavand Branch, Islamic Azad University, Damavand, Iran.(Email:hoseinkarimi@gmail.com)

²Department of Information Systems, Faculty of Computing, Universiti Teknologi Malaysia, Malaysia.

³Department of Information Technology, Parand Branch, Islamic Azad University, Parand, Iran.

⁴Department of Educational Foundation and Social Science, Faculty of Education, Universiti Teknologi Malaysia, Malaysia.

Abstract— In this paper, we discuss the role of ICT and social media on democratic activities. Some overview of political systems are presented to show its impact on governments' decision making. At the end of research we suggest some recommendations to enhance the quality of online democratic activities.

 $\it Keywords$ — e-democracy, e-participation, e-government, ICT, Social Media

I. INTRODUCTION

Information and communication technologies bring a lot of changes in different aspects of our lives. The implementation of ICT in different environments brings different kinds of transformation to the environment. These transformations are observed in mailing systems, transportation, teaching and learning, communication, etc (Saadatdoost, Sim et al. 2011). Among these, ICT changed urban life not only technically but also philosophically and systematically (Beycioglu 2009). We highlight the change in citizens' participation in democratic activities and participation. In section two a short discussion on e-participation, e-government and e-democracy is presented by means of some cases from Middle East countries.

II. POLITICAL SYSTEMS

Political phenomena can be defined as comprising an open system that needs to cope with the problems generated by its exposure to be influenced by the environmental systems (Easton 1965). For instance, some point to the outcome of the industrial revolution and how it elicited ferocious responses in the form of communism and socialism. The ICTs are the most powerful environmental changes that strongly affect political systems and make it significantly important to be considered in political changes. Prognosis is that the information revolution will bring in its wake similar chasms between the information classes (Mahizhanan 1999) which need to be handled in a right way.

Here we will focus on the role of ICT and an ICT based democracy which is able to promote citizens political participation and consequently to minimize the information gap among them.

Direct democracy and representative democracy are two main kinds of democracy. In the representative democracy, people elect individual to represent them in government. While, in the direct democracy that is also known as pure democracy people make decisions directly instead of having representatives to decide for them. Although Choo (Choo 2002) (Based on the Dahl's standards for democratic process (Dahl 2000)) claim that direct democracy have more merits than representative democracy in terms of citizens' effective participation and control of agenda, until now the representative democracy has been adapted and prevailed in the world. The reason for this inconsistency was technical impossibility. In fact, there were not possible to collect the idea of all people from a society and it was not possible to make decisions based on everybody's vote. The rise of computers and Internet is able to remove this barrier and pave the way for the pure democracy. However the direct democracy may still be unachievable in short term, using ICT empower citizens to take part in decision making and political activities more easily.

III. THE ROLE OF ICT ON POLITICS

In the initial stages of works on the role of ICT in political changes, there were intellectuals who believed that ICT can pave the way for direct democracy while it can remove the barriers of communication that are the main obstacles in this kind of democracy (Toffler, Toffler et al. 1994), (Rheingold 1994), (Dyson 1998). In the other hand, there were other scholars who believed that it is better to improve existing political systems instead of changing them fundamentally (Norris 2003), (Poster 2001). Although Information and Communication Technologies alleviate the lack of technological infrastructure for direct democracy and help it to rise again, the question is whether world needs a direct democracy or the existing systems are more applicable.



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Based on a well study on online transformation for political activities which has been done by Nam (Nam 2011), it is possible to classify different ideas about the role of ICT in democratic changes into three categories. In first category, researchers believe that internet is not able to fundamentally cure the problem of participatory inequality and they reveal a "demographics-determined" gap in online political activities. Second are those who consider that technological potentials are being applied in order to attract new citizens to participate in democratic participation, but it is still causing disagreements about the inclusiveness and quality of participation. Third group of researchers say that ICT can make a new place for those who already taking part in offline modes of participation.

Researching the role of Internet on democratic activities, Nam (Nam 2011) state that "the internet, to some limited extent, can contribute to improving equality inclusiveness of political participation." He affirms that there are no much different between offline and online participants and it could be said that internet can alter the way that people take part in democratic activities instead of bringing new actors in to the stage. However, I believe this could not be generalized to all societies. In countries that the freedom of speech exists, this pattern might be right but in countries that government highly control democratic activities and activists will be under high level of risks, people will try to use online kinds of activities. They might use anonymous account on Facebook or twitter in order to express their ideas. These kinds of activities could be observed in Middle East countries in which government is not transparent and people are not allowed to say their thoughts. However, this could be expressed as those who want to participate in offline democratic activities will participate in online modes of democratic activities and when any of these kinds become problematic, the other kind of participation will rise.

He (Nam 2011) also mentioned another two statements including "The internet not only reinforces the existing pattern of offline political participation, but also mobilizes a new pattern for online political participation." and "Strong predictors for online political activity differ from those for offline political activity." This may or may not be true in other contexts which need more research to be proved.

Regardless of the kind of effect that ICT could have on political activities, there is an undeniable role of Internet based media on recent political changes like Arab Spring uprising. It could be said that Facebook and Twitter had a great effect on Arab Spring Uprising.

Dubai School of Government in its report on Arab Social Media Report (2011) state that near 90% of Tunisians and Egyptians that were surveyed in March 2011 were using Facebook to organize or raise the awareness of protest (Huang 2011). This report also adds that social media and its usage by activists had an important role in empowerment, mobilization, shaping opinions and influencing changes in Arabian countries (Mourtada and Salem 2011). In a short review of results of Arabian Spring it could be said that Egypt, Tunes, Yemen and Libya's regime has fallen. Bahrain and Syria's government are still struggling with oppositions. In Saudi Arabia, Jordan and Emirates also public benefited from these changes and Arabian Spring.

IV. E-PARTICIPATION

Participation of citizens in democratic activities via ICT based systems is called e-participation. Nowadays, it is possible to use digital facilities to pave the way for democratic participation. In order to measure the e-participation it is necessary to know different kinds of activities that can be done online. Gibson (Gibson, Lusoli et al. 2005) lists sending e-postcards or political jokes, downloading campaign software, forwarding an online petition or signing up for an e-news bulletin, etc. as examples of e-participations. Based on this definition, all the people who take part in any of these forms could be considered as e-participants in democratic activities. In order to promote citizens e-participation, it is necessary to raise the rate of activities in aforementioned forms.

Another important step in order to find necessary moves for implementation of ICT in order to promote the electronic participation of citizens in political activities is to find critical points in these kinds of participations. Different researches pinpoint several factors that affect the level of democratic activity. The first factor is the age of citizens. Previous studies show that younger people are keener to use new technologies (Coleman and Spiller 2003). Other researchers also emphasized the impact of age. Nam (Nam 2011) mentioned that age has different impacts on online and offline modes of democratic participation. While the younger people prefer to take part in online mode, older people are keen to use offline modes. The second factor which is observed to make different in patterns to contribute in democratic activities is gender. Researches show that male are more active in both online and offline political activities.



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The next factor is education. As it can be predicted, more educated people have more intention to use online mode. So it can be said that the education has a positive impact on e-participation. However, this pattern stays the same in offline participation. It means that those who are more educated take part in both kinds of political participation.

Fourth factor that is discovered by mentioned scholars is wealth. The impact of wealth is almost the same with the education. It means that as the income of the investigated people increase, the level of participation in both online and offline political activities rise. Although it can be said that the access to the infrastructure for online participation can play an important role, it does not affect the offline democratic participation. A question will be highlighted which is why people with more income, show more interest in political activities? The reason for this fact needs more researches in order to find the critical issues.

The fifth factor is the race which may not be the same all over the world. A case study in USA revealed that Caucasians are more active in political field than non-Caucasians. So in different points of the world, this pattern can exist with different races in different countries that may caused by the level of their awareness or other factors that needs to be highlighted.

In addition the access to internet and the amount of time spent by users online is another great determinant factor which has a positive effect and as it increases, the level of online participation also increases.

Regardless of factors that affect e-participation, it is important to see whether it is important or not? Can it really affect government decisions and make them responsible for whatever that is broadcast in digital media? In order to answer these questions, a quick look over some cases may be helpful.

In some countries, accessing many websites including Facebook, Twitter, and etc. is not possible by means of filtering (Tait 2006). The governments keeps fighting people who are using these websites and even arrest people who are using these social networks to express their ideas which are against national rules (BBC 2012). Even with all these crackdowns. Facebook still have its effect on people and even can cause some decision makers to act base on people's desire. As an example, during summer 2012, an earthquake took place in Northwest of Iran and 300 people were dead. After that disaster, governmental Medias were silent and did not broadcast that event. Using Facebook and other electronic social Medias, citizens broadcast this event themselves and right in first hours of the event, a lot of people went to donate blood and other stuffs in order to be sent to the inured and people who had lost their homes.

These helps were followed by strong criticism of government due to its response to the earthquake (Daftari 2012). Due to Internet users' activity in the net, government changed its way of handling the issue and governmental medias started to talk about it and other decision makers also changed their attitude and even some lawmakers stepped forward and criticized the way that Iranian president faced the issue. The president of Iran's "The crisis Parliament stated that management headquarters must take broader steps to alleviate these concerns" (Torbati 2012). All these things happened only by raising the issue in Facebook and blogs which shows that even when government deny the impact of internet on democratic participations, the act is really effective and cannot be omitted from considerations. E-participation may change the way democracy works in different countries and may affect differently.

V. E-GOVERNMENT AND E-DEMOCRACY

In the first step to know the impact of Internet on democracy, it is necessary to know exactly the concept of e-democracy and the effect of e-government on it. There are four groups of definitions for e-government and edemocracy. The first group defines e-government as "Utilizing the internet and the World Wide Web for delivering government information and services to citizens" (United Nations and administration 2001). Second idea is to identify it as a method for governments to apply new ICTs specially internet applications to provide citizens and businesses with more access to information and services in order to improve the quality of services and to promote democratic participation among them (Fang 2002). According to the view point of the third group, egovernment is a way to promote e-democracy. In the other hand there are some who believe that, promoting local services such as voter registration, public opinion polling and communication among elected representatives and their constituents can encourage the e-participation (Huang and Bwoma 2003). Fourth group of scholars present a wider concept of e-democracy in comparison with egovernment and believe that e-government and edemocracy are joint together in order to make e-democracy (Clift 2004). However according to all those scholars, defining an exact border between e-democracy and egovernment is difficult, it is obvious that the benefits of egovernment including improved services, cost reductions, redundancy decrease, revenue increment, transparency, accountability, and economic development (Jaeger 2005) is undeniable.



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According to Clift (Clift 2004), there are five goals for e-government that promote democracy and effective governance include the following:

- Better government decisions;
- Increased citizen trust in government.
- Increased government accountability and transparency.
- Ability to accommodate the public will in the information age.
- Involvement of stakeholders, including NGOs, Business, and interested citizens, in new ways of meeting public challenges.

However, with all these advantages there are some risks in applying ICT in democratic processes. For example, it can encourage populist participation (Millard 2007), it may reduce the possibility of collective action (Lipow and Seyd 1996) as well as eroding social capital and community ties (Galston 2002), and civil discussions (Streck 1997). On the other hand, e-democracy and e-government can be dismissed totally if they fail to achieve what advocate claim or if surface changes occur but the fundamentals of liberal democracy stay the same (Chadwick 2003). These facts illustrate that it is necessary to consider different factors while scholars want to recommend a model for promoting e-democracy.

Researches show that e-government which is a technological approach, does not guaranty e-democracy which is a social concept (Kardan and Sadeghiani 2011), (Blakeley and Matsuura 2001), (Cho 2008). Netchaeva (Netchaeva 2002) stated that there are two main purposes for e-government websites: (1) is to help citizens carry out their daily affairs using online services, and (2) is to provide the opportunity for citizens to participate in democratic processes. These two functions are completely different and should not be conflated. It is likely to say, obstacles policy-making main in are cultural, organizational and constitutional not only technological (Co-operation and Development 2003). Overcoming these barriers needs great effort, starting from finding key factors, indexes for measurement, critical issues, cultural improvement, proposing a model for how to increase citizens' participation and at last a long term plan of implementation for that model.

VI. CHALLENGES AND RECOMMENDATIONS

As it was stated before, there are several factors that are important and critical when e-democracy comes in.

It is very important to consider all those aspects in order to maximize the transparency of the government and also increase the trust of citizens on their rulers. In order to do that it is better to apply new systems to improve the existing systems instead of changing it fundamentally. One of possible ways is to rely more on e-government systems and increase the available features in it. In addition it is necessary to take a look at the critical factors which are stated before and find a way to remove existing barriers in the way. For example, as it was mentioned before, younger citizens are more interested in e-participation. It can be interpreted that younger people are more familiar with digital systems so they are able to use them more than older people. In addition, the impact of education can be the same and in order to take care of these facts, it is necessary to held up different courses for those groups which are not very familiar with the new technologies. These courses may need to be forced on the target groups by means of some laws or incentives.

The other thing that needs attention is the impact of wealth and access to internet. It can be said that these two are related to each other and when the income increases, the access to facilities will increases. In order to cover the problem of wealth for those who are not in high income classes, the government can provide public infrastructure to increase the access for all citizens. This can decrease the gap between wealthy and poor people in the e-participation.

The impact of race and gender needs more study and research, because these two factors are more depended on cultural facts rather than technological and educational matters. So these factors need different solutions in different scopes.

The recommendations can be listed as bellow:

- Educate the older people and citizens with lower level of education to be able to use online systems.
- Provide public and free infrastructures for all citizens to increase the access among them.
- Expand e-government systems in order to increase the time that people spend in the internet.
- Explore the cultural factors that affect the level of eparticipation in order to increase it.

VII. CONCLUSION

All the mentioned cases show that electronic media has its own effect on democracy and decision making in high levels in countries. Whether governments accept the role of new born Medias or not, these technologies are influencing societies; and more people are getting influences by them.



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Hence, it is essential to manage their role and consider them as a powerful tool which needs to be considered in order to reduce harmful effects and influences.

REFERENCES

- BBC (2012). "Four People were arreseted in Iran for Insulting officials in Facebook." BBC.
- [2] Beycioglu, K. (2009). "A cyberphilosophical issue in education: Unethical computer using behavior The case of prospective teachers." Computers & Damp: Education 53(2): 201-208.
- [3] Blakeley, C. J. and J. H. Matsuura (2001). "E-Government: Is E-Democracy Inevitable?" Alliance Law Group LLC.
- [4] Chadwick, A. (2003). "e-Government and e-democracy: a case for convergence?" Paper for Presentation at Public Policy in the E-Government Era (II).
- [5] Cho, I. (2008). Digital Democracy and Citizenship as the Democratic Political Systems for the Information Age.
- [6] Choo, I. (2002). "the evolution of democratic political systems in the information age: Digial Democracy
- [7] "Proceedings for the 46th annual meeting of ISSS.
- [8] Clift, S. (2004). "E-democracy, e-governance and public net-work." Open Source Jahrbuch: 317-329.
- [9] Co-operation, O. f. E. and Development (2003). Promise and problems of e-democracy: challenges of online citizen engagement, OFCD.
- [10] Coleman, S. and J. Spiller (2003). "Exploring new media effects on representative democracy." The journal of legislative studies 9(3): 1-16.
- [11] Daftari, L. (2012). "Iranians show little confidence in gov't response to devastating earthquakes." Retrieved 10/12/2012, 2012.
- [12] Dahl, R. (2000). "On democracy " Yale university press.
- [13] Dyson, E. (1998). Release 2.1: A design for living in the digital age, Broadway.
- [14] Easton, D. (1965). A framework for political analysis, Prentice-Hall.
- [15] Fang, Z. (2002). "E-Government in Digital Era: Concept, Practice, and Development." INformation Journal of The computer, The Internet and Mangement 10(2): 22.
- [16] Galston, W. A. (2002). "The impact of the Internet on civic life: An early assessment." governance. com: Democracy in the information age: 40-58.
- [17] Gibson, R. K., W. Lusoli, et al. (2005). "Online Participation in the UK: Testing a 'Contextualised' Model of Internet Effects1." The British Journal of Politics & International Relations 7(4): 561-583.
- [18] Huang, C. (2011). "Facebook and Twitter key to Arab Spring uprisings: report." The National. Abu Dhabi Media 6.
- [19] Huang, Z. and P. O. Bwoma (2003). "An overview of critical issues of E-government." Issues of Information Systems 4(1): 164-170.

- [20] Jaeger, P. T. (2005). "Deliberative democracy and the conceptual foundations of electronic government." Government Information Quarterly 22(4): 702-719.
- [21] Kardan, A. A. and A. Sadeghiani (2011). "Is e-government a way to e-democracy?: A longitudinal study of the Iranian situation." Government Information Quarterly 28(4): 466-473.
- [22] Lipow, A. and P. Seyd (1996). "The politics of anti-partyism." Parliamentary Affairs 49(2): 273.
- [23] Mahizhanan, A. (1999). "Smart cities: The Singapore case." Pergamon 16(1).
- [24] Millard, J. (2007). European EGovernment 2005-2007: Taking Stock of Good Practice and Progress Towards Implementation of the I2010 EGovernment Action Plan, September 2007, European Commission.
- [25] Mourtada, R. and F. Salem (2011). The Role of Social Media in Arab Women's Empowerment. Dubai, Dubai School of Government 1: 26.
- [26] Nam, T. (2011). "Dual effects of the internet on political activism: Reinforcing and mobilizing." Government Information Quarterly.
- [27] Netchaeva, I. (2002). "E-government and e-democracy." International Communication Gazette 64(5): 467.
- [28] Norris, P. (2003). "Revolution, what revolution? The Internet and US elections, 1992-2000." governance. com: Democracy in the information age: 59–80.
- [29] Poster, M. (2001). "Cyberdemocracy: Internet and the public sphere." Reading digital culture 4: 259-271.
- [30] Rheingold, H. (1994). The virtual community: Finding connection in a computerized world, Harvill Secker.
- [31] Saadatdoost, R., A. T. H. Sim, et al. (2011). Application of self organizing map for knowledge discovery based in higher education data. Research and Innovation in Information Systems (ICRIIS), 2011 International Conference on.
- [32] Streck, J. (1997). "Pulling the plug on electronic town meetings: Participatory democracy and the reality of the usenet." New Political Science: 17-46.
- [33] Tait, R. (2006) "Censorship fears rise as Iran blocks access to top websites."
- [34] Toffler, A., H. Toffler, et al. (1994). Creating a new civilization: The politics of the third wave, Progress & Freedom Foundation.
- [35] Torbati, Y. (2012). "Iran government criticized over earthquake response." reuters Retrieved 10/12/2012, 2012, from http://www.reuters.com/article/2012/08/13/us-iran-quakeidUSBRE87C0OW20120813.
- [36] United Nations and A. S. f. P. administration (2001). Assessing the Progress of the UN Member States. D. f. P. E. a. P. Administration, United Nations.