

Towards a sustainable e-Participation implementation model

This paper proposes a framework for an effective e-Participation model that can be suitable under certain socio-economic settings and applicable to any country. Most of such previous initiatives were experimental in nature and lacked in both public awareness and clearly defined expected outcomes.

A great majority of the existing frameworks are inadequate to address their universal applicability in countries with certain socio-economic and technological settings. Though there is so far no “one size fits all” strategy in implementing eGovernment, there are some essential common elements in the transformation. Therefore, this paper attempts to develop a singular sustainable model based on some theories and the lessons learned from existing e-Participation initiatives of developing and developed countries, so that the benefits of ICT can be maximized and greater participation be ensured.

The model is initially presumed to be sustainable since it is designed to fit under any socio-economic conditions of a country and can be initiated both by public (state) and private agencies. The study also reviews current research on e-Participation and assesses existing endeavours and challenges for the countries.



M. Sirajul Islam

Swedish Business School, Örebro University

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“ Identifying the characteristics of the domain of ‘citizens’ in e-Participation is an important issue. ”

1 Introduction

In political science, participation is the fundamental principle of democracy. It means to take part in collaborative activities for achieving shared and common goals (Wikipedia, 2007) within a certain platform facilitated by a certain leadership. E-Participation, which is the new means of participation and sub-set of e-governance and e-democracies, is based on modern ICT supported platform to facilitate the participation in government and governance. Brown (2004) points out that the influence of modern science on the democracy symbolizes and promotes liberal democratic values such as transparency, scepticism, and collective problem-solving, strengthens wealth and security and henceforth helps to make politics and policy more rational and effective.

The new version of participation has been intended to develop to transform traditional bureaucratic systems to participatory, autocratic to democratic, and exclusive to inclusive, empowering, open, transparent and trustworthy. However, many studies reveal that the use of new technologies may not lead to greater participation in organizations. Rather, it leads to increased informal communication amongst all existing individuals rather than creating new members (Komito, 2005). Also, it has been evident that ICT tools can not support every participatory technique which may require significant modifications of the traditional structure (Tambouris et al., 2007).

The word sustainability refers to the continuation of producing expected outputs without creating any disharmony and imbalance in a system. Contemporary studies show that ICT-based government systems raise barriers and in many instances create digital inequalities between the 'tech-haves' and 'tech-haves not' (EAG, 2005), of which one group reaps the benefits of IT-enabled accessibility by helping each other (Horrigan, 2005) and one cannot. This phenomenon will not support sustainable e-Participation in which the systems that are expected to provide certain outputs may be disrupted because of some serious factors being ignored during the plan, design and implementation phases. Therefore, a sustainable model for e-Participation may guide the decision makers in state and private levels to implement the systems in certain place and in certain time. Accordingly, adding values and innovations in the various phases of the model will help the stakeholders to reap the benefits of e-Democracy on continuous basis.

2 Methodology

Because of versatility of the selected topic, this paper is based on qualitative research, which is descriptive in nature, that seeks to understand the contemporary epistemology of e-Participation and possible solutions. The main research questions of this paper are i) what are the present nature of e-Participation frameworks and corresponding tools? and, ii) can a sustainable model be framed up and be applicable to any settings? To get the answers to these questions and to have insights of the subject matter, an extensive web based literature review has been conducted. The websites of the highly ranked e-participatory countries have also been examined. The study also examines available benchmarking tools and concepts on e-Participations and afterwards proposes a sustainable e-Participation model for the policy makers in both public and private sectors.

3 Literature Review

E-Participation, which has been shared with e-Democracy (Andersen, 2006), and encompassed by both supply and demand side stakeholders (UNKB, 2007), has been defined by Macintosh (2004) as 'knowledge intensive process. This is an interactive, collaborative, incremental and dynamic process which requires meaningful messages to be extracted from large assemblages of data produced by multiple stakeholders over time. Good e-service design and good e-Participation is complementary to each other (Grönlund, 2006). One of the objectives of the application of ICT in e-Participation is to motivate and engage wider citizens through diverse modes of technical and communicative skills to ensure broader participation in the policy process, real-time qualitative and accessible information, transparent and accountable governance.

Civic engagement through ICT is a demand of time since the recent phenomena of public participation in civic affairs and especially in democratic elections exhibits a declining trend which may cause a serious crisis in democratic nations (OECD, 2001). Side by side, widespread adoption of ICT in the public governance pushes decision makers to adopt electronic applications in the various segments of the governance seriously.

As far as e-Participation is concerned, it has been evident from OECD countries that such participation is more active in the smaller units of government, particularly at the local community level (Ahmed, 2006; Whyte et. al., 2006; Norris, 2006). However, such scenario of developed countries should not be generalized in the developing countries, where the reverse is the reality and the issue of digital divide is very much evident.

E-Participation is sometimes synonymously used as grassroots digital democracy, which emphasizes the understanding of democracy as participatory bottom-up-process (Fuchs, 2006). Here, **participatory is a self-managed system** (Banathy, 1996) that empowers people towards the decision making process through the mobilization of resources and capacities (Fuchs, 2006). Self-managed concept indicates that e-Democracy doesn't have to be offered and organized by the State and its formal structure. Rather, this is a spontaneous activity by an organization or group of people for a specific need in a specific time which evolves through the transformation of informal structure. However, in both cases a coordinated leadership is required for making the participation more effective.

Arnstein (1969) in her analysis points out that participation starts crossing over from eight rungs on the ladder, which are: (1) Manipulation, (2) Therapy, (3) Information, (4) Consultation, (5) Placation, (6) Partnership, (7) delegated power and (8) citizen control. Here, the first two steps are categorized under 'non-participation' or 'least citizen participation', which are not aimed to participate in a program but to educate the participants. Levels 3 and 4, which are collectively said as "tokenism", unimportantly allow citizens to hear and to be heard. The next higher level of tokenism, Placation, allows citizens to advise the decision makers who have continued right to decide. The last three steps of the ladder are the levels of 'citizen power' where the citizens actively and democratically exercise their power. As the ladder characterizes, to ensure effective participation, one can not jump to the upper level without crossing over the previous. It indicates that prior to high level of participation appropriate readiness is essential - otherwise this may result in partial or total failure.

Arnstein's (1969) insights on participation are viewed on urban planning. It provides an important contribution to conceptualize participation which can be related to e-Participation as well. Because of lack of ambitious policy initiatives, high level e-Participation in the decision making and planning process is not so easy and can not be done overnight (Andersen, 2006). Also, lack of research is in place to demonstrate the means of suitable technology to facilitate effective participation and identification of supply (public, private or combination of both initiatives) and demand side stakeholders under the various socio-economic settings of the countries. International Teledemocracy Centre of Napier University (2006) shows through analyzing a project carried out in central Scotland that web based tools enable and encourage more people to participate in local democracy. But on the contrary, another study (Islam et al., 2007) in Bangladesh reveals that web based dissemination channel is very much ineffective as the penetration rate of PC and internet is significantly low. In this case, where there is a little or no educational attainment combination of mobile phones, SMS, call centres and local resources could be more accessible and can help to narrow digital divide as well (WNDW, 2006). Therefore, for developing countries the term m-Democracy is more suitable than e-Democracy, where penetration rate of mobile phones is higher than the rate of internet access (Ahmed, 2006).

Identifying the characteristics of the domain of 'citizens' in e-Participation is an important issue. However, it is not so clear whether such participation is with only the general citizens of the country (though found in most cases) or in combination of other interested groups such as (1) Formal policies, (2) Civil Society and (3) Administration (Grönlund, 2006). It is assumed that the provision of physical, political, procedural and electronic architecture along with continual vigilance of rigorous data protection measures in e-Participation is a must (Acland, 2003), but there is not so many literature showing how to couple and shape them up in a single framework. This is a kind of barrier towards conceptualizing such participation. However, without understanding and identifying the nature of barriers we can not formulate an effective framework. Norris (2006), in his first nationwide survey of e-Democracy among U.S. local governments, identifies some barriers to e-Participation. These are: (1) lack of funding, (2) lack of technology staff, (3) upgrade technology, (4) citizen demand, (5) demand by elected officials, (6) security issues, (7) concern about digital divide, (8) privacy issues, (9) technology expertise, (10) concern about unrepresentative groups, (11) participation and (12) support by elected officials. Ahmed (2006) argues that civic interest towards e-Participation is declining because of intensive focus on 'e' accessibility issues rather than e-enabling existing social inclusion policies like health of e-health and education of e-education. Therefore, publicizing all aspects and inclusions of e-Participation should be given more emphasis by the supply side.

Above all, it is important to understand the determining factors for participation. The failure to understand the facts of participatory behaviours and expectations may lead to surprise among the actors of participation, which is very evident in the context of political participation (Ferejohn, 2005). However, as the participation evolves through the practice in a specific situation, therefore it is not possible to develop a strong methodological root. This is also cumbersome to have a coherent view of participation without a grounded experience (Rifkin & Kangere, 2002). On the other hand, grounded experience can not be realized without identifying the associated variables. Fowler et al. (2008) identify a good number of variables listed under the four categories which are more pertinent for political participation. These are: Demographic (e.g. gender, race, marital status, income, occupational prestige, and home ownership), Attitudinal and behavioural (e.g. interest in the campaign, access to political information, general political knowledge, strength of partisanship, feelings of civic duty, internal and external efficacy, personal skill acquisition, altruism, and patience), Social (e.g. interpersonal communication, social identification, group consciousness, socialization, political disagreement, and social capital) and Institutional (e.g. contact from political organizations, civic education, and barriers to registration). These numerous variations suggest that there should have certain implementation model on participation that can easily be customized and be replicable in a specific situation.

4 Benchmark Analysis to Understand e-Participation Readiness

Benchmarking studies help policy makers to compare the standing of their country in terms of others and assist them to adopt strategic decision-making on e-Democracy and e-Governance at large. This also provides civil society a accountability tool for the resources they have invested on (Heeks, 2006). Though currently available benchmarking reports are mainly concerned with e-public services, not e-Participation, however, these may give some clues on the standing of countries' readiness for e-Participation.

Among a number of ICT related indexes initiated by numbers of organizations, there have been only three benchmarking tools based on certain factors and indicators to evaluate yearly status of countries and set them under a certain rank order. **Center for Public Policy (CPC) of Brown University** assesses, according to its recently published report, 1,687 national government websites of the 198 nations around the world. CPC evaluated websites of each country, even the non-English sites, to have full sense of presence of various features dealing with information availability, service delivery, public access (CPP, 2007). In addition, the **UN Global EGovernment Survey (DESA, 2007)** publishes a yearly comparative ranking of the 191 member countries of the UN according to two primary indicators: i) the state of eGovernment readiness; and ii) the extent of e-Participation as constructed on quantitative composite index of eGovernment readiness based on website assessment; telecommunication infrastructure and human resource endowment. The countries are ranked through the survey according to a numerical classification corresponding to the five stages of presence: Emerging, Enhanced, Interactive, Transactional and Networked. Based on this survey, the **United Nations eGovernment Readiness Knowledge Base (UNKB)** has further developed a benchmarking tool with a feature which provides a comparative assessment of the monitoring progress of country level readiness during the period from 2003 to 2005 (UNKB, 2007). **Waseda University eGovernment Ranking (2007)** is the first Asian institute that develops a global eGovernment measurement tool which in its survey includes only 32 countries. On the contrary to depend mainly on websites as has been commonly seen in the previous efforts, the Waseda eGovernment Ranking uses comprehensive indicators and parameters which include network preparedness, required interface functioning applications, management optimization, homepage situation, and the introduction of Chief Information Officers (CIO) (Wasida, 2007). However, this survey lacks covering many countries of the world and therefore may not be rational to generalize the result that would indicate overall global trends. **Economist Intelligence Unit (EIU)** (2005) in co-operation with the IBM Institute for Business Value, develops indexes based on qualitative and quantitative factors. This index though is not directly concerned with eGovernment but plays a significant role in understanding e-readiness status of the 65 countries of the world. **Accenture eGovernment Maturity report (2007)** focuses on 22 countries of which mostly are drawn from developed countries. The report quantitatively and qualitatively investigates overall maturity of the countries in the contexts of service and customer service. The report of 2005 evaluates 177 government services across 12 major service sectors. These are agriculture; defense; eDemocracy; education; human services; immigration, justice and public safety; participation; postal; procurement; regulation; revenue; and transport (Accenture, 2007). However, since the methodology of this maturity report is mainly based on developed countries, therefore the results can not be generalized to rest of the world. Table 1 summarizes the major e-governance related indexes and their comparative status and corresponding results for 2005.

Table 1: Summary and comparison of available Ranking methods and Top 10 countries in year 2005

Rank	Waseda University	Brown University	UN E-gov Readiness Index	UN E-Participation Index	EIU E-readiness index
1	USA	Taiwan	USA	UK	Denmark
2	Canada	Singapore	Denmark	Singapore	USA
3	Singapore	USA	Sweden	USA	Sweden
4	Finland	Hong Kong	UK	Canada	Switzerland
5	Sweden	China	South Korea	South Korea	UK
6	Australia	Canada	Australia	New Zealand	Hong Kong, Finland
7	Japan	Germany	Singapore	Denmark	
8	Hong Kong	Australia	Canada	Mexico	Netherlands
9	Malaysia	Ireland	Finland	Australia	Norway
10	UK	Vatican	Norway	Netherlands	Australia
Indicators	Network preparedness, Interface functioning applications, Management optimization, Homepage situation, and the introduction of CIO	Websites dealing with Information availability, Service delivery, Public access	Quantitative indicators: Website assessment; Telecommunication infrastructure, Human resource endowment. E-Participation Index not included.	Qualitative indicators: Supply side assessment of E-information, E-consultation, E-decision making. Questionnaires having 0-4 scale each.	Connectivity, Business environment, Consumer and business adoption, Legal and policy environment, Social and cultural environment, Supporting E-services.
Country Coverage	32	198	191		65

Table 1 demonstrates that there is a less discrepancy in the list of top 10 countries although the indicators of indexes are not similar. Countries like USA, Canada, Singapore, Sweden, Australia, Hong Kong, UK and South Korea are almost common in all the ranking tools. The UN yearly eGovernment survey (DESA, 2007) evaluates quantitatively, and therefore this does not provide better information and services of a nation which needs normative or qualitative judgments on the issues of veracity, accessibility, or usability (Curtin, 2006).

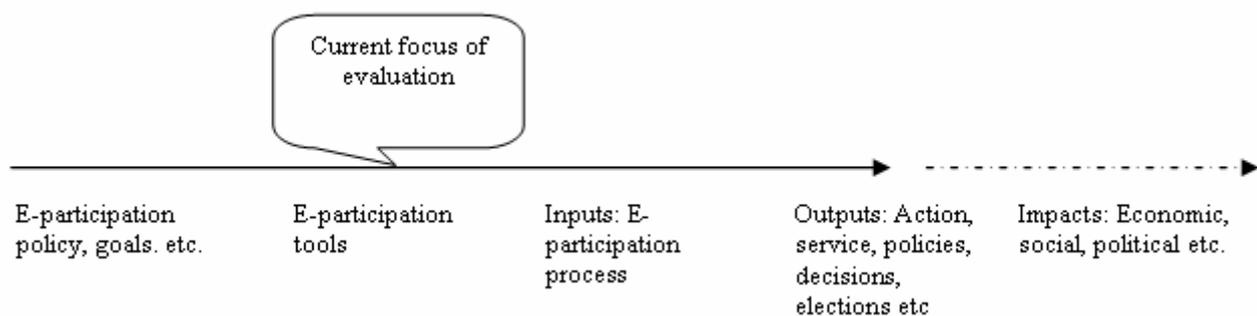


Figure 1: Broadened spectrum of e-participation evaluation. Source: UN workshop on e-Participation and e-Government, Budapest, Hungary, July 2006

In addition, the e-Participation Index of UN is not supplemented with a quantitative index and focuses only on the supply side e-Participation which should be broadened on the both sides starting from policy to impact analysis (Curtin, 2006) as given in figure 1. The above analysis suggests that the indexes and their corresponding indicators would contribute to important direction towards framing up a sustainable e-Participation model.

5 e-Participation Models and Implementation Process

The term e-Participation is quite new as a product of e-governance and e-Democracy programs, and therefore the availability of the universally accepted framework for such is very limited in numbers (Rifkin & Kangere, 2002). Ahmed (2003) argues that the concept e-Participation is still experimental in nature and the expected outputs are yet to be clearly defined. However, the following discussion tries to conceptualize some notable frameworks on the various aspects of participation.

OECD's (2001) framework on e-Participation is widely known and is constituted by i) Information, ii) Consultation and iii) Active participation. Macintosh (2004) on the basis of this dimension develops three levels of e-Participation: (1) e-enabling, (2) e-engaging and (3) e-empowering. Here in e-empowering, citizens do not only participate actively but extend support to such initiatives and subsequently emerge as important facilitators of providing bottom-up ideas in the political process. UN e-Participation framework (DESA, 2007) is based on the similar dimension with the names of i) e-information, ii) e-consultation and iii) e-decision making. The relationship of these thoughts is summarized in figure 2.

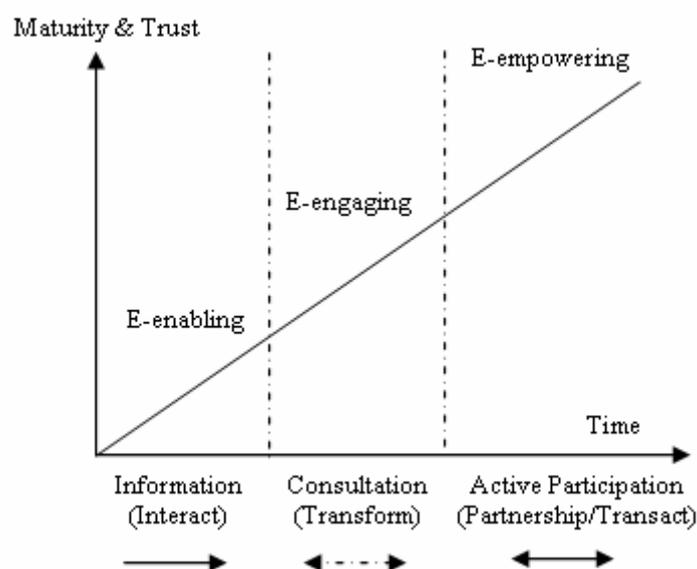


Figure 2: Integrated dimension of e-Participation

Here, 'Information' is the first level 'active but one-way' initiative that enables citizen to access the information passively. This can be done through static fact sheets and websites. 'Consultation' and 'Active participation' have a two-way relationship. In the Consultation level, the government sets the questions and manages the process and citizens are encouraged to engage in contributing their views on a particular issue through online public comment, chat rooms, focus groups, surveys and public meetings.

Under 'Active participation', citizens are empowered by actively and independently participating in the policy-making process of the government based on a partnership. This dimension only exhibits the level of e-Participation over time and possesses positive correlation between a certain level and maturity. However, it doesn't provide guidelines to the country to build e-Participation architecture irrespective to the level of standing over time. The understanding of such levels of participation is derived along with the overall eGovernment progress of a country.

Tambouris et al. (2007) propose (Figure 3) a "Five-stage top-down and bottom-up" framework which helps in scoping e-Participation that focuses on the stages, starting from the Democratic process (Top) of a country until Technology (Down). Here, the democratic layer, as from top-down, includes all the democratic process of a country and acts as a catalyst by facilitating communication between policy makers (G2C) and the public (G2C) and between themselves (C2C and G2G). Further more, participatory techniques are used in order to engage and involve all the democratic stakeholders and address the issue of carrying out participatory processes.

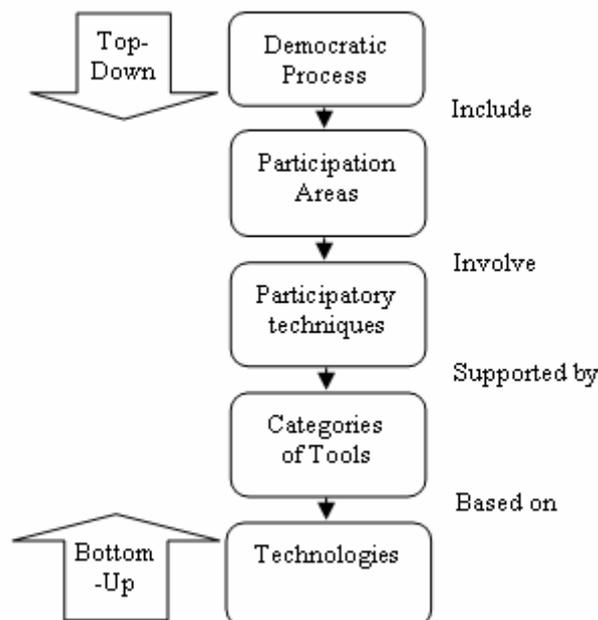


Figure 3: Five-stage top-down and bottom-up e-participation framework (Tambouris et al., 2007)

Appropriate ICT tools as in the next phase can be used to enhance and support particular e-Participation techniques upon a certain level of modification from the traditional sense of (offline) participation. In case of bottom-up approach, ICT tools can act proactively and lead to introduce new participatory techniques and subsequently broaden the participation (Tambouris et al., 2007). This observation is quite evident in a developing and democratic country like Bangladesh, where the use of new ICT tools like mobile phone in the grassroots level pushes up to introduce a new sense of participation. Islam et al. (2008) study on the agricultural market information services of Bangladesh shows that while the PC penetration is less than 3%, internet penetration is less than one-tenth of that. On the other hand, records on December 2007 indicate that there is one mobile phone per four persons, compared to one per seven persons in 2006 which is expected to be about one per three persons by 2009. Clearly, using the pattern of mobile phones in Bangladesh negates the positive correlation between poverty and digital access. The amazing growth in mobile telephony in Bangladesh offers numerous value added services. There, people conveniently exchange and cast their opinions on various issues mostly initiated by the private sector and particularly by the newspapers and private satellite TV channels.

The top-down approach is rationally applicable to the democratic developed countries where the role of ICT is just supportive. This also indicates that the effective use of this framework depends on the political structure of a country and may not be suitable for those without a democratic environment.

The Spidergram framework by Rifkin et al. (1988) helps to understand participation as a process and assess the changes and progress of programmes over time. Rifkin and her colleagues developed this framework for measuring community participation in health related programs and has been used in many countries so far. This tool describes changes in the process by plotting the situation along five critical factors in participation: needs assessment, leadership, organization, management and resource mobilization. All these factors in this tool are joined in the middle to give a holistic view of progress of the programme, but they do not tell how to implement the program.

Phang & Kankanhalli (2007) propose a framework (Table 2) of ICT exploitation for participation which is based on setting the four objectives. In addition, the framework shows that appropriate techniques and corresponding ICT tools are critical to achieve the objectives. However, this framework doesn't address the socio-economic, technical and others issues that are required prior to setting up any objectives. It also lacks explaining stakeholders and the nature of sequential stages, as seen in other initiatives. Moreover, the framework focuses more on web based tools that may not be easily and widely available in the developing countries.

Table 2: A framework of ICT exploitation for e-Participation proposed by Phang & Kankanhalli (2007)

<i>E-Participation objectives</i>	Information Exchange (Interactive avenue)	Education & support building (Formal participants selection & engagement)	Decision making Supplements (Participation processes)	Input probing (Unbiased data collection mechanisms)
↓				
<i>ICT tools that can support the participatory techniques appropriately</i>	Web portal with Online discussion forum, Online chat	Electronic profiling, Online chat, Discussion forum with login feature, Teleconferencing, Videoconferencing, E-mail	Group support systems with process restrictiveness feature, Online pair-wise structured survey, Visualization tools	Online survey questionnaire, Web comment form, Data analysis tools

It is now apparent that most of the frameworks are on evolutionary in nature and do not provide a clear and complete roadmap to the policy makers of public and private organizations to proceed with adopting ICT based participation in their e-governance and e-Democracy implementation programs. Most of the frameworks are inadequate to address their universal applicability in countries having certain socio-economic and technological settings. Therefore, in consideration to the above multifaceted concepts and findings, this paper proposes the following (Figure 4) e-Participation model (or 7Ps model in brief). The model is initially presumed to be sustainable since it is designed to fit under any socio-economic conditions of a country and can be initiated both by public (state) and private agencies. The proposed model has seven phases, starting from the down to top, and can be explained, compared and related in any of the three segments of the framework stated in Figure 2. The explanations of each phases of this model are given in Figure 4.

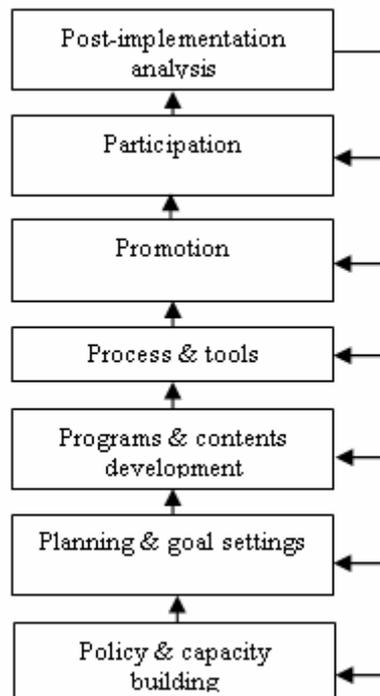


Figure 4: 7Ps Sustainable E-participation implementation model

Policy and capacity building:

This phase is the most fundamental base for initiating any project to be sustained for a long period. Without a concrete national planning and policy agenda and a strong but visionary leadership and political consciousness, nothing is achievable in a country. The national policy agenda should be addressed and reformed in accordance to the '5Ws' and '2Hs' (GoJ, 2005), that is: what, why, whom, when, where, how and how much under the considerations of the country's socio-economic and technological realities. This should particularly include the sources and allocation of funds both for short and long-term.

Development of techno-skills through vocational and formal education, building sustainable telecommunication infrastructure including hardware, software, websites, mobile phone based services and networking and making them available in both rural and urban community through various public and private agencies, institutional readiness in both supply and demand sides, formulating appropriate legislations and transparent applications, promoting ICT research initiatives and awareness and above all strengthening democratic processes and political conscious from the both directions of central and local government are must prior to adopting any e-initiative in a country.

Notably, this may lead to confusion as how a private agency or group of ordinary people can follow this phase, since they do not have direct control over the capacity building process. Here the role of such actors is reactive to a certain situation and can infuse bargaining power over the governmental decision making process. They may advocate for a policy and capacity building conducive for a certain participation process. However, in some instances, policy and capacity building may be viewed flexibly if there is a participatory initiative being carried out by a non-governmental organization or by a group of people within their boundary and scope of activities.

Planning and goal settings:

The '5Ws' and '2Hs' should also be addressed here but giving particular focus on selecting target audience and to ensure how to make effective participation in the decision making process. This phase also provokes that e-Participation programmes emerge from overall e-governance initiatives, and can not be launched in isolation.

Program and content development:

The development of a program and its corresponding contents must be designed in a way so that this can be considered appropriate to the focused group and accordingly be accessible through easily and widely available tools.

Process and tools:

This phase determines how the programs and contents should be used. Different tools may be used for achieving different goals through different mechanisms. This also suggests that not all goals are achievable through a single tool or channel and mechanisms. Here, the channels could be webs, mobile phones, digital televisions, call centres, kiosks, computers, PDAs and any future e-channel that would be easily and widely available to the targeted audience. Above all, the socio-technical barriers of the participants must be kept in mind while designing the process to access the tools and contents.

Promotion:

Many projects have failed because of inappropriate awareness on the supply and the demand sides. Therefore, steps should be taken to make both sides aware of the mission of the initiative and how the initiative will provide benefits to the stakeholders. Though such initiative is mainly electronic in nature, the awareness programs should be carried out in offline (e.g. newspaper, leaflets) and online (e.g. email, facebook etc.) contexts. It is important to note in this phase that the promotional campaign is more critical at the local community or rural level than to the upper or urban level.

Participation:

This is a final implementation level where participation takes place depending on the stage of evolution of adopting the e-Participation program. As discussed under Figure 2 this can generally be of one-way at the initial level, changing the direction of communication as it matures over time and practices. Here, association

of rewards in the participation process on the both sides is needed in order to keep the motivational level of the participants sustained. Furthermore, the involvement of dynamic moderators is critical to the success at this level.

Post-implementation analysis:

Functionality of a system can not be sustained without the presence of an effective feedback mechanism and impact analysis and subsequently incorporating the results in order to correct and upgrade the service. As the model exhibits, the feedback and corrective measure in each phase contribute to the overall quality of the systems. However, feedback originating from this level and entering the first phase of the model may not provide immediate corrective actions, since this structure is long term in nature. In addition, according to the proposed model, the more we proceed to the upper parts of the ladder, the less likely need to adopt corrective measures.

6 Conclusion

Toffler et al. (1995) in their famous book 'Creating a New Civilization: The Politics of the Third Wave' set out the transition of civilization from a First Wave (agrarian) society into a Second Wave (industrial) and currently into a knowledge-based Third Wave society. The new possibility of meaningful participation has appeared because of the emerging technologies and changes in the society (Redburn et al., 2003). The success of such society requires effective participation through decentralized modern communication networks like internet (Stiglitz, 2002). However, an effective participation requires an effective framework with concrete guidelines. In fact, this paper finds the lack of clear guidelines that direct and implement a participatory process effectively. The proposed model therefore is the brainchild of existing e-Participation concepts and practices. Since the concepts of such topic are quite new and the speed of innovation is endless, therefore this paper suggests for further empirical and qualitative researches. This will help to examine the interoperability and sustainability of the proposed model and lead to improvement if needed over time.

References

- Accenture eGovernment Maturity Report (2007). Retrieved on August 10 from http://www.accenture.com/xdoc/ca/locations/canada/insights/studies/leadership_cust.pdf
- Acland, A. (2003). E-Participation and the Future of Democracy, Dialogue by Design. Retrieved on August 10, 2007 from www.dialoguebydesign.com
- Ahmed, N. (2006). An Anthology of E-Participation Models E-Participation and EGovernment: Understanding the Present and Creating the Future. Chapter V, Department of Economic and Social Affairs, Division for Public Administration and Development Management, Report of the Ad Hoc Expert Group Meeting at Budapest, Hungary, United Nations, New York, USA.
- Andersen, K. V. (2006). e-Participation Management: Policy-input from DEMO-Net. Copenhagen Business School, Department of Informatics, Exploiting the Knowledge Economy: Issues, Applications, Case Studies, Paul Cunningham and Miriam Cunningham (Eds), IOS Press, Amsterdam.
- Arnstein, S. R. (1969). Ladder of citizen participation. Duncan lithgow's Projects, Libertia peregrinans, Otari-Wilton's Bush, Wellington, NZ. Retrieved on August 10, 2007 from <http://lithgow-schmidt.dk/sherry-arnstein/ladder-of-citizen-participation.html>
- Banathy, Bela H. (1996). Designing Social Systems in a Changing World. New York, Plenum.
- Brown, M. B. (2004). The Political Philosophy of Science Policy. Essay Review of Philip Kitcher's Science, Truth, and Democracy, in *Minerva: A Review of Science, Learning and Policy* 42, no. 1.
- Center for Public Policy (2007). Global EGovernment 2007. Brown University, USA. Retrieved on August 10, 2007 from <http://www.insidepolitics.org/egovtdata.html>
- Curtin G.G. (2006). Issues and Challenges: Global EGovernment/E-Participation, Models, Measurement and Methodology. E-Participation and EGovernment: Understanding the Present and Creating the Future, Chapter V, Department of Economic and Social Affairs, Division for Public Administration and Development Management, Report of the Ad Hoc Expert Group Meeting at Budapest, Hungary, United Nations, New York, USA.

- EAG (2005). e-Inclusion: New Challenges and Policy Recommendations. eEurope Advisory Group, IDABC, Brussels. Retrieved on August 10, 2007 from <http://europa.eu.int/idabc/egovo>
- Economist Intelligence Unit –EIU (2005). The 2005 e-readiness rankings. The Economist, Retrived on August 10, 2007 from <http://www.eiu.com/2005eReadinessRankings>
- Ferejohn J. (2005). Participation and Democracy. Stanford University, USA.
- Fowler, J. H., Baker, L.A., Dawes C. T. (2008). Genetic Variation in Political Participation. American Political Science Review, Vol. 102, No. 2
- Fuchs, C. (2006). eParticipation Research: A Case Study on Political Online Debate in Austria. ICT&S Center, Austria, Paper No. 1.
- GoJ - Government of Japan (2005). Business Continuity Guidelines. Reducing the Impact of Disasters and Improving Responses to Disasters by Japanese Companies, Central Disaster Management Council, Cabinet Office, Government of Japan, ed 1st.
- Grönlund, Ä. (2006). E-Participation and eGovernment, EGov'06 PhD Colloquium, DEMO-net, European Commission, Krakow, Poland.
- Heeks, R. (2006). Understanding and Measuring EGovernment: International Benchmarking Studies. E-Participation and EGovernment: Understanding the Present and Creating the Future, Chapter V, Department of Economic and Social Affairs, Division for Public Administration and Development Management, Report of the Ad Hoc Expert Group Meeting at Budapest, Hungary, United Nations, New York, USA.
- Horrigan, J.B. (2005). On Demand Citizens: EGovernment at High Speed. Pew Internet & American Life Project, Washington DC, USA.
- Islam, M. S. & Grönlund, Ä. (2007). Agriculture Market Information E-service in Bangladesh: A stakeholder oriented case analysis. In Wimmer et al, proceedings of EGOV2007, Regensburg , Germany.
- Islam, M.S. & Al-Awadhi, S. (2008). Sustainable Rural IS Implementation Process for Developing Countries: Case Study of Agriculture Market Information Services (AMIS) in Bangladesh. Submitted to 3rd IEEE/ACM International Conference on Information and Communication Technologies and Development (ICTD2009), Qatar, 2008.
- Komito, L. (2005), e-Participation and Governance: Widening the net. The Electronic Journal of eGovernment Volume 3, Issue 1, Academic Conferences Ltd, pp 39-48.
- Macintosh, A. (2004). Characterizing E-Participation in Policy-Making. In proceedings of the 37th Hawaii International Conference on System Sciences. International Teledemocracy Centre, Napier University, UK
- Macintosh, A. (2006). eParticipation in Policy-making: the Research and the Challenges. Exploiting the Knowledge Economy: Issues, Applications, Case Studies Paul Cunningham and Miriam Cunningham (Eds) IOS Press, Amsterdam.
- Norris, D. F. (2006). E-Democracy and E-Participation among Local Governments in the United States. E-Participation and EGovernment: Understanding the Present and Creating the Future, Chapter VII, Department of Economic and Social Affairs, Division for Public Administration and Development Management, Report of the Ad Hoc Expert Group Meeting at Budapest, Hungary, United Nations, New York, USA
- Organization for Economic Co-operation and Development –OECD (2001). Citizens as partners: OECD handbook on information. Consultation and public participation in policy-making, OECD, Paris.
- Phang C. W. & Kankanhalli, A. (2007). A Framework of ICT Exploitation for E-Participation Initiatives. Department of Information Systems, School of Computing, National University of Singapore, Accepted for publication in Communications of the ACM , Retrieved on August 10, 2007 from www.comp.nus.edu.sg/~atreji/papers/ICT-epart.pdf
- Redburn, F.S. & Buss, T. (2003). Modernizing Democracy, National Academy of Public Administration, USA.
- Rifkin S.,B. & Kangere M. (2002). What is Participation?. CBR : a participatory strategy in Africa, Chapter 3, Hartley, Sally, Ed, London, Centre for International Child Health (CICH), Centre for International Child Health (CICH), London, UK.
- Rifkin, S.B., Muller, F., Bichmann, W. (1988). Primary health care: on measuring participation. Social Science and Medicine Vol. 26, No.9.

- Stiglitz, J. E. (2002). Participation and Development: Perspectives from the comprehensive Development Paradigm, Review of Development Economics, No. 6(2), Blackwell Publishers Ltd.
- Tambouris E., Liotas, N., Kaliviotis, D., Tarabanis K., A (2007). Framework for Scoping eParticipation. In the Proceedings of the 8th Annual International Digital Government Research Conference. Philadelphia, USA.
- Toffler, A. & Toffler, H. (1995). Creating a new civilization: the politics of the Third Wave. Turner Publications, USA.
- UN Global EGovernment Readiness Report (2005). From EGovernment to E-inclusion. Department of Economic and Social Affairs (DESA), Division for Public Administration and Development Management, UNPAN/2005/14, 2007. Retrieved on August 10, 2007 from <http://www.unpan.org/dpepa-egovernment%20readiness%20report.asp>
- UNKB -United Nations EGovernment Readiness Knowledge Base (2007). Overview: E-Participation. Retrieved on August 10, 2007 from http://www.unpan.org/egovkb/egovernment_overview/eparticipation.htm
- Waseda University Institute of EGovernment Media Advisory (2007). World EGovernment Ranking. Waseda University, Tokyo. Retrieved from August 10, 2007 from http://www.obi.giti.waseda.ac.jp/e_gov/3rd_rankings_en.pdf
- Whyte, A., Macintosh, A., McKay-Hubbard A., Shell D. (2006). Towards an e-Democracy Model for Communities. International Teledemocracy Centre, Napier University, UK, Retrieved on August 2007 from itc.napier.ac.uk/ITC/documents/e-community_council_D2_Model_v2_2.pdf
- Wikipedia (2007). E-Participation. Retrieved on August 2007 from <http://en.wikipedia.org/wiki/E-Participation>
- WNDW Production Team (2006). Wireless Networking for the Developing World. Lulu.com publisher. Retrieved on August 10, 2007 from <http://us.wndw.net/download.html>

Author

M. Sirajul Islam

PhD student

Swedish Business School, Örebro University, Sweden

siraj2k@yahoo.com

<http://www.epractice.eu/people/siraj>



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