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Department of Economic and Social Affairs
Division for Public Administration and Development Management

E-Participation and E-Government: Understanding the Present and Creating the Future

Report of the Ad Hoc Expert Group Meeting
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DESA

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Preface

An important role of the United Nations is to support Member States' efforts to build effective ICT strategies and programmes to achieve development goals, in general, and enhance and support citizen inclusion and empowerment, in particular. In this context, the UN promotes information-sharing, best practices, and lessons learned about e-participation and e-government endeavours around the world.

Effective e-participation and e-government requires collective action by national governments, the private sector and the civil society to create new initiatives for ICT-led development and to ensure that everybody, regardless of socio-economic background, is given an equitable playing field in the formation of the information society. The international organizations and the donor community on its part need to support an inclusive mode of governance so that all citizens of a state have equal access to opportunity.

As part of its ongoing effort, the United Nations, through its Division for Public Administration (DPADM), DESA organized a Meeting on *E-participation and E-government: Understanding the Present and Creating the Future* to assess issues and challenges facing countries as they advance in developing their ICT for development and e-government programmes. The Meeting provided an opportunity to review e-participation and e-government experiences, determine the strengths and weaknesses of the initiatives, and search for options and methodologies that may support a more inclusive e-government approach for local, national, regional and international stakeholders who are striving to harness the potential of ICTs for inclusion, democracy and development.

It is hoped that the findings in this Final Report of the Meeting will further contribute to advancing innovative approaches to e-participation and e-government development to ensure that new technologies become an effective tool in building an inclusive society for the future.

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The Final Report of the Meeting was prepared by Ms. Seema Hafeez, KMB/DPADM/UNDESA and has incorporated all the papers presented at the meeting.

The contribution of all the participants and presenters, as well as the support of the Government of the United Kingdom, Office of the Deputy Prime Minister, which hosted the simultaneous event entitled the 'International Symposium on e-Democracy' from 25-28 July 2006, are greatly appreciated.

Contents

PART III: THE CITIZEN'S PERSPECTIVE AND OTHER SPECIAL ISSUES

Overview

The information revolution has ushered in an era where the capabilities for participating in all aspects of the economy and society are changing with the diffusion of modern information and communication technologies (ICTs). Also in the industrialized world, countries are finding that the initial use of ICTs to provide timely and relevant public services has led to a renewed interest on the part of citizens in the uptake of government services. In the developing world, where access to networks is less widely diffused, there are a growing number of experiments with ICT applications to support governance activities.

However, access and use of ICTs for development is at a formative stage in many developing countries, with millions of people still outside the inclusive net of its benefits. Lack of telecommunication infrastructure and education, compounded by a lack of integration of ICT policies into development planning and an inadequate enabling environment and regulatory framework impede inclusion and participation of all.

As new technologies have a growing role in society there is a need to rethink governance paradigms to redirect them towards citizen-oriented, participatory and inclusive models of e-government and e-participation for development. Transforming the functioning of the public sector towards greater efficiency and better service delivery requires, among other things, that use of new information and communication technologies be geared towards policy development. ICTs can help shift the role of government from that of a manager with authority to one of a leader with a vision, while shifting its the orientation from bureaucratic to participatory, and its reach from exclusive to inclusive.

Greater attention needs to be given to innovative applications of ICT in support of e-participation and e-government endeavours. There is a need to extrapolate information on best practices so as to facilitate the adoption and effective implementation of these initiatives worldwide. Lessons learned from existing e-participation and e-government initiatives need to be used to better design and adapt ICT initiatives in countries striving to develop their own programmes in a way that the benefits of ICT can be maximized to achieve their respective development agendas, while minimizing the inherent risks and costs.

In its endeavour to support Member States in the area of ICT for development, the United Nations Division for Public Administration and Development Management (DPADM) organized an Expert Group Meeting on *E-Participation and E-Government: Understanding the Present and Creating the Future* from 27-28 July 2006 in Budapest, Hungary. The Meeting was organized as part of the 'International E-participation and Local Democracy Symposium on *Promoting Social Inclusion via E-participation,* hosted by the Office of the Deputy Prime Minister, United Kingdom.

The UNDESA Meeting on *E-Participation and E-Government: Understanding the Present and Creating the Future* provided an opportunity to review e-participation and e-government experiences, determine the strengths and weaknesses of the initiatives, and search for options and methodologies that may support a more inclusive e-government approach.

The objective of the Meeting was to identify the major issues and trends in e-participation and e-government by reviewing existing approaches worldwide and analysing the structural and process changes associated with e-participation and e-government development. The overall aim was to

explore and identify issues and challenges facing both governments and citizens in their quest towards human development, inclusion and empowerment by broadening the understanding of e-participation and e-government. The Meeting posed key questions such as:

- What guides the development of e-government and e-participation initiatives;
- How to define the elusive nature of "participatory" and "inclusive" government;
- How to develop targets and indicators for e-government and e-participation;
- How to effectively channel the lessons learned from good practices for use in emerging e-government and e-participation initiatives;
- What are the innovative approaches and country best practices;
- What makes an e-government approach successful in one setting but not in another; and
- What is the citizen's perspective on e-participation and e-government programmes.

A group of 24 experts was invited to present specialized papers on the subject and discuss the technical issues related to e-government and e-participation. The substantive findings contained in this Final Report of the Expert Group Meeting will be used by DPADM for enriching its normative and programmatic work and for reporting to the Economic and Social Council through the Committee of Experts on Public Administration.

Summary of the discussions

The Meeting was undertaken with the *United Nations Global E-government Readiness Report 2005: From E-government to E-Inclusion Report* as the backdrop. The conceptual framework adopted by the UN report denotes e-government readiness to be the means to an end, i.e., the end being development for all. It focuses on the following question: is e-government, as a tool, contributing to the socio-economic upliftment of the people? Following the guidelines for global human development set out in the UN Millennium Development Goals (MDGs), the UN Global E-government Readiness Report quantitatively assesses the strengths and weaknesses in e-government initiatives worldwide with the notion that the ultimate objective remains 'inclusion of all' in development.

The Meeting provided an opportunity to bring together a multidisciplinary group to further evolve the holistic framework for the UN of e-participation and e-government assessments worldwide. Experts were of the opinion that e-government is a key tool for public sector reforms towards better governance, which is a cross cutting requirement in the achievement of the objectives of the Millennium Declaration. Policy tools to stimulate e-government include benchmarking, exchange of good practices, cooperation and financial support. Online public services can contribute to raising the access and availability of services and employment and act as a catalyst for e-inclusion by offering new and better services. Online services can also foster social integration. Through effective e-participation and e-government, governments can strive to:

- Provide mechanisms for assessing the creation of value for citizens;
- Promote participation in democratic processes by using online channels, and placing politically useful information online; and
- Contribute to economic growth and sustainable development

A number of important considerations were put forth by the experts, including ideas for measuring and assessing impacts and developing various e-government classification schemes to serve as analytical "lenses". Participants gave ideas for measuring the "demand" side of e-

government/e-participation and for focusing on country and regional level comparative approaches.

Richard Heeks, Development Informatics Group, University of Manchester, UK noted that the majority of benchmarking studies have focused on national e-government since national e-government provided an appropriate basis for cross-national benchmarking. He said that based on current benchmarking surveys, little was known about the demand for, and use of, e-government. As a result, what went into assessment reports may differ from what policy makers – the primary audience – were looking for. Heeks stated that that the current approaches of e-government assessment were quite narrow.

Heeks presented his conceptual ideas on benchmarking aimed at policy makers or researchers involved in planning or evaluating the benchmarking or measurement of e-government. Drawing on various models of e-government, Heeks indicated that before an assessment is carried out there is a need to ask the following: Why benchmark e-government? What to benchmark? How to benchmark? And, how to report? Providing an assessment of various approaches to measuring e-government, he pointed out that benchmarking exercises encompassed studies assessing e-readiness, availability of e-government, uptake of e-government at the citizen level and impact assessment of e-government programmes. Measuring change in e-government should adopt a more dynamic approach. There is a need to move towards more rounded models where measurement of demand and impact of e-government also plays a role. He also pointed out the need to benchmark mobile government (m-government) which may be of more importance in developing countries.

John Brakebill and Philip von Haeling from Accenture presented the framework of e-government assessment conducted by Accenture which assesses e-government service delivery aspects in 21 countries. In the last seven years the Accenture study has revealed that e-government has moved from being an emerging trend to an essential and integrated part of many governments' broader vision of leadership in customer service. Lessons of experience also indicated that e-government needed to be part of a broader transformation agenda. Brakebill said that even though individual rankings did not vary considerably from year to year, governments' progress could be identified by four stages which were defined by Accenture as the following:

- Establish e-government;
- Use e-government;
- Embrace leadership; and
- Build trust

Accenture's experience indicated that governments are at a critical juncture in their e-government and e-participation development. While each country remain different, leading economies in e-government share commonalities, such as in local connectivity, shared internal services, and focus on the adoption of and a commitment to customer service. The challenges are country specific rooted and often in the cultural underpinnings of the society, such as in the realm of privacy sharing. Brakebill pointed out that while Accenture's Public Service Value Model was primarily applied in developed countries and there was no standardized basis for measuring value across the world, a few lessons could be gleaned from Accenture's e-government assessment studies. Brakebill provided a number of recommendations for building the model, including an emphasis on the need to ensure connectivity.

E-government performance tends to mostly focus on the delivery and provision of online public services, and less on feedback mechanisms that allow citizens and stakeholders to engage in policy debates and consultations. In recent years, however, e-government has been gradually evolving into a more interactive process whereby citizen engagement through e-consultation and e-participation is now being viewed as a necessary next step towards the promotion of a more inclusive society.

Jeremy Millard of the Danish Technological Institute, Denmark, pointed out the need to focus on the end goal of empowerment of the citizen, suggesting some 21st century approaches to think about new means to achieve empowerment for the citizen. For example, he cited the limited role of e-government in the transformation of public service delivery. He mentioned the importance of using several channels for service delivery i.e. "flexi-channelling" where citizens used other methods of contact in addition to e-government. He pointed out that if ICTs are to promote inclusion, e-inclusion should be considered as one of the tools to reach the goal. In discussing United Nations work on e-government and –participation, Millard suggested that in addition to assessing access and connectivity the United Nations should work on, at some point, the second tier of e-government assessment, i.e., that of citizen take-up and usage. He also emphasized the need for what he called the 'third tier' in measurement of e-government and e-participation, that of the 'impact and benefit to the citizen'.

The discussion in the Meeting revolved around the development of participatory and inclusive policies, which should have as their objective the provision of - and access to - ICT-related services to the largest possible number of people and communities so they can participate in a knowledge-based society and economy.

Promoting e-participation requires inclusion of citizens in participative and deliberative decision-making process. E-participation can be thought of as a tool which expands the parameters of decision-making. Together with decentralization of services to local governments, use of ICTs allows citizens to participate in governmental decision-making affecting their basic needs. E-participation could also nurture the development of democracies and a progressive transformation of the relationship between politics and citizens.

In this context, and taking e-democracy as the starting point, Lawrence Pratchett, from De Montfort University, United Kingdom noted that the distrust in governments has generated the momentum behind the greater demand for transparency, accountability, and a renewal of democracy. He maintained that e-participation and /or e-democracy would be useful if they were used as a transformative tool of democracy, making institutions work better. Drawing upon his research work on democratic institutions, Pratchett presented ways in which e-democracy could be used as a tool to reinforce, change or develop democracy in particular ways. E-democracy devices may be top-down, in so far as they are developed by governance organizations to structure citizen behaviour in democratic engagement; or they may be bottom-up, in so far as they are instigated and owned by citizens acting collectively to influence public policy.

He said that it was possible to distinguish three main forms of democratic devices: aggregative, negotiative or deliberative.[1] **Aggregative devices**, such as elections, seek to establish the public will by adding up the preferences of all individuals and reaching a majority decision. These devices place great emphasis upon establishing and maintaining political equality. **Negotiative devices**, such as community forums, recognize that there are competing preferences in

[1] See, for example, Schmitter, P., A. Trechsel, et al. (2004). The Future of Democracy in Europe: Trends, Analyses and Reforms. Strasbourg, Council of Europe Publishing.

communities and seek to provide opportunities for different stakeholders to bargain with each other to reach mutually acceptable compromises in policy. **Deliberative devices**, such as a citizens' jury, recognize that not all people's preferences are fixed and seek to provide opportunities for ideas to be developed and changed through a process of discussion and deliberation.

However, e-participation endeavours are still in their infancy and only a few countries have actively promoted them to date. In fact, it is not easy to assess the impact of e-consultations and e-participation, because there are few examples of dramatic policy outcomes as a result of this process. Beginning with an introduction to the transformation hypothesis as formulated in 2000 and 2001, Donald Norris, University of Maryland, USA, noted that the hype surrounding the end-state of e-government/e-democracy had not proven correct, as there was no evidence for its claims. Citing his own survey earlier in the year, Norris confirmed that little planning was actively being undertaken for engaging in e-participation at the state level. Detailing his e-democracy study as the first nationwide survey of e-democracy among local U.S. governments, he noted that few do anything with respect to e-participation. In fact, based on the survey questionnaire sent out to over 2,000 municipalities, he found that fewer than ten per cent reported any e-participation measures on their websites. The primary reason for this, he noted, was the lack of citizen demand. Only 3-4 per cent of the citizens surveyed actively demanded more e-participation.

Social inclusion and participatory governance is possible only if political, economic, technological and social barriers are removed and access to opportunities from ICTs is equitably distributed. The reach of ICTs to facilitate greater participation by citizens to influence the democratic decision-making process is just as important as the nature of the participatory process itself.

Building a participatory and inclusive society requires a multi-stakeholder approach to meet this objective. An important aspect of inclusion remained web accessibility. Mikael Snaprud, Agder University College, Norway, identified the challenges of web accessibility for policy-making and outlined the efforts of the European Internet Accessibility Observatory (EIAO) in alleviating them. The objective was to achieve a more accessible Information Society while simultaneously realizing that differences in assessment methodologies, comparisons and systematic monitoring make comparison difficult. EIAO was leading the way by developing a prototype of a large scale automated online web accessibility observatory. Working with other partner agencies, it is seeking to harmonize a Unified Web Evaluation Methodology (UWEM). Once a framework was established, EIAO would be able to deliver benchmarks via reporting services for a wide variety of uses including measurement benchmarks for web accessibility policy making. Ultimately, it was hoped it would also facilitate coordination among public bodies overseeing web accessibility policy implementation and design. Snaprud noted that EIAO had also started to explore the possibility of adding other indicators to its repertoire, such as measuring content, usability, efficiency and effectiveness of websites in an automated fashion.

Following up on the discussion of e-inclusion and e-participation, it was noted that several countries worldwide were exploring different ways of developing interactive mechanisms to encourage e-engagement and e-participation. In recent years, many countries had moved in the direction of employing ICT to incorporate citizens' perspectives into public policy making especially as it relates to delivery of services.

Lessons of experience at the country level suggest that participation of citizen through ICT lends support to good governance and effective policy making. It is also accepted that e-government and e-participation could promote transparent, inclusive, pluralistic and decentralized societies.

A case in point was the presentation of the Republic of Korea. Drawing upon his country's experience in successful e-government and e-participation, Park Je-Guk from the Government of the Republic of Korea provided an overview of Korea's journey to e-government from 1987 forward. He outlined how it started off in the Republic of Korea in terms of the objectives, directions, and strategies of the programme of e-government and its current advanced stage. The programme included 31 key projects with an annual e-government budget of about $308 million. Since inception already some of the key front-office services being offered included the Online Civil Service (G4C), www.egov.go.kr, Open Government, www.open.go.kr, and Online Citizen Participation, www.epeople.go.kr initiatives. He outlined the Republic of Korea's efforts at reducing the digital divide and in instituting an Information Resource Management system. Mr. Park stated that the ultimate goal of the Republic of Korea's e-government programme was to "Realize the World's Best Open Government".

Rut Martinez-Munoz from the Basque Parliament, Spain presented an overview of the IT4ALL Network web collaborative tool featuring 35 indicators of e-democracy. Martinez-Munoz noted that new information and communication technologies provide many opportunities to public authorities and institutions to strengthen relations with citizens. E-democracy aims to apply these technologies to improve the opening-up of institutions fostering political representation. The opening-up concept integrates the principle of informing citizens about the decision making processes and provides them with real options to participate in them.

The overall purpose of the tool is information sharing for which it is imperative to develop a cooperative strategy encompassing measures to increase transparency, pro-activity (from institutions), multi-channel approaches, education and the promotion of civic values. She noted that the IT4ALL tool encompasses these approaches in design and structure. The various features of the tool enable greater collaboration through a best practices database feature. It also allows for generating benchmarking and self assessment reports.

A former consultant to Mexico's Federal CIO, Roberto Martinez provided an account of how the UN Global E-Government Reports influenced Mexico's e-government policy decisions. To provide context, Martinez noted how then President Vicente Fox established a "good governance agenda," which emphasized a government that provided honesty, transparency, professionalism, quality, and regulatory improvement, together with a digital agenda. It was envisioned that e-government should be a powerful driver allowing the government to be more streamlined. While this resulted in the creation of a federal CIO whose office emphasized an implementation model of single-windows, there was simultaneously a negative perception about the e-government initiatives reported by the press. To overcome this obstacle, Mexican policy makers needed to identify how they could improve their ranking in global benchmarking reports. It was determined that the best way would be to focus on the web measure assessment. A concerted effort towards investments in, and improvement of, e-government programmes was undertaken, resulting in a revised improved ranking of the country in the following UN Global E-government Readiness Report. The Mexican Government understood that the twin objectives of improving e-government and providing access to all citizens were tied closely to the availability of connectivity, infrastructure and human capital in the country. A sensitivity analysis conducted (on maintaining performance) showed that, in the short run, an increase in personal computers could be achieved as an investment, but it was important to focus on improving service delivery to the citizen, especially in the area of transactional services. In conclusion, Martinez re-emphasized

the importance of the UN report and its methodology of global benchmarking for policy decisions of developing countries around the world.

Presenting the experiences of the Arab countries, Charles Sha'ban of the Talal Abu-Ghazaleh Information Technology Group stated that though the UN Global E-government Readiness Report 2005 covered all the Arab countries well, data indicated that only two Arab countries, namely the UAE and Bahrain, scored above 0.5 in the overall ranking. He said that the UN Report highlighted some of the best practices in Arab countries, such as in the case of Egypt ("The Government now delivers") and Qatar ("Government services made easier"). However, no Arab country received a good ranking for online payments despite some good solutions, such as e-dirham in the UAE and the e-payment gateway in Jordan.

He outlined that despite progress there were several issues and challenges facing the Arab countries, such as the digital divide, language barrier, literacy rates, as well as limited connectivity due to the lack of telecommunications infrastructure. Hardware and software prices still remained high. At the same time, implementation of e-government lacked in commitment, collaboration and awareness. To achieve progress in e-government, Sha'ban outlined measures for success of e-government in the region, such as defining clear goals, advocacy for e-government, and the willingness and ability to change.

Wilma Deetlefs of the Ministry of Information and Broadcasting, Namibia noted that in Namibia, the UN Report's e-government rankings were viewed as a race between countries with the unintended consequences, in some cases, of wasteful e-government projects. She pointed out that e-government programmes need to be preceded by a clear understanding of objectives, goals and strategies. In many low income developing countries, competing claims on scarce resources may dictate priorities other than e-government. In Namibia, whereas contingency funds are available to implement some e-government initiatives, the recent polio outbreak changed this priority. In light of this and similar events, e-government implementation was conducted in phases. While Namibia had a clear vision and an E-Governance Policy Framework, many infrastructural and other barriers mandated a "think big and start small" approach.

Lessons of experience in e-participation and e-governance, from the perspective of citizens in the Central and Eastern European (CEE) Region, showed that adoption of technology for the benefit of the citizen was slower in the region. Focusing on the Central and Eastern European (CEE) Region in transformation, Chuck Hirt, CEE Citizens Network, Slovakia and Mate Varga, Hungarian Association for Community Development, Hungary presented an overview of the framework of development in the region which was characterized by lack of education with a large digital divide. In this context the responsibility for the development of e-government remained with the government. However, they noted that, in some cases, the social effect of technology may lead, in turn, to a depletion of trust in the government.

With new technology providing opportunities for the increased involvement of the citizens the first step to promote participation rests on the availability of information. In this context, the important stakeholders were the citizen groups, in general, and the CEE Citizens Network, in particular, which espoused the ideal to provide a multi-faceted approach to improving the process from the demand side. Such measures included encouragement, providing real chances for participation, as well as increased ICT-based knowledge.

The experts opined that it was important to define the wider community around e-government in terms of both the stakeholders involved in the various issues of e-government development and the expansion of the scope of e-government issues to be addressed including issues such as the e-

government regulatory environment and e-government funding and citizen up-take of e-government.

In conclusion, the experts felt that the challenge for e-government and e-participation is to develop an effective partnership among the various stakeholders to manage change in public sector management, which is critical to introducing e-government applications and services. To that end, innovations in ICT should give priority to supporting e-government and e-participation. This requires a shift in the role of the government from a controller of information and services to that of a facilitator, whereby information and services are geared towards addressing the needs and concerns of the citizenry and aimed at reaching a common social good. The development of socially inclusive policies needs to provide access to ICT-related services to the largest possible number of people and communities in order to improve their participation in a knowledge-based society and economy.

PART I: E-GOVERNMENT CONCEPTS AND APPROACHES

Chapter I

Understanding and Measuring E-government: International Benchmarking Studies

Richard Heeks

A. Why Benchmark?

e-government benchmarking means undertaking a review of comparative performance of e-government between nations or agencies. e-government benchmarking studies have two purposes: internal and external. The internal purpose is the benefit achieved for the individual or organization undertaking the benchmarking study. The external purpose is the benefit achieved for users of the study.

Little or nothing is made explicit about internal purpose in benchmarking studies. It could be synonymous with the external purpose but equally it could relate to a desire to raise the profile or perceived expertise and legitimacy of the individual or organization in e-government, or it could relate to a desire to attract funds or win additional e-government business. Where a benchmarking report has a sales and marketing function, this could be in tension with development goals. At the very least, it makes sense to ensure that study implementers are themselves clear about their internal purpose even if this is not publicized.

Recommendation 1: Clarify The Internal Purpose Of Benchmarking

External purpose is a more complex issue to deal with and will involve an iterative identification of demand (or need) for e-government benchmarking information, identification of the audience for the study, and evidence about the use to which study findings will be or are being put (see Figure 1, developed from Janssen et al 2004).

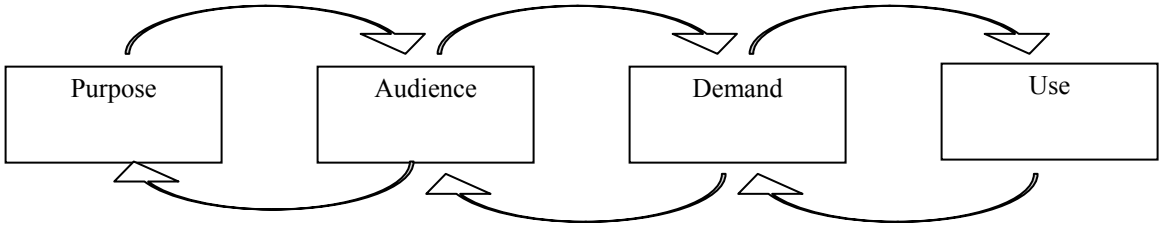


Figure 1: Determining the External Purpose of e-government Benchmarking

The main audience for e-government benchmarking is e-government policy makers: this is sometimes explicit (e.g. UN 2005), sometimes only implicit (e.g. Accenture 2005), and sometimes absent (e.g. West 2005). Typical sub-audiences may include other e-government practitioners such as consultants, private IT firms and lower-level public officials; and academics (UN 2005).

Deriving from the main audience, the main purpose of benchmarking is typically either:

a) *retrospective achievement*: letting policy makers know in comparative terms how their country or agency has performed in some e-government ranking (e.g. "It is a useful tool … to gain a deeper understanding of the relative position of a country vis-à-vis the rest of the world economies" (UN 2005:13)); and/or
b) *prospective direction/priorities*: assisting policy makers with strategic decision-making about e-government (e.g. "we aim to help governments identify the course of action that will most likely deliver high performance in e-government." (Accenture 2004:2)). For some studies, prospective guidance may be more at the tactical level of individual e-government projects; for example, offering lessons learned or best practices for such projects (e.g. OeE 2001); and/or

There is also an audience hardly ever mentioned – citizens and civil society organizations – for whom benchmarking may provide a purpose of:

c) *accountability*: enabling governments and agencies to be held to account for the resources they have invested in e-government. Ministries of Finance/Treasuries may share an interest in this purpose. For all these groups, e-government officials may have their own purpose of using benchmarking in order to justify politically their investments in e-government.

There is little explicit evidence about the demand for benchmarking studies, though in some cases they arise out of e-government practitioner forums (e.g. Capgemini 2004) or are conducted by e-government agencies (e.g. OeE 2001). One can make an assumption in such cases that benchmarking has been demand-driven. However, in general, there is a knowledge gap around the demand for benchmarking data; particularly around demand among e-government and other officials in developing countries: we know very little about what data these senior civil servants want.

This issue is of particular relevance to benchmarking readiness for e-government because a Euro-centric perspective might suggest that the time for such studies is past. As e-government activity grows over time, the key issues – and, hence, the demand for benchmarking data – are felt to change over time, as illustrated in Figure 2 (adapted from OECD 1999, ESCWA 2005).

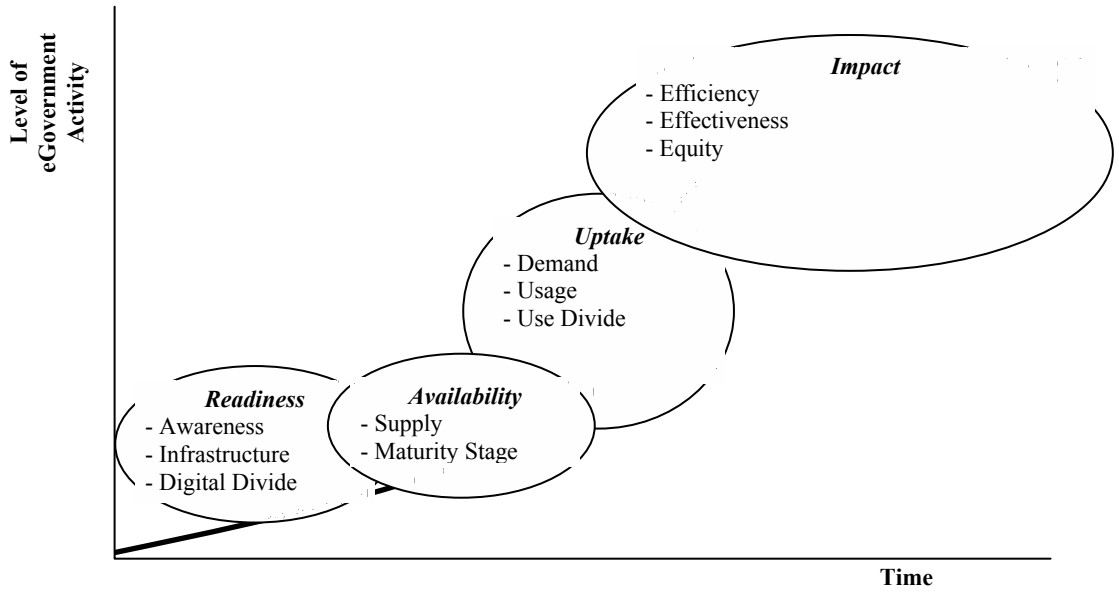


Figure 2: Changing e-government Issues Over Time

In part these changes could be ascribed to the policy lifecycle, illustrated in Figure 3 (adapted from Stone 2001, Janssen et al 2004).

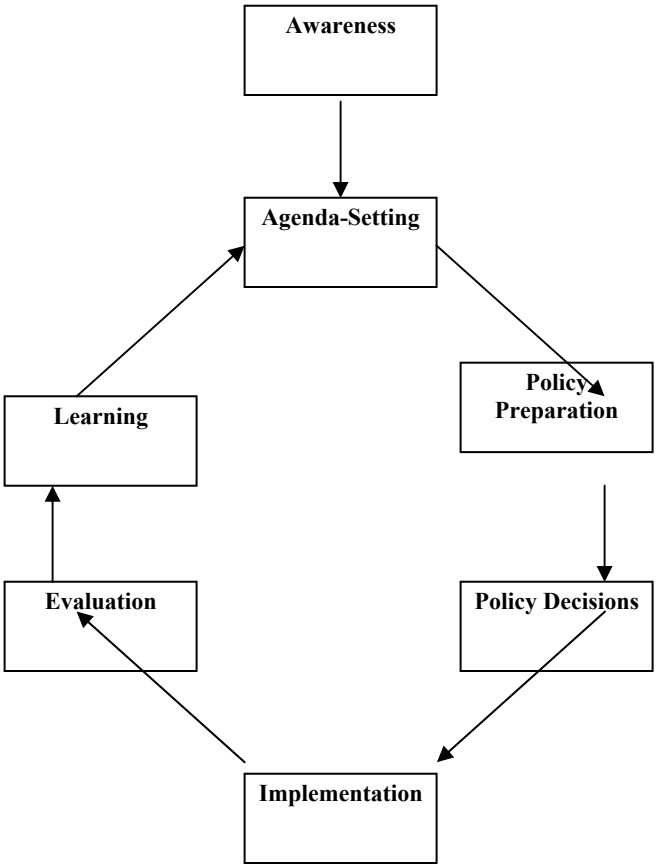


Figure 3: The Policy Lifecycle

The demand (and thus external purpose) for e-government benchmarking is likely to change as policy makers move through the cycle:

- For policy makers entering the *awareness stage*, the demand might simply be for help in understanding what e-government is.
- For policy makers at the *agenda-setting stage*, demand might come more from those seeking to encourage adoption of e-government onto the policy agenda, focusing on the carrot of good news/benefits stories and the stick of poor comparative benchmark performance.
- At the *policy preparation stage*, policy makers will likely demand an understanding of alternatives and priorities, comparisons with other countries and best/worst practices.
- Finally, at the *evaluation stage*, they may demand both comparative performance data and the reasons behind that comparative performance in order to move to *learning*.

At a broader level, however, one may see that, once a policy cycle is completed, policy makers move on to a new cycle, with a new issue. One can therefore hypothesise a set of e-government policy cycles that move through the Figure 2 issues: a readiness cycle giving way to an availability cycle, then an uptake cycle and so forth. In the industrialized countries, there might be a sense of this from the changing nature of studies (see also EAG 2005). Table 1 shows the main focus of 64 e-government benchmarking reports (developed from eGEP 2006a), where there has been a change of modal interest from readiness to availability to uptake to impact over time.

Table 1: Main Focus of e-government Benchmarking Studies Over Time

Year	*Readiness*	*Availability*	*Uptake*	*Impact*
2006				**X**
2005			X	**XXXXXXX**
2004	X	**XXXXXXXX**	XXXX	XXXXX
2003	XXXXX	XXXXXXX	**XXXXXXXX**	XXXXXX
2002	XXX	**XXXX**	X	XX
2001	XX	**XXXXXX**		
2000	**XXXXX**	XXX	XXXX	

So, is the era of concern about readiness already gone? Arguably not because of the Euro-centricity of the points just made. Industrialized country governments and some benchmarking reports written for those governments may be moving to a level of e-government activity and a policy cycle beyond issues of readiness. But that is not necessarily true of the majority of the world's nations, in which the seven core elements of readiness for e-government still appear to be part of current agenda and policy discussions (Heeks 2002, UNESCO 2005):

- Data systems infrastructure
- Legal infrastructure
- Institutional infrastructure
- Human infrastructure
- Technological infrastructure
- Leadership and strategic thinking
- e-government drivers

Note, though, the word "appear" since we do have so little evidence about that state of e-government policy-making in developing countries, and about the data demands of policy makers.[1]

Recommendation 2: Clarify The External Purpose And Audience For Benchmarking

Recommendation 3: Commission A Quick Study On Demand For Benchmarking Data

[1] UNICTTF (2005) undertook a survey of national statistical organisations which include questions about demand for general ICT indicators; this demand was generally perceived to be high. It acknowledges, however, that assessing demand from the producer rather than user perspective is a limitation of its survey and notes "The existence of national ICT policies would indicate demand for indicators, however no information on indicators used in the national policies is available yet." (p6)

Box 1: Beyond e-government?

Aside from the particular benchmarking issues, is it time to stop focusing on e-government? Strategy in government moves through four stages of relations between information and communication technologies (ICTs) and public sector reform (Heeks & Davies 2001):

- *Ignore*: ICTs are entirely disregarded in considering reform.
- *Isolate*: ICTs are included but disconnected from the reform process.
- *Idolise*: ICTs become a centrepiece of reform, seen as the transformative lever.
- *Integrate*: Reform goals are the ends, and ICTs are an integral means to achieve those ends.

The peak of interest in e-government occurs when groups of officials enter the "idolise" phase, creating a demand spike for data from studies and reports. But what happens after this? In some cases, there is a post-hype bursting of the dot.gov bubble, with officials simply falling out of love with e-gov and moving on to seek the next silver bullet. In other cases, there is a move to the "integrate" approach, with ICTs subsumed within a broader vision of and interest in transformation. In either situation, there will be a fall-off in demand for e-government data.

Evidence for this analysis is scanty but we can claim a few straws in the wind:

- The US National Academy of Public Administration's ending of its e-government programme and the absence of e-government from its 2006 "big ideas" list.
- 2003 being the peak year for number of e-government benchmarking studies reported by eGEP (2006a).
- The virtual "without a trace" disappearance of the once much-publicised e-government targets in the UK.
- Accenture's 2005 refocusing and rebranding of its annual e-government survey to centre on customer service.

However, as per the main text discussion, such signs from the industrialized world (and one might be able to cite counter-signs) do not reflect demand in the majority world where interest in e-government still appears to be growing; but absence of demand studies makes any conclusions on this tentative.

Evidence on demand for e-government benchmarking data can help guide the purpose and content of a study. Evidence on use of e-government benchmarking data can help guide evaluation of a study, and the purpose and content of any subsequent studies. Governments performing well in e-government rankings certainly do make use of that fact in press releases and other publicity (see e.g. TBCS 2004, FirstGov 2006). And there is an assumed use of data to guide e-government strategy (e.g. Janssen et al 2004). As per demand, though, there seems to be very little evidence about key usage issues: Do policy makers and others make use of the data provided by benchmarking studies? If so, what data do they use? And how exactly do they use it? Without such evidence we are limited in our ability to evaluate the impact and value of e-government benchmarking studies, and in our ability to guide future studies.

Recommendation 4: Commission A Quick Study On Usage Of Benchmarking Data

Recommendation 5: For Regular Benchmarking Series, Create A User Panel To Provide Feedback

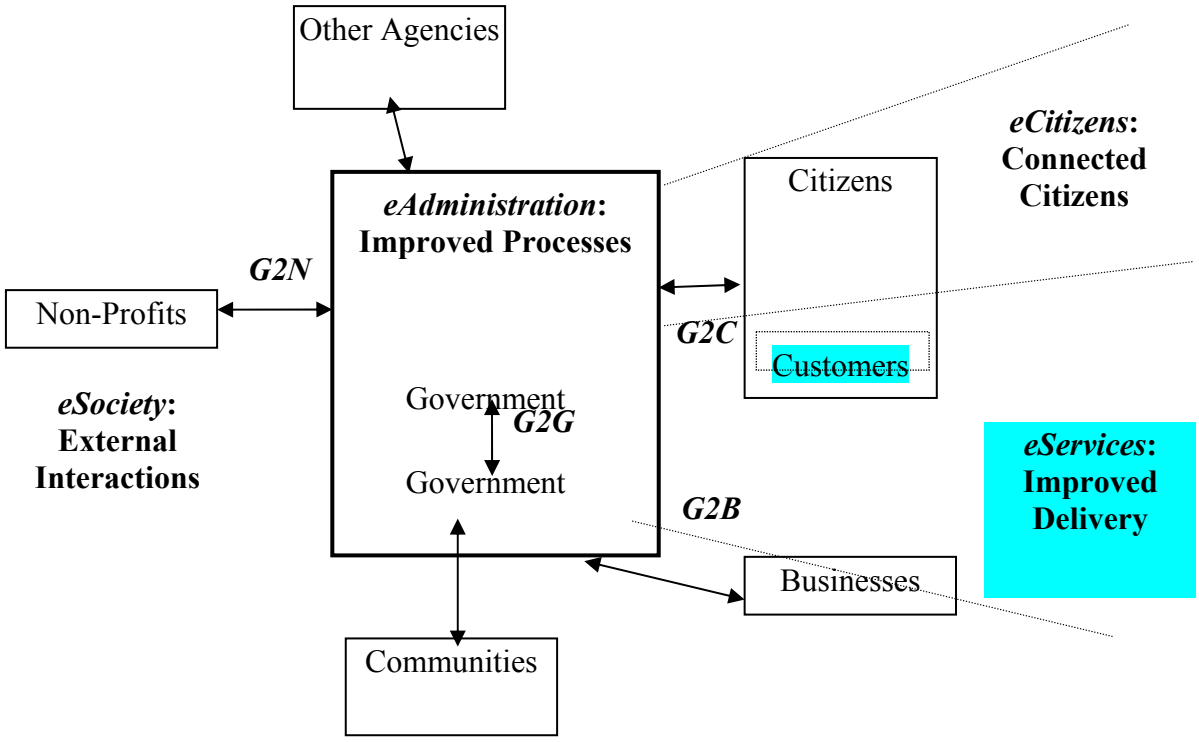
B. What To Benchmark?

B1. Scope of e-government

Components of e-government

We can readily categorise the nature of e-government, as per Figure 4 (adapted from Heeks 2002).

Figure 4: The Components of e-government



Within this potentially broad scope of e-government, the majority of benchmarking studies have focused on citizen-related e-services (Janssen 2003, Kunstelj & Vintar 2004). One may see acknowledgement of the constraints this places on benchmarking as good practice (see, e.g., UN 2005:14). Nonetheless, these are constraints that – within the time and cost boundaries that all benchmarking studies must work to – one might try to break free from.

Why? In an overall sense, because there are question marks over citizen-related e-government:

- Citizen contact with government is relatively rare. In the US, for example, only half of survey respondents had contacted any level of government in the previous year and, of those, two thirds rated their contact rate as less than every few months (Horrigan 2005). Likewise, use of e-government by citizens is relatively rare – the number of citizens accessing e-government in the past one year is about one-half to one-third the number who have ever

accessed e-government, suggesting up to two-thirds of those using government Web sites do so less than once a year (Accenture 2005).

- The total number of citizens ever making use of e-government worldwide is relatively small. Figures for the majority world of developing countries are lacking but we can estimate these, given we have an estimate of the number of Internet users in developing countries (e.g. ITU 2006 for 2004 estimates). We then need an estimate of the proportion of Internet users who have ever accessed e-government. In industrialized countries, this figure is approximately two-thirds (TNS 2003, Accenture 2004, Horrigan 2005). However, it is likely to be much less in developing countries given the far more limited availability of e-government services. Figures from TNS (2001, 2002, 2003) provide figures ranging from 10% of Internet users ever using e-government at the lowest end of developing/transitional economies to around 40% (for Malaysia) at the highest end. This is a significant range so, in taking 25% of Internet users as an average figure it must be recognized that this is a very rough average. We can use it, though, to provide estimates for the apparently very small fraction of citizens in developing countries that has ever accessed e-government: see Table 2. Figures for other countries (Europe including Russia and other transitional economies, Japan, Israel, Canada, USA, Australia, New Zealand) use an average 60% of Internet users ever accessing e-government. Put together, these show that developing countries provide 80% of the world's population but 20% of its e-government users.

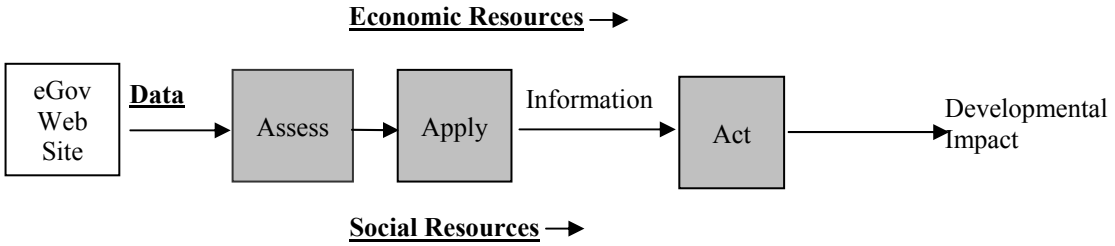
Table 2: Estimate of Citizen Use of e-government in Developing and Other Countries
Ever Accessed e-government

Region	***Absolute***	***% Population***
Africa	5.6m	0.7%
Americas	16.3m	3.0%
Asia	60.0m	1.6%
Oceania	0.12m	1.4%
DCs Total	*82m*	*1.6%*
Middle- and high-income countries	320m	25%
World Total	*402m*	*6.3%*

- There appears to be a negative relationship between citizen attitudes to e-government and usage rates/sophistication of e-government for citizens: attitudes are most positive in those countries with the lowest rates of e-government use/sophistication, and vice versa (Graafland-Essers & Ettedgui 2003, Accenture 2005). One (small) study of disadvantaged users in the US found that, following training, two-thirds had visited a government Web site but that not a single one intended to do so again (Sipior & Ward 2005).

- By far the main use of e-services by citizens is to access information from government Web sites rather than actual services (only 10-25% of e-government users undertake transactions (TNS 2003, Accenture 2004), and even for e-government "front-runner" services only 5-10% of transactions are undertaken online: the remainder still occur offline (Ramboll Management 2004)). But this acquisition of data is just the first step in an information chain (see Figure 5) that requires the presence of many other resources if it is to lead to a developmental impact on citizens' lives. To turn that e-government-based data into an impact requires that the data be assessed, applied and then acted upon. This requires money, skills, knowledge, motivation, confidence, empowerment and trust among other resources. Yet e-government itself does nothing to impact these other resources. It is therefore only one small part of a much bigger picture required to make an impact on citizens' livelihoods.

Figure 5: Citizen Use of e-government Data – The Information Chain



We can also frame an argument for the necessity of benchmarking beyond just citizen e-services in terms of the other e-government components. First, **G2B** – with the goal of improving public service to business – should not be ignored. Of those benchmarking reports that do encompass e-services, most focus only on citizens and ignore businesses as users; yet there is evidence of a need to reverse this emphasis:

- In 2002 in the EU, the most popular e-government service for citizens (library book search) was used by less than 10% of citizens; the most popular e-government service for businesses (online submission of statistical data) was used by 23% of businesses (Graafland-Essers & Ettedgui 2003).
- In 2003 in the UK, 18% of citizens had some online interaction with government (TNS 2003) but 35% of UK businesses did so (DTI 2004).
- Economic return on investment in e-government can be calculated via its impact on three cost stages of interacting with government: finding relevant government procedures, understanding government procedures; and complying with government procedures (Deloitte 2004). From this approach, it is government interactions with businesses much more than citizens which delivers e-government ROI.
- Perhaps reflecting this notion of higher demand and higher returns plus higher IT readiness among businesses, G2B services are more developed. In 2004, in the EU, 68% of sampled e-government-for-business sites offered full electronic case handling compared to just 31% of e-government-for-citizens sites (Capgemini 2005).

Second, because **G2G** – with goals such as cutting costs, decentralising power, managing performance, and improving strategic decision-making – should not be ignored. eAdministration has not been addressed by global benchmarking but it has a key role to play:

- In terms of most e-government stage models, the final stage (be it called integration, transformation, sharing, etc) requires back office changes; in other words significant G2G developments (Goldkuhl & Persson 2006).

- In practice, the most successful approaches to e-government are characterised by a "dual focus on back office integration and front office service delivery" (BAH 2002:18) so that "backoffice changes are required to achieve results" (Capgemini 2004:3; see also Kunstelj & Vintar 2004).
- Benefits of e-government are perceived mainly to relate to change in internal government agency processes (NOIE 2003, Capgemini 2004).

Third, because **e-citizens** applications – with goals of talking to citizens and listening to citizens – should not be ignored:

- eCitizens applications cover issues of e-accountability, e-participation and e-democracy, the goals of which are fundamental to good governance (Kaufmann et al 2005). Concern about delivery of good governance therefore requires concern about e-citizens.
- Without a focus on e-citizens applications, there is a danger of digital exclusion; in other words of the inequalities between the "haves" and "have nots" being exacerbated by e-government (EAG 2005).

Fourth, because **e-society** applications – with goals such as working better with business, developing communities, and building partnerships – should not be ignored.

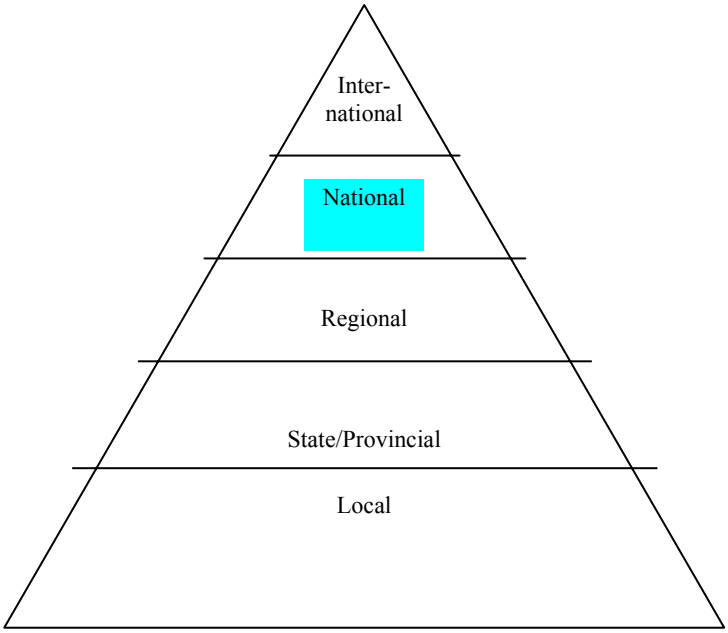
- Reform based on new public management attempts to shrink the role of the state to "steering not rowing", thus requiring a stronger partnership role with private and civil society organizations (CSOs) that will join the state as service providers (Heeks 2001).
- For developing countries particularly the state's capacity is much less than necessary to deliver on its roles. It is therefore obliged to rely on other organizations – largely those of civil society – particularly for service provision (Edwards 2003).

Recommendation 6: Seek Ways To Incorporate The Breadth Of e-government Components Within Benchmarking

Levels of e-government

We can categorise at least five potential levels of e-government, as per Figure 6.

Figure 6: Levels of e-government

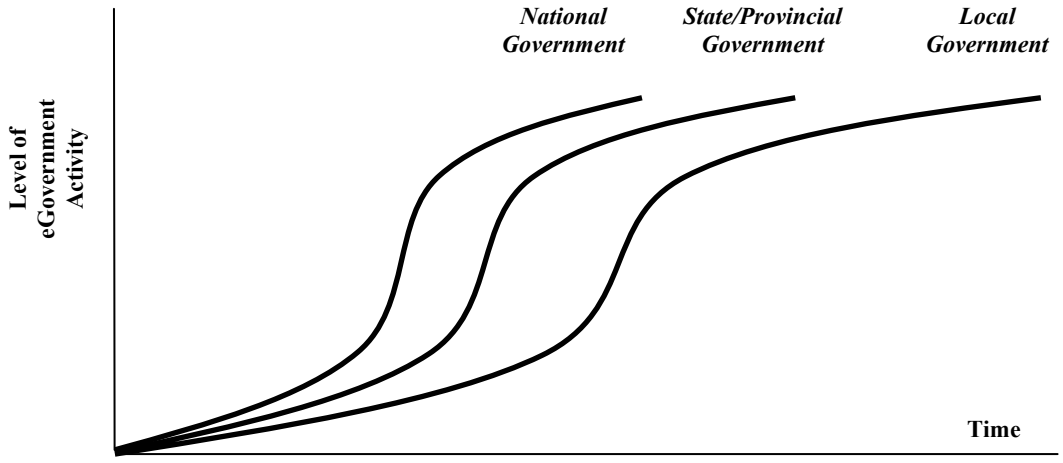


The majority of benchmarking studies have focused on national e-government. National e-government provides, of course, an appropriate basis for cross-national benchmarking. For some developing countries, it represents the only location for e-government. However, this does bring with it some limitations:

- In industrialized countries between one-half and fourth-fifths of government contacts are at sub-national level (Carbo & Williams 2004, AGIMO 2005, Horrigan 2005). In developing countries, it is local governments particularly that are the main point of contact for delivery of services and for delivery of national programmes (Amis 2001, Page 2006). Hence they are a critical location for applying ICTs in pursuit of national development goals (Jensen 2002).
- Lower tiers of government may be more innovative in e-government than the national level due to lower barriers to change (e.g. Paquet & Roy 2000). In many countries, this may be more than counter-balanced by the severe resource constraints, leading to diffusion graphs similar to that portrayed in Figure 7. Even in this situation, though, e-government at lower tiers is of increasing importance over time: one straw in the wind is the e-government case studies listed at the World Bank e-government web site (World Bank 2006a): more than half are at state and local level.

Recommendation 7: Seek Ways To Incorporate Appropriate Levels Of e-government Within Benchmarking

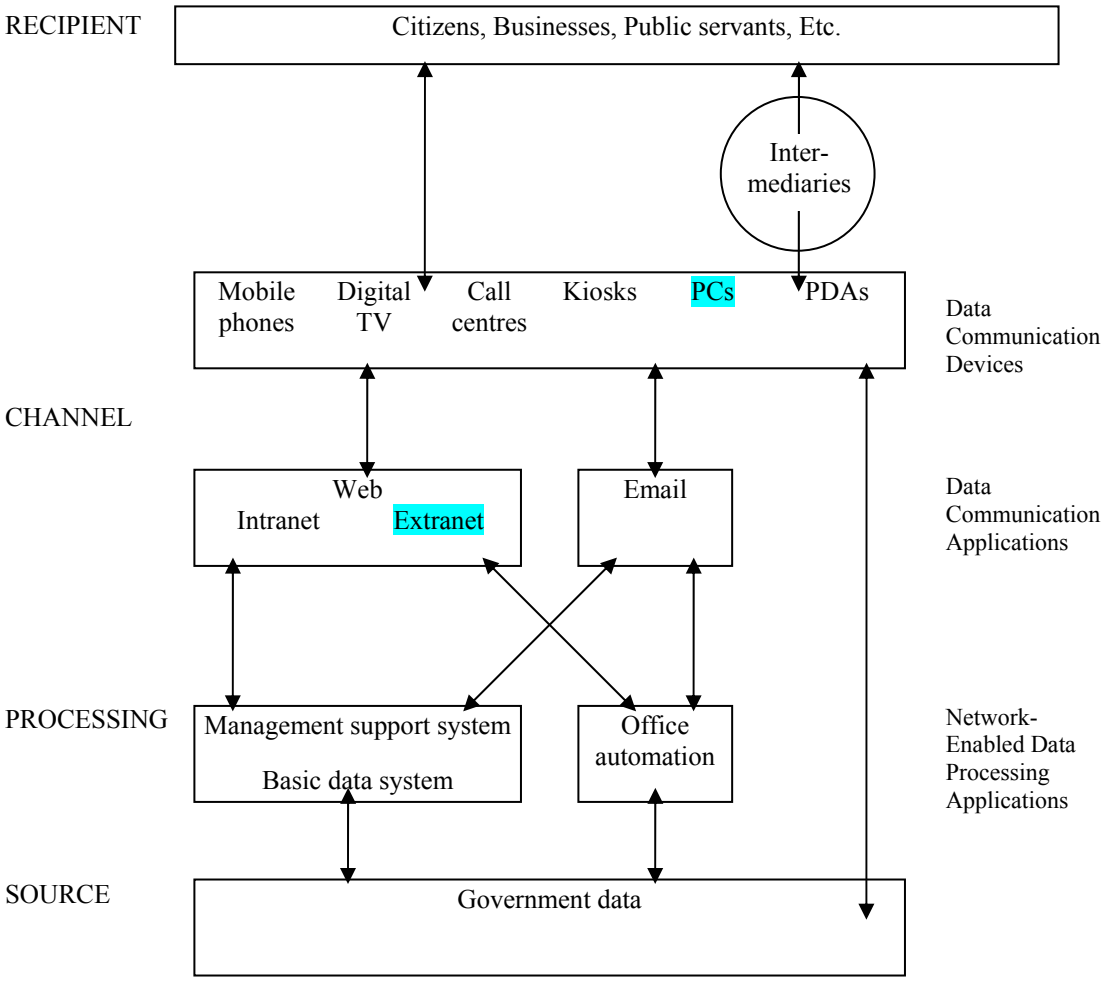
Figure 7: Hypothesised Diffusion of e-government at Different Levels of Government in Developing Countries



Channels of e-government

e-government can be defined as the use of information and communication technologies by public sector organizations. As such it encompasses a variety of potential delivery channels (see Figure 8, adapted from Cabinet Office 2000).

Figure 8: The Architecture of e-government



By and large, the focus of benchmarking studies has been Web-based communication delivered via a PC. The assumption – explicit within industrialized country-focused studies; implicit otherwise – is that the PC will be directly accessed by the recipient. However, even in industrialized economies this reflects neither practice nor preference in interaction with government:

- Telephony dominates channel usage in some situations: Accenture (2005) reports 63% of industrialized country respondents contacting government by telephone; compared to 31% using the Internet over a 12-month period.
- In-person visits dominate in other situations: an Australian survey reports half of government contacts to be face-to-face compared to one-fifth undertaken via the Internet (AGIMO 2005).
- Survey data also reflects an ongoing preference for telephone or in-person channels especially for transactional, problem-solving, urgent and complex interactions (AGIMO 2005, Horrigan 2005).

These figures are changing over time – visits to government web sites are growing; the profile among Internet users (a grouping which has only plateaued in size in a few of the economies) is more pro-Internet; and there seems to be a fairly ready incorporation of government Web sites into citizens' information searches (Graafland-Essers & Ettedgui 2003, Accenture 2004). However, we should not seek to deny the reality of current usage and preference patterns.

Recommendation 8: Encompass The Multi-Channel Realities Of Government Interactions, For Example, By Investigating Channel Integration

Data from developing countries is very limited but suggests a "same but more so" picture. For example, Accenture (2005) reports that in emerging economies 67% of those with a home phone (a sample significantly skewed towards higher-income groups) had used in-person interactions with government compared to 11% using online channels in the past year. To this, we can add two further issues:

- Given Internet usage rates of, for example, less than 3 per 100 population in Africa (and with that use heavily skewed towards a small high-income fraction of the population), models of e-government anticipating direct use of the Web by citizens are inappropriate for the majority of the world's population for the foreseeable future (Heeks 1999, ITU 2006). If e-government services are to impact this group, it will be through intermediated models: for example, assisted use at a village kiosk or town telecentre.
- Developing country governments and related international actors during the final years of the 20th century and first years of the 21st have been telecentre-focused. As a result they have, to some extent, been blindsided by the growth of mobile telephony in developing countries. Yet, for example, there are now over five times more mobile phones than PCs in Africa, with growth rates for the former being over 50% per annum, while the latter grows at just over 10% per annum (ITU 2006). Even in Europe, cell phone usage outstrips that of PCs and there is intense interest in m-government: delivery of government information and services to phones (e.g. Cross & MacGregor 2006).

Recommendation 9: For Global Or Developing Country Benchmarking, Take Account Of Intermediated Access To e-government

Recommendation 10: Investigate Ways To Incorporate M-government Into Benchmarking

B2. E-government Value Chain

Figure 9 illustrates the "e-government value chain" – a summary of the way in which e-government turns inputs into outcomes (developed from Flynn 2002, Janssen et al 2004, Capgemini 2005). Benchmarking studies can choose to measure simple indicators from this chain, as described in Table 3, or calculated indicators, as discussed later.

Figure 9: The e-government Value Chain

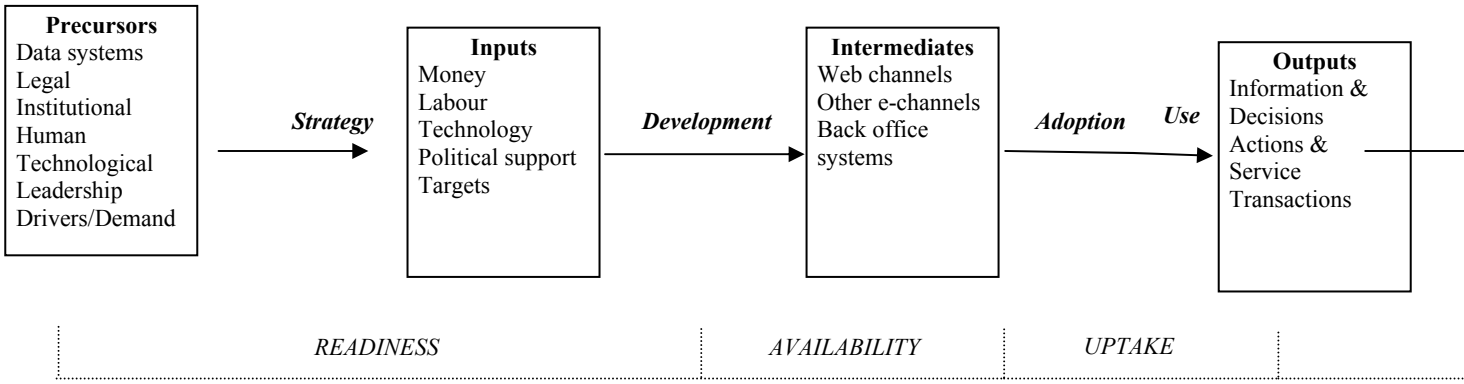


Table 3: e-government Measures, Indicators and Methods Used in Benchmarking Studies

Value Chain Stage	*Sample Measure*	*Sample Indicator*	*Sample Data-Gathering Method*
Precursors	Telecommunications infrastructure	Mainline phones per 1000 population (UN 2005)	Official statistics: international agency (UN 2005)
		Internet users per 1000 population (UN 2005)	
	Human resource infrastructure	UNDP education index (UN 2005)	
Strategy	Presence of e-government Strategy		
Inputs	Money	Annual government expenditure on IT (Heath	Official statistics: government (Heath

		2000)	2000)
Development	Development best practices	Extent of use of public-private partnerships (OECD 2004)	Internal self-assessment (OeE 2001, OECD 2004)
		Lessons learned (OeE 2001)	
Intermediates	Quality of government Web sites	Navigability rating for Web site (Moore et al 2005, Petricek et al 2006)	Third-party Web assessment (BAH 2002, Accenture 2005, Cabinet Office 2005, Capgemini 2005, Moore et al 2005, UN 2005, West 2005)
		Nodality of Web site (Petricek et al 2006)	
		Bobby/W3C accessibility of Web site (Choudrie et al 2004, Cabinet Office 2005, UN 2005)	Web metrics and crawlers (Choudrie et al 2004, Kuk 2004, Cabinet Office 2005, UN 2005, Petricek et al 2006)
		Privacy rating for Web site (Choudrie et al 2004)	
		Connectivity of e-government sites to NGO sector (Kuk 2004)	
	General features of government Web sites		Internal self-assessment (BAH 2002)
		Presence/absence of email address (West 2005)	
	Participation-specific features of government Web sites	Presence/absence of credit card payment system (West 2005)	
	Government Web site maturity	% of countries explaining e-consultation, and informing citizens of ways to provide input (UN 2005)	
		Level of Web site on three-stage model	

		(Accenture 2005)	
	Government-specific infrastructure	Level of Web site on four-stage model (Capgemini 2005)	
		Level of Web site on five-stage model (UN 2005)	
		% government staff with a PC (BAH 2002)	
		% government services available online (BAH 2002)	
Adoption	Prospective attitude towards use of e-government by citizens	Awareness of specific e-government services (Graafland-Essers & Ettedgui 2003)	Mass citizen survey (Graafland-Essers & Ettedgui 2003, TNS 2003, Accenture 2004, 2005, Horrigan 2005)
		% adults feeling safe to transmit personal data to government via Internet (TNS 2003)	Focus group (NOIE 2003)
		Channel preferences of citizens – phone, online, mail, in person (Graafland-Essers & Ettedgui 2003, Accenture 2005, Horrigan 2005)	Internal self-assessment (OECD 2004)
		Likely benefits of e-government perceived by citizens (Graafland-Essers & Ettedgui 2003)	Pop-up survey (Freed 2006)
		Barriers to e-government use perceived by citizens (NOIE 2003, Accenture 2004)	
	Adoption best practices	Expectations of e-government perceived by citizens (Freed 2006)	

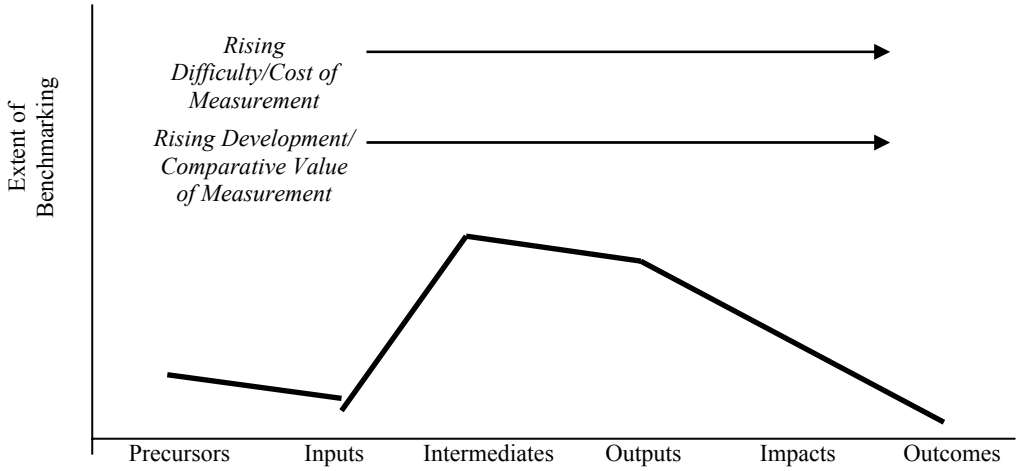
		Presence/absence of incentives for e-government uptake (OECD 2004)	
Use	Use of e-government by citizens	% adults using online services in past year (Graafland-Essers & Ettedgui 2003, TNS 2003)	Mass citizen survey (Graafland-Essers & Ettedgui 2003, TNS 2003, Accenture 2005, Horrigan 2005)
		% e-government users getting information about welfare benefits (Horrigan 2005)	Mass business survey (DTI 2004)
	Use of e-government by businesses	% businesses making online payments to government (DTI 2004)	
	Experience of e-government use by citizens	% contacts in which previous contact was recalled (Accenture 2005)	
Outputs	Retrospective attitude towards use of e-government by citizens	Satisfaction rating with particular e-government services (Accenture 2004, Ramboll Management 2004, Horrigan 2005, Freed 2006)	Mass citizen survey (Accenture 2003, Horrigan 2005)
		Level of citizen complaints about e-government service (Freed 2006)	Pop-up survey (NOIE 2003, Ramboll Management 2004, Freed 2006)
		Perceived improvement to information access (NOIE 2003)	
Impacts	Citizen benefits	Time saved (Capgemini 2004, Ramboll Management 2004)	Interview: internal self-assessment/ internal administrative records

			(NOIE 2003)
	Financial benefit	Financial savings perceived by officials (NOIE 2003)	Interview: internal self-assessment (BAH 2002)
	Back office changes		Questionnaire: internal self-assessment (Capgemini 2004)
		Nature of changes to government processes (BAH 2002)	
		Changes in process time (Capgemini 2004)	Pop-up survey (Ramboll Management 2004)
Outcomes	Employment levels		

Table 3 is not intended to be statistically representative. However, its profile does reflect other evidence (e.g. Janssen 2003, Kunstelj & Vintar 2004, eGEP 2006a) that benchmarking tends to focus on the core of the value chain – intermediates, adoption and use – rather than the main upstream (precursors, inputs) or downstream (impacts, outcomes, to some degree outputs) elements. As summarized in Figure 10, this probably occurs because the core measures are a compromise between ease/cost of measurement and developmental/comparison value. However, this does create limitations in that most critical of benchmarking activities: understanding the value of e-government. The particular emphasis on intermediates is also problematic because it is not a proxy for the further-downstream measures of adoption and use: in other words, countries/agencies with very sophisticated Web sites can have low levels of use and vice versa (BAH 2002, Wattegama 2005).

Recommendation 11: Where Feasible Incorporate More Downstream (Outputs, Impacts) Measures Into e-government Benchmarking

Figure 10: Usage of Different Indicators in e-government Benchmarking



There are related indicator sets for at least three of the underemphasized measures – demand precursors, impacts, and outcomes – that are relatively easily available for a large spread of countries (see Table 4). Unfortunately, there are many additional factors involved in the relation between these general indicators (of attitudes, governance and development) and core e-government indicators. Certainly, any correlation exercise involving outcomes would be fairly pointless: the causal path from e-government to outcomes is too indistinct. For the other indicator sets – demand and impacts – correlation is also of questionable value given the likely limited impact of these more general demand indicators on e-government, and of e-government on general governance indicators of corruption, trust, perceptions of accountability and bureaucracy, etc. Nonetheless it may be worth undertaking some exploratory correlations to see if any patterns emerge.

Recommendation 12: Conduct Exploratory Correlations Between Demand, Impact And Core e-government Indicators

Table 4: Demand, Impact and Outcome Data from Non-e-government Sources

Value Chain Element	***Sample Indicators***
Precursors: Demand	Relative importance of security, democracy and economy (WVS 2005)
	Level of political activity (WVS 2005)
	Contribution of technology (WVS 2005)
Impacts	Trust/confidence in government (GI 2005, WVS 2005)
	Level of corruption (Kaufmann et al 2005, TI 2005)
	Perceptions of democracy (GI 2005)
	Governmental effectiveness (Kaufmann et al 2005, IMD 2006)
Outcomes	Millennium development goals (UNSD 2006)
	National development indicators (World Bank 2006b)

Using Calculated Indicators

The discussion above relates to simple indicators, which form by far the majority of those reported. A number of benchmarking studies use composite indicators, e.g. for the purposes of

national rankings. Composites have been criticized (e.g. UIS 2003) for their subjectivity and inaccuracy; some also lack transparency – it is unclear how they are researched or calculated. A guide to good practice in use of composites would include (eGEP 2006a:45):

- "Developing a theoretical framework for the composite.
- Identifying and developing relevant variables.
- Standardizing variables to allow comparisons.
- Weighting variables and groups of variables.
- Conducting sensitivity tests on the robustness of aggregated variables."

Recommendation 13: Follow Good Practice Procedures When Using Composite Indicators

Table 5: Calculated Indicators Used in e-government Benchmarking

Calculated Indicator	***Example***	***Method***
Benefit/Cost Ratio	Expected financial benefit (impact) / Financial cost (input) (NOIE 2003)	Interview (internal self-assessment/ internal administrative records)
Demand/Supply Match	Preference for online channel in particular services vs. Online sophistication of that service (Graafland-Essers & Ettedgui 2003)	Mass citizen survey
Comparative Service Development	Stage model level of citizen services vs. business services (Capgemini 2005)	Third-party Web assessment
	Stage model level of different service cluster areas (Capgemini 2005)	
National Ranking	Composite of features and stage model level for national Web sites (West 2005)	Third-party Web assessment
	Composite of ICT and human infrastructure with stage model level for national/other Web sites (UN 2005)	
	Composite of stage model level, integration and personalization of national Web sites (Accenture 2005)	

Other than the composite calculation of national rankings, there appears to be relatively little use of calculated indicators in the benchmarking of e-government (see Table 5). Some of these existing indicators could usefully be extended.

Benefit/Cost Ratio. Ways of measuring benefits are discussed later. However, there is an notable black hole in e-government benchmarking of relevance to benefits: e-government failure. Partial failures – e-government projects in which major goals are unattained and/or in which there are significant undesirable impacts – do produce a workable system which typically would be included within benchmarking. However, total failures – e-government projects that are never implemented or are implemented but immediately abandoned – will, by definition, not be included in normal benchmarking. Yet one can estimate that between one-fifth and one-third of all e-government projects fall into the total failure category (Heeks 2000, Heeks 2003). Such all-cost, no-benefit projects need to be included in overall benefit/cost calculations for e-government.

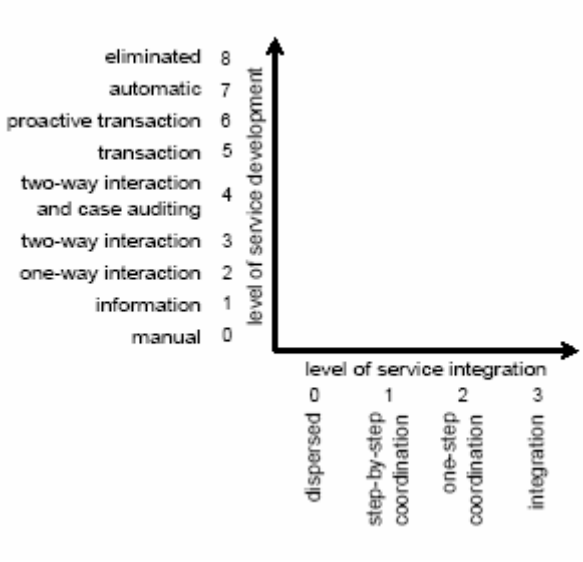
Demand/Supply Match. There is a significant bank of data on e-services supply measures such as web site maturity and quality. This can be compared to demand data: either country-specific ratings of demand from a commissioned survey, or more generic data gathered from other sources. In case of the latter, evidence from poor citizens in the majority world suggests a quite different set of demand priorities from those expressed by industrialized world users. Priorities of the former may relate to agriculture (supply sources, innovations, market prices, weather), health, employment and other information/services directly related to livelihoods, particularly incomes and welfare (Colle 2005, UNESCAP 2005).

Comparative Service Development. Comparisons of the maturity of different service clusters gives an insight into government priorities. For example, in Europe, government-centred applications (tax gathering, registration by citizens/businesses) have a greater maturity than more citizen-centred applications (service delivery, provision of permits/licenses) (Capgemini 2005). One could see this as evidence of a lack of citizen-centricity in government. This idea – of comparing government-centred and citizen-/user-centred application maturity – can be utilized in other benchmarking studies. One could combine this basic demand understanding to compare maturity of, for instance, applications aimed more at traditionally male interests/roles vs. traditionally female interests/roles; or to compare applications prioritized more by poor citizens vs. those prioritized more by wealthy citizens.

National Ranking: Stage Models. All the national ranking models listed here rely centrally on a stage model of e-government. Stage models vary somewhat but a typical formulation runs from Information (static information) to Interaction (information searches and form downloads) to Transaction (completing transactions online) to Integration (joining-up of online services between agencies) (Goldkuhl & Persson 2006). There are at least two problems with this approach, caused partly by the fact that stage models have their origins in private sector e-commerce models. First, they assume online transaction to be the "nirvana" of e-government, yet nirvana might actually be the proactive completion of the transaction within government or even its elimination (Janssen 2003). Second, having a single stage model conflates two separate dimensions: the sophistication of a service (a front-office measure of how much can be accomplished online) and the integration of a service (a back-office measure of the degree to which elements of a user-focused process are dispersed or integrated) (Kunstelj & Vintar 2004). The latter authors therefore propose a revised conceptualization of stage models, as illustrated in Figure 11. Accenture's moves to build a two-dimensional ranking system based on service

maturity (a basic sophistication model) and customer service maturity (incorporating aspects of integration but also further customer-centric ideas) can be seen as innovative in this regard.

Figure 11: Two-Dimensional e-government Web Stage Model



National Ranking: Precursors. National e-government rankings undertaken by the UN are virtually unique in including some precursors (telecommunications infrastructure indicator and human development indicator). This could be extended to correlate e-government maturity levels or usage levels with a full set of the precursor indicators identified above (data systems, legal, institutional, human, technological, leadership, drivers/demand) via analysis of variance to see which precursors appear more or less important. (See also the idea of "pathway diagrams" in Section D.)

Recommendation 14: Investigate Extended Use of Calculated Benchmarking Indicators

Using Standard Public Sector Indicators

We can also compare Table 5 with a standard indicator set for public sector performance (see Table 6 (adapted from Flynn 2002): the examples chosen here are G2C e-services given its domination of benchmarking, but they could equally be applied to other components of e-government).

From the comparison we can see that only one calculated standard indicator was found in the review of benchmarking; benefit/cost ratio which is one external efficiency measure, but undermined at least in the cited case because it is a) self-reported only, and b) refers only to expectations, not reality. The only other typical indicator used is quality, as reflected in relation to both intermediates (e.g. stage maturity or navigability of e-government Web sites) and outputs (e.g. citizen satisfaction with e-government services).

Table 6: Standard Indicators for Government and e-government Performance

Indicator	***Explanation***	***e-government Example***	***Benchmark***
Economy	The amount of inputs used	Expenditure per capita on IT in government	None
Internal efficiency	The ratio of inputs: intermediates	Cost per Web site produced per year	Minimization
External efficiency	The ratio of inputs: outputs (use)	Cost per citizen user of government Web sites per year	Minimization
Internal effectiveness	The fit between actual outputs (use) and organizational objectives or other set targets	The extent to which underserved communities are users of e-government services	Maximization
External effectiveness	The fit between actual impacts and organizational objectives or other set targets	The extent to which citizens are gaining employment due to use of an e-government job search service	Maximization
Quality	The quality of intermediates or, more typically, outputs (use)	The quality of e-government services as perceived by citizen users	Maximization
Equity	The equitability of distribution of outputs or impacts	The equality of time/money saved by e-government service use between rich and poor citizens	Maximization

The first three standard indicators listed in Table 6 would be potentially usable only if figures on government IT spending are available. Per-application figures would be most useful but they appear very rarely (Nicoll et al 2004 is an exception, providing an estimate of US$12,000 to US$750,000 redesign costs per e-government Web site; and US$150,000 to US$800,000 annual recurrent costs per e-government Web site). More general figures on ICT spending in government are available for some countries (see World Bank 2006c) but one must then grapple with the limitation of relation between this figure and available intermediate or output measures: how appropriate is it, for example, to relate total ICT spending solely to Web sites, when that spending likely covers many other areas of computerization?

Effectiveness measures can and are used for benchmarking e-government, though hampered by the relatively limited attention they have received to date. Finally, equity measures are relatively easy to adopt, at least for those benchmarking activities relying on surveys since equity-related questions – about the income, education, age, location, etc of respondents – are often included in the survey. As discussed later, one may also proxy these with general Internet use demographics.

Recommendation 15: Investigate Greater Use Of Standard Indicators, But Recognize Barriers To Their Use

Benchmarking Change

Many benchmarking studies of e-government are one-offs and rely on one-time, cross sectional measures. Even regular benchmarking studies tend to focus mainly on their static data with somewhat perfunctory consideration of change in indicators over time. Yet it is the ability to

bring about change that, presumably, policy makers and other audience members are particularly interested in. National or agency rankings, for example, might look very different if based on degree of change over one-, two- or three-year timescales rather than based on static measures.[2] One could then investigate top performers further via quantitative correlational and qualitative causational analysis to try to understand what explains their performance; providing important lessons. From this perspective, one likely causal component – missing from almost all e-government benchmarking – is the capacity of government agencies to enact a learning cycle of evaluation, reflection, planning and action (IAB 2003).

Recommendation 16: Give Equal Emphasis Where Possible To Measures Of Change Over Time

Matching e-government supply to demand is one of the main likely priorities for change. Given this, adoption data is of especial interest. It is not particularly appropriate for benchmarking: comparing perceived pros and cons of e-government or channel preferences across countries is of limited value. But for individual countries or agencies a sense of why their target users do and do not use e-government provides valuable guidance for change (see, for example, Graafland-Essers & Ettedgui 2003, Accenture 2004). This is part of a slightly broader point that it is the processes within the e-government value chain – adoption to some extent but strategy and development much more – that are the activities of change which most benchmarking study users are actually engaged in. Yet these activities are rarely the subject of benchmarking, tending more to form a patchy qualitative background from which readers must draw their own conclusions and only occasionally (e.g. OeE 2001) being placed centre-stage[3]. One proposed approach to address – given the complexities of measuring qualitative processes such as change – is "bench-learning": a peer-to-peer exchange of change-related lessons and practices requiring less standardization and fewer "public relations biases" than the typical top-down/external form of benchmarking (eGEP 2006b).

Recommendation 17: Recognize The Importance Of Change Practices In Benchmarking

Recommendation 18: Consider The Relevance Of A Bench learning Approach

Benchmarking Public Value

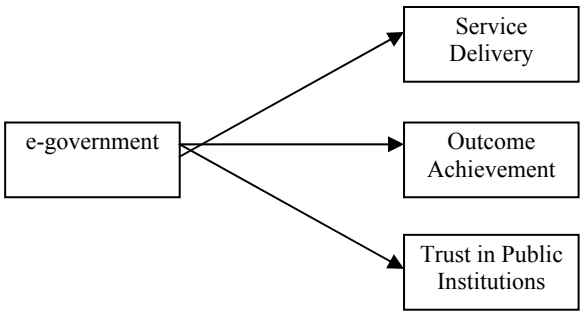
"Public value" has become something of a buzz term invoked in relation to e-government benchmarking, though sometimes without a clear connection to what is actually measured (e.g. Accenture 2004). Public value is intended to be the equivalent for the public sector of private value: the returns that businesses deliver for their shareholders. In general, public value can be defined as "the value created by government through services, laws, regulation and other actions." (Kelly et al 2001:4). It is therefore in tune with the "integrate" approach described in Box 1 and a reminder that we should not really be interested in measuring e-government *per se*, but in measuring what e-government achieves: a message not understood by many governments in setting their techno-centric initial targets for e-government.

But how can this rather vague concept be translated for measurement of e-government? Here, two ideas are offered. First, we could break the public value of e-government down into three main areas, as described in Figure 12 (developed from Kearns 2004).

[2] eGEP (2006b) proposes relying solely on the annual change in an indicator as the benchmarking measure for e-government because this circumvents the problem of standardising indicators across countries.

[3] Another exception is the Balanced E-Government Index (Begix), which incorporates a well-balanced set of indicators around benefits, efficiency, participation, transparency and change management (Bertelsmann Foundation 2002). Unfortunately its actual content and implementation methods are unclear. See: http://www.begix.net

Figure 12: The Public Value of e-government (Kearns Approach)



These can be developed into a set of indicators, as shown in Table 7 (developed from Kearns 2004).

Table 7: Indicators for e-government's Public Value (Kearns Approach)

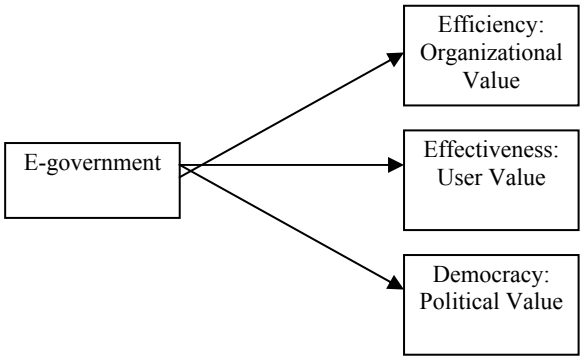
Value Domain	***Indicator***	***Description***
Service Delivery	Take-up	The extent to which e-government is used
	Satisfaction	The level of user satisfaction with e-government
	Information	The level of information provided to users by e-government
	Choice	The level of choice provided to users by e-government
	Importance	The extent to which e-government is focused on user priorities
	Fairness	The extent to which e-government is focused on those most in need
	Cost	The cost of e-government information/service provision
Outcome Achievement	Outcome	e-government's contribution to delivery of outcomes
Trust in Public Institutions	Trust	e-government's contribution to public trust

Public value can thus be seen as a new perspective since none of these indicators is covered by standard e-services G2C benchmarking (even though this interpretation of public value is largely focused on e-services rather than, say, e-administration or e-citizens). Take-up, satisfaction and cost have all been part of some benchmarking studies, and the importance measure is very similar

to demand/supply match. As noted, the causal distance between e-government and outcomes is too great, so outcomes must be measured by proxies such as outputs or impacts which some benchmarking does cover. The indicators of information, choice, fairness, and trust do not appear to have been covered by any mainstream e-government benchmark studies.

A second approach takes a rather broader perspective that could potentially encompass all components of e-government, again with three main areas as described in Figure 13 (developed from eGEP 2006b).

Figure 13: The Public Value of e-government (eGEP Approach)



Again, these can be developed into a set of indicators, as shown in Table 8 (developed from eGEP 2006b). There is still some bias here against e-administration, with no inclusion of user impact related to improvements in decision- and policy-making, and against e-society, with no inclusion of government's e-enabling of civil society and communities. This is because the framework is based on an understanding of e-government users only as taxpayers (efficiency), consumers (effectiveness), and citizens/voters (democracy). However, eGEP's work combines a significant depth of analysis with an understanding of real-world limitations to produce a valuable set of ideas on benchmarking indicators.

Recommendation 19: Consider New Indicators Of e-government Public Value Which May Be Of Use In Benchmarking

Table 8: Indicators for e-government's Public Value (eGEP Approach)

Value Domain	*Indicator*	*Sample Measures*
Efficiency: Organizational Value	Financial Flows	Reduction in overhead costs
		Staff time saving per case handled
	Staff Empowerment	% staff with ICT skills
		Staff satisfaction rating
	Organization/IT Architecture	Number of re-designed business processes
		Volume of authenticated digital documents exchanged
Effectiveness: User Value	Administrative Burden	Time saved per transaction for citizens
		Overhead cost saving for businesses (travel, postage, fees)
	User Value/Satisfaction	Number of out-of-hours usages of e-government
		User satisfaction rating
	Inclusivity of Service	e-government usage by disadvantaged groups
		Number of SMEs bidding for public tenders online
Democracy: Political Value	Openness	Number of policy drafts available online
		Response time to online queries
	Transparency and Accountability	Number of processes traceable online
		Number of agencies reporting budgets online
	Participation	Accessibility rating of e-government sites
		Number of contributions to online

discussion forums

C. How to Benchmark?

C1. Selecting Data-Gathering Methods

We can identify from the review and Table 3 given above a series of different data-gathering methods for e-government benchmarking and can summarize three features of each method (as shown in Table 9, adapted from eGEP 2006b:20):

- *Cost*: the time and financial cost of the method.
- *Value*: the value of the method in producing data capable of assessing the downstream value of e-government.
- *Comparability*: the ease with which data produced can be compared across nations or agencies.

Table 9: Comparing e-government Benchmarking Data Sources

Method	*Cost*	*Value*	*Comparability*
Official statistics	Low	Low	High
Internal self-assessment	Low-Medium	Medium	Low
Third-party Web assessment	Medium	Medium	High
Web metrics and crawlers	Medium	Medium	Medium-High
Pop-up survey	Medium	Medium-High	Medium-High
Focus group	Medium	High	Low-Medium
Internal administrative records	Medium-High	Medium-High	Low-Medium
Mass user survey	Medium-High	High	Medium-High

There is a fourth issue that should also be included when considering data-gathering methods: data quality. This is an issue hardly addressed by most benchmarking studies, and there seems to be an implicit assumption that the quality of benchmarking data is high. However, this is not always the case with apparently "solid" indicators in fact being based on subjective and partial original data (see Janssen 2003, UIS 2003, Minges 2005). If the data quality of methods does need to be assessed or compared, the CARTA checklist can be used (Heeks 2006):

- How *complete* is the benchmarking data provided by this method?
- How *accurate* is the benchmarking data provided?
- How *relevant* is the benchmarking data provided?
- How *timely* is the benchmarking data provided?
- How *appropriately presented* is the benchmarking data provided?

Recommendation 20: Select Data-Gathering Methods On The Basis Of Their Cost, Value, Comparability and Quality

C2. Other General Methods Issues

Measurement Transparency. In some benchmarking studies (e.g. Bertelsmann Foundation 2002) it is not possible to understand either how the benchmarking data was gathered, nor how it was analyzed, nor how it was used to calculate any indices or rankings. Other studies (e.g. UN 2005) are very clear about all these elements. The problem with the former approach is that it raises suspicions that researchers either do not wish their methods to be understood (and, hence, criticized) or that they seek to extract rents from proprietary methods that others cannot reuse. In either case this devalues the benchmarking findings.

Recommendation 21: Be Transparent About Benchmarking Methods

Output/Impact Measurement. Measures beyond adoption in the e-government value chain are needed to judge the value of e-government. Most of the impact examples given in Table 3 were measured by self-assessment; a method with distinct drawbacks, as noted below. As also discussed later, there may be emerging opportunities to use Web metrics/crawlers to assess some outputs/impacts but only in certain situations. In general, then, output and impact measurements require some form of survey. Surveys have been used for this but survey data to date seems to have concentrated mainly on adoption and use, so there is obvious potential for change.

Recommendation 22: Make Greater Use Of Survey Methods To Assess e-government Outputs And Impacts

Partnerships in Data-Gathering. As can be seen from Table 3 and from the reference list, there are many e-government benchmarking studies at global, regional and national level. This inevitably means there is duplication of data-gathering activity. For example, annual global third-party Web assessment is undertaken by West (e.g. 2005) and the UN (e.g. 2005). Consulting firms Accenture, Capgemini and Deloitte have all undertaken similar regular third-party Web assessments for e-government sites in Europe and beyond. There are also studies repeating this activity for individual nations (e.g. Abanumy et al 2005). Likewise there are a number of apparently-similar, apparently-simultaneous mass surveys in various countries encompassing e-government. The opportunities for greater partnership in gathering data for benchmarking would seem to be significant.

Recommendation 23: Investigate Opportunities For Partnering With Other Data Gatherers

C3. Specific Methods In Use

We can offer a commentary on each of the identified data-gathering methods.

Official statistics are used relatively little because they tend to be non e-government-specific and (see commentary on Table 4) it can thus be hard to make the connection with e-government. Probably their most appropriate use is in detailing the precursors to e-government; something that only one major benchmarking study currently does (UN 2005). As noted above, there could be investigation of correlating e-government indicators with governance indicators such as those collated by the World Bank (Kaufmann et al 2005).

Internal self-assessment works well for some things, such as reporting of lessons learned. It works less well for others where there can be a "public relations bias": the respondent is aware that their response will be publicly reported and will thus produce a good or bad reflection, such as in self-reporting the presence or absence of e-government best practices. It works worst of all for items that are outside the respondents' evidence base, yet there do seem to be potential examples of this, such as questions to IT managers about citizen experiences of e-government. However, internal self-assessment does reach places that other methods do not: it is one of the few methods for gathering data to benchmark G2G e-government.

Recommendation 24: Ensure Internal Self-Assessment Is Used Appropriately With Minimal Bias Incentives

Third-party Web assessment divides into three different types:

- Categorization: simple presence/absence measures, and classification from presence/absence into stage model ratings (UN 2005, West 2005). This approach is quite widely known and used.
- Quality assessment: evaluation via Web usage criteria such as content, functionality and design (Moore et al 2005).
- Mystery user: replicating the user experience (Accenture 2005). This is potentially a more subjective approach than the others but does come closest to reality since the assessor takes on the role of a user who, say, wishes to participate in an online debate or apply for a license renewal.

Recommendation 25: Investigate The Utility Of Mystery User Techniques

Web metrics and crawlers may be a growth area for benchmarking given the relative ease with which they can be used. To date, they appear to be used mainly for e-services site quality assessment; for example, assessing the accessibility of sites to users with disabilities or assessing site privacy levels (see, e.g., Choudrie et al 2004, UN 2005).

One area for further development may be the assessment of hyperlinks. These can be used to measure the quality (navigability, centralization) of an individual site. They can also be used to measure the "nodality" of an e-government site: both its authority/visibility (the number of in links to that site) and its hubness (the number of outlinks from that site) (Petricek et al 2006). (A quick and dirty version of the former is to type consistent keywords into major search engines to see if the site appears on the top 10 hits: see Holliday 2002). Authority could be seen as one measure of value of external-facing e-government. One could also look at the nature of nodality – for example, the number and proportion of links to and from civil society organizations as some measure of either G2N or of the recognized role of CSOs as intermediaries in delivery of government information and services in most countries (see Kuk 2004).

To date almost all benchmarking using Web metrics/crawlers has involved the use of externally-applied tools. However, internally-applied Web metrics (i.e. those available to e-government Webmasters) offer an even richer source if they can be objectively reported. This includes not merely usage indicators such as number of page hits or completed transactions but also proxies of outputs (e.g. measuring satisfaction in terms of repeat usage or cross-usage (usage of other information/services on a portal)) and even impacts (e.g. measuring benefits in terms of the extent of site use outside normal government office hours) (eGEP 2006b).

Recommendation 26: Investigate Relevance Of Automated Assessment Of Site Accessibility And Nodality

Recommendation 27: Investigate Potential For Access To Internally-Applied Web Metrics

Pop-up surveys, or some equivalent automated method of questioning a random selection of site users, are generally seen as the preserve of site owners. However, there are examples of e-government sites allowing "foreign" pop-ups from a third-party organization in order to enable independent comparative benchmarking (see Freed 2006). Given the value of survey methods, this is worth further investigation though seems likely to be more acceptable to officials at national level, comparing across agencies, than at international level, comparing across countries (see, e.g., Ramboll Management 2004). As pointed out by those using these surveys, they provide a somewhat skewed response profile: non-users and potential users of e-government are excluded; busy, less-confident, and less-opinionated users tend to be under-represented. However, they do offer a fairly quick and easy way to gather e-government data on use, outputs and impacts.

Recommendation 28: Investigate Use Of "Foreign" Pop-Up Surveys

Focus group methods are very helpful at really understanding e-government usage in depth. However, their strength is in development of qualitative data and they rarely present data with the quantitative validity to allow cross-agency or cross-country comparisons.

Internal administrative records are rarely accessible directly by bench markers, and so they tend to suffer some of the shortcomings of internal self-assessment. Their variability also means they have little to offer cross-country benchmarking.

Mass user surveys can do things no other method can; for example, reach out to that vast majority of the world's population that has not yet been touched by e-government. They are less skewed and allow for greater depth of questioning than pop-up surveys. They provide the statistically-valid sample sizes that focus groups do not. Their main disadvantage is cost. However, given the large number of mass surveys currently undertaken, benchmarking studies can be built around the addition of a small number of questions into existing mass surveys. Some surveys specifically invite this (e.g. GI 2005).

Recommendation 29: Piggy-Back e-government Questions Onto Existing Mass Surveys

C4. Less-Used Methods

Public Domain Statistics. While not quite falling into the category of "official statistics", a number of benchmarking studies re-use e-government statistics from publicly-accessible e-government or related reports. There is also public domain data from non-e-government sources that could be of use in benchmarking either for direct use or as the basis for further calculations. For example, country-level data on:

- Internet access in schools (WEF Global Competitiveness Report)
- Extent of business Internet use (WEF Global Competitiveness Report)
- ICT expenditure as % GDP (accessible via World Bank Knowledge Assessment Methodology site)
- Government prioritization of ICT (WEF Global IT Report)
- Government procurement of ICT (WEF Global IT Report)
- Presence of ICT in government offices (WEF Global IT Report)
- Percentage of localities with public Internet access centers (proposed UN basic core ICT indicator that may become available)
- Percentage of individuals dealing with government/public authorities via Internet in last 12 months (proposed UN basic core ICT indicator that may become available though at present only about 15% of developing countries gather data on specific uses of the Internet (UNICTTF 2005))
- Percentage of businesses dealing with government/public authorities via Internet (proposed UN extended core ICT indicator; data for some countries is available on the current UNCTAD e-business database)

Recommendation 30: Ensure Reuse Of Any Appropriate Public Domain e-government Or Related Statistics

In addition, e-government has really begun to take off as an area for academic study in the past year or so, seeing an explosion in the amount of research being undertaken and outlets for that research. The outlets have risen from just two journals in 2002 with some remit to cover e-government (*Information Polity*, *Government Information Quarterly*) to at least four more directly focusing on e-government by 2006 (*Electronic Journal of e-Government*, *Journal of E-Government*, *International Journal of Electronic Government Research*, *Transforming Government)* plus several annual e-government conferences plus all the other information systems, public administration and e-business journal and conference outlets covering e-government. Much of the written material is not of value to benchmarking being secondary research or focused on conceptualization or reporting case studies. However, there is relevant primary research reported, including evidence from the most data-poor locations: developing countries (e.g. Kaaya 2004, Abanumy et al 2005).

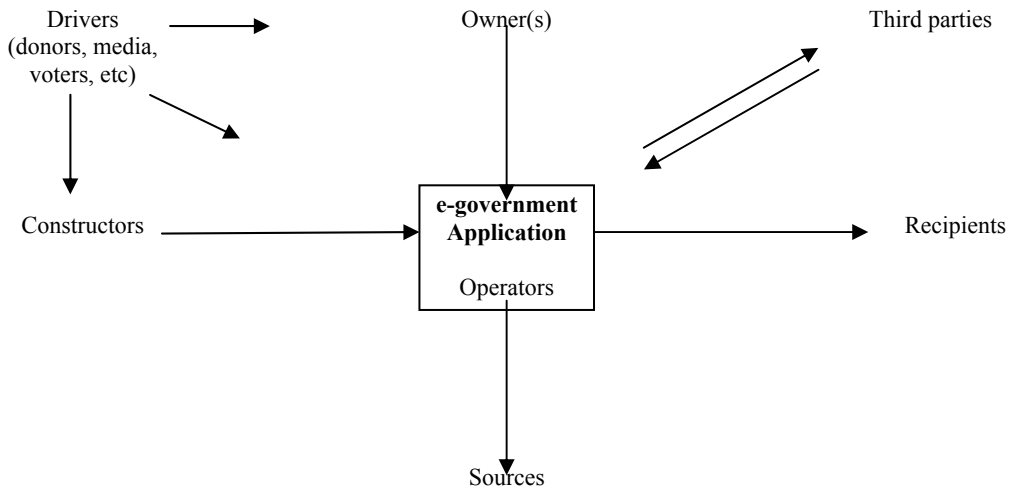
Recommendation 31: Identify A National Or Regional Collator To Draw Together All Public Domain Research Data On e-government In Their Area

Intranet Assessment. If access can be granted, then the techniques of third-party Web assessment can be applied to a sample of intranets within government, allowing the incorporation of G2G e-government into benchmarking. Internally-applied Web metrics and pop-up surveys can supplement this to provide data on use, outputs and impacts.

Recommendation 32: Seek Access To Intranet Data

Public Servant and Politician Surveys. Even a basic stakeholder analysis of e-government (see Figure 14 for the DOCTORS stakeholder checklist) would identify two stakeholder groups almost entirely absent from data-gathering for e-government benchmarking: government staff and politicians. Yet government staff are central to the operation and data sourcing for most e-government applications, and to the construction and receipt of output for many e-government applications. Where they are included as sources of data for benchmarking, they provide a properly triangulated view of e-government, and they deliver insights absent from other studies (see, e.g., Jones & Williams 2005).

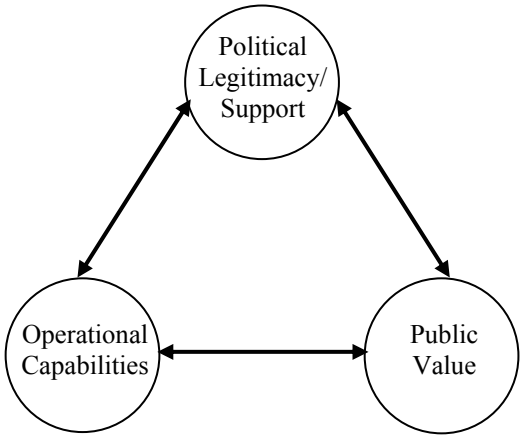
Figure 14: Generic e-government Stakeholder Map



Equally, politicians are often the main owners or drivers (or third-party resistors) for e-government. They are significant determinants of whether or not e-government is providing public value (Horner & Hazel 2005). And political legitimacy/support is seen alongside public value and operational capabilities as part of the "strategic triangle" that determines the overall value and viability of public sector projects such as e-government (see Figure 15: Moore & Khagram 2004). Political legitimacy/support can therefore be surveyed both as an input and as an impact of e-government projects. Yet politics and politicians – a central feature of public sector life – warrant hardly a mention in e-government benchmarking studies.

Recommendation 33: Make Greater Use Of Public Servant And Politician Surveys
Recommendation 34: Measure Political Legitimacy/Support As Both An Input And Impact Of e-government

Figure 15: The Public Sector Strategic Triangle



Intermediary Surveys. In developing countries and in the disadvantaged communities of industrialized countries, access to e-government is often intermediated; for example, occurring for citizens via a community- or privately-owned PC in a local tele centre, cybercafé or similar. These intermediary organizations are thus vital to e-government – they form another part of the Figure 14 stakeholder map – yet have so far been overlooked in benchmarking. They could be included through direct surveys or through agreement to host pop-up surveys. For those intermediaries that have their own Web sites, these could be supplemented by either Web metrics/crawlers or third-party Web assessment. As noted above, automated measures of government Web site nodality can also be used to assess the extent of connectivity to service intermediaries.

Recommendation 35: Make Greater Use Of Intermediary (e.g. Telecentre) Surveys

C5. Methods for Specific Issues

Here, we reflect back on some of the priorities identified earlier, and look at ways to address those priorities. Rather than provide a specific recommendation for each issue, this section comes with a general point:

Recommendation 36: Adopt Methods Appropriate To Particular Benchmarking Interests

G2B. Most benchmarking exercises seem to fail G2B simply because it does not form part of the mental map of those commissioning or planning the research. It can fairly easily be added to third-party Web assessment and Web metrics by ensuring the inclusion of enterprise-relevant government agencies (e.g. Ministry of Industry, or Department of Enterprise) and services (e.g. company registration, business development services, export support, public procurement, etc.) (see, for example, Capgemini 2005). It can fairly easily be added to surveys by including a specific survey of entrepreneurs (see, for example, Graafland-Essers & Ettedgui 2003).

G2G. Third-party Web assessment of intranets, cautious use of self-assessment and surveys of civil servants were identified above as key techniques for gathering data to benchmark G2G. A model questionnaire combining both front office and back office questions is available from NCM (2003).

E-citizens: E-democracy. The UN's (2005) e-participation approach provides a basis for measuring some elements of e-democracy using third-party Web assessment that focuses on citizen ability to influence policy-making. This is based on a three-stage model of e-information (web sites provide information on policies), e-consultation (presence of policy-related discussion forums), and e-decision-making (evidence of influence of citizen inputs such as presence of government feedback). Beyond this, there is potential for a "mystery citizen" approach of assessing a test attempt to provide policy input or other forms of e-participation for each nation or agency being benchmarked. Third-party assessment can also involve content analysis of online discussion forums; for example, measuring the deliberative equality, rationality and interactivity of such discussions (Lyu 2006). Real depth of understanding, though, can only come from survey work. This shows, for example, that the motivations of participants in e-democracy forums may relate much more to their desire to form and broadcast their own opinion to peers rather than to a desire to influence government policy (Lyu *ibid*).

E-citizens: E-transparency. E-transparency has five levels (Heeks 2004):

1. Publication: just providing basic information about a particular area of government.
2. Transaction: automating some public sector process and reporting on that process.
3. Reporting: providing specific details of public sector decisions and actions (e.g. via performance indicators).
4. Openness: allowing users to compare public servant performance against pre-set benchmarks.
5. Accountability: allowing users some mechanism of control (e.g. reward or punishment) over public servants.

This can be used as the basis for third-party Web assessment of those areas of government which are felt to be most important for transparency, such as budgets and other finances, procurement and contracts, and permits/licensing. Other methods that could be relevant include Web metrics/crawlers (assessing government nodality vis-à-vis key rights, anti-corruption and transparency CSOs) and citizen/entrepreneur surveys.

E-society. Partnerships and linkages are probably best assessed by surveys of community, civil society and private sector organizations. Assessment via Web metrics/crawlers of nodality/linkages of government Web sites to sites of these organizations are a supplemental possibility.

Sub-National Tiers. The typical situation of state and local government in developing countries is one where "most departments still use manual typewriters to record information" (Helegbe 2006:1), reflecting the staggered e-government graphs shown in Figure 7. However, change is occurring and growing numbers of sub-national governments in developing countries are building web sites that are assessable:

- Simple visibility tests can be undertaken: what appears in the first ten or twenty search engine entries when typing in "*Country* "state government"" or "*Country* "provincial government"" or "*Country* "district government"".
- Automated hyperlink assessment can measure the nodality of key local government sites such as the national Ministry/Department responsible for local government.
- More directed searching can be undertaken – taking, say, the tiers of government for the largest city or for the most rural state/province – and assessing any Web sites that can be found using third-party Web assessment. Informant-based guidance can be used for identification of such sites, as per the approach used by Capgemini (2005).

Alternative Channels Including m-government. Third-party Web assessment of provision for alternative digital channels can be used to assess these channels. For example, assessors can check for the presence/absence of WAP, SMS and PDA services on e-government sites, and for

reference to digital TV interfaces. Mystery user techniques can be applied to test out the utility of m-government interfaces. For m-government, this could be combined with public domain statistics on accessibility and use of mobile telephony to build an m-government Index. Telephony can be assessed through means such as presence/absence of a phone contact number on government Web sites, use of phone contacts by mystery citizen researchers, and by user survey. Integration between telephony and e-government could be assessed by mystery citizen studies that investigate, say, whether a partially-completed online transaction can be facilitated by subsequent phone contact.

Benefits. The benefits of e-government fall into one or more of five categories (Heeks 2001):

- *Cheaper*: producing outputs at lower total cost.
- *More*: producing more outputs.
- *Quicker*: producing outputs in less time.
- *Better*: producing outputs to a higher quality.
- *New*: producing new outputs.

The last two relate to effectiveness measures (see Table 6 indicators) and must generally be measured qualitatively. The first three relate to efficiency measures and may offer opportunities for quantitative, even financial, measurement. Where e-government is cheaper, internal self-assessment may point to staff and other resource savings; user surveys may point to resource savings (e.g. postage, travel and intermediary fees) (Deloitte 2004).

Where e-government is quicker (and that is certainly the main benefit users seek from e-government: Accenture 2004), financial benefits are not so immediately obvious. One approach – usable for any assessment of the user-side benefits of e-government – is to assess how much users would be willing to pay for the benefits they perceive e-government to deliver. This can produce an overall sense of e-government's social value.

Alternatively, figures on usage levels and/or Web sophistication can be combined with evidence on user-side time savings to produce an estimate of the social benefits due to e-government. For example, the proportion of citizens using transactional e-government services in a country and their frequency of use of such services (estimates extrapolated from similar e-readiness countries can be used) can create an estimate of total number of transactions per year in a country. This can be multiplied by case study data on the amount of time saved per transaction in moving from the most-used traditional channel (typically telephone or in person) to create a total national annual time saving from e-government citizen services. This can be valued in simple terms using average annual wage/income data. See Ramboll Management (2004) for an example of baseline figures (user time savings average just over one hour per transaction comparing online vs. offline) and calculation methods for European nations.

Equity and e-inclusion. There is a danger that e-government will increase inequities in society, with US evidence that it "helps people who already can help themselves" (Horrigan 2005:34). Hence the interest in "e-inclusion", which means:

- "Preventing digital exclusion, i.e. preventing disadvantaged people and groups from being left behind in the development of the information society. Here the focus is on access and basic ICT skills (digital literacy).
- Exploiting new digital opportunities, i.e. reducing existing disadvantages, providing new opportunities in terms of employability, quality of life, access to knowledge, etc.
- Fostering participation and empowerment, i.e. facilitating the use of ICT in order to allow individuals and groups to express themselves, to deepen and widen their social capital, to participate in democratic processes on a local as well as a wider scale." (EAG 2005:9)

Access rates can be determined by precursor studies looking at availability of ICT infrastructure, skills and other relevant resources within disadvantaged groups. Availability measures can also be used such as Web metric/crawler-based measures of e-government site accessibility for the disabled, or third-party assessment of minority language availability (see West 2001, Choudrie et al 2004, UN 2005). One can also look at the comparative maturity of e-government domains of particular relevance to the socially-disadvantaged, which are often held to be education, health, labor and social welfare (OECD 2005; see UN 2005 for use of this focus). These can be compared with generic domains or those appealing to non-disadvantaged groups (e.g. travel advisory, higher education). Ultimately, though, benchmarking the second two elements of e-inclusion listed above will require some form of survey work. It will also require recognition of the information chain (see Figure 5), which acts as a reminder of the non-e-government-related resources that disadvantaged groups need in order to gain full benefit from e-government.

As noted above, one can ask demographic questions in pop-up and mass user surveys. These provide an understanding of the equity of access and use of e-government which, when related to income, can be presented in the form of Gini coefficient calculations and graphs. At present, though, there are relatively few statistics on the demographics of e-government users, but there are a greater range of data on the demographics of Internet users indicating various divides of gender, age, education, income, etc. A question then arises: can Internet user demographics be taken as an appropriate proxy for e-government user demographics?

In relation to gender (see Table 10), there may be some sense of a greater tendency for male than female Internet users to access e-government but there is no statistical validity to this sense from the data presented here.

Table 10: Internet User Gender and e-government Usage Rates

Source	***Female Internet users using e-government***	***Male Internet users using e-government***
Multi-country (TNS 2001)	89%	78%
Multi-country (TNS 2003)	65%	69%
Singapore (Li et al 2004)	67%	73%
South Korea (Lyu 2006)	21%	34%

The same can be said for age, education and income (see Table 11): there is some slight skew towards e-government users being older, more educated and richer than the general Internet-using population but there is no statistical basis for making any differentiation.

Table 11: Comparative Internet User and e-government User Demographics

Indicator		*Internet Users*	*e-government Users*
Average age	Multi-country (TNS 2001)	<20 years (modal age)	25-34 years (modal age)
	Multi-country (TNS 2003)	<25 years (modal age)	25-34 years (modal age)
	Singapore (Li et al 2004)	34.1 years	33.6 years
	South Korea (Lyu 2006)	32.4 years	33.5 years
% University educated	Singapore (Li et al 2004)	23%	27%
	South Korea (Lyu 2006)	61%	75%
Average monthly household income	Singapore (Li et al 2004)	S$4,246	S$4,390

On this evidence at least, there is no basis for differentiating between the demographics of Internet users and the demographics of e-government users. Data for the former can therefore be used as a proxy for the latter in benchmarking issues such as equity and e-inclusion.

It was also noted earlier that data on Internet user numbers could be used to calculate the number of users of e-government in a country or region. To do this, though, one requires a conversion factor on the percentage of Internet users who are e-government users. Those conversion factors were used in the calculations for Table 2 but they were based on very limited data for developing countries; this area of evidence therefore requires strengthening, for example via more sample surveys of Internet users.

Public Value. eGEP's approach to public value indicators for e-government is rich and would require incorporation of many of the elements already described – public servant surveys, intermediary surveys, e-democracy and e-transparency measures, benefit and equity measures. Kearn's approach would also require a combination of methods to cover its nine indicators:

- Take-up: measure via user surveys (proxy via conversions from Internet user statistics).
- Satisfaction: measure via user or pop-surveys (proxy via internal Web metrics on repeat and cross-usage).
- Information: requires a new scale of information value, probably measured by third-party Web assessment (could be read as similar to e-government site maturity).
- Choice: measure by third-party Web assessment or internal self-assessment in relation to choice of channels, may require internal self-assessment or survey to identify situations of choice of provider.

- Importance: requires a survey of user priorities (demand), matched against investment or availability (supply) of e-government.
- Fairness: requires a survey of disadvantaged/excluded citizen priorities, matched against investment or availability (supply of e-government); could also use survey figures on profile of use or outputs across disadvantaged vs. non-disadvantaged groups.
- Cost: measured by internal-self assessment.
- Outcome: as argued above, needs to be proxied by impact or output measures, which are typically measured by survey.
- Trust: measured by user survey.

However, all discussions of public value agree that it is citizen preferences that determine the components of public value rather than one-size-fits-all approaches. As with other issues, there is some sense of these preferences and, hence, the meaning of public value for industrialized countries but much less sense of whether public value would mean something different for the majority, poor citizens of developing countries.

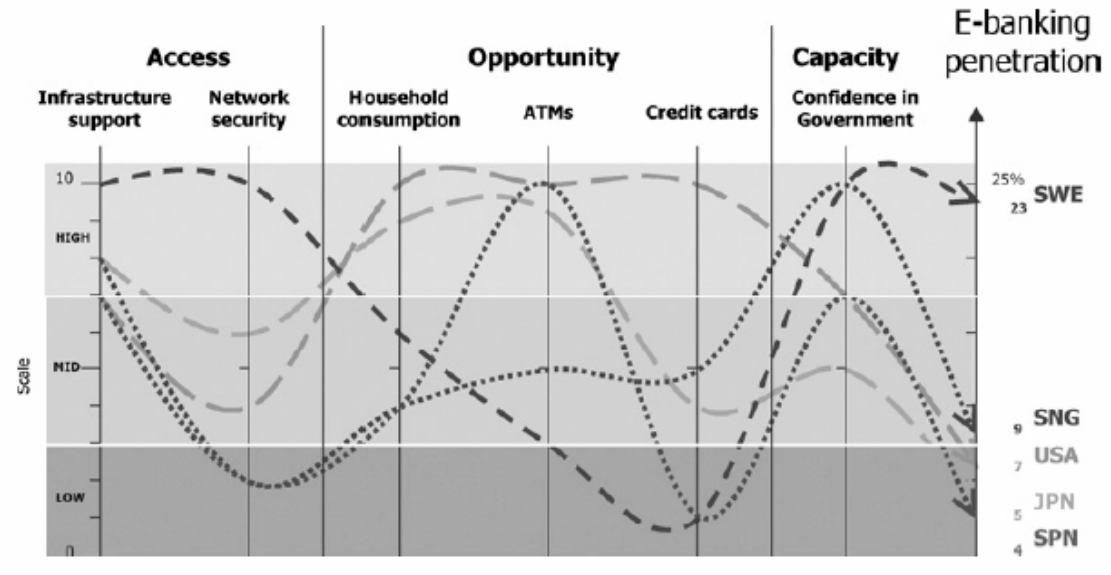
One area, for instance, of particular concern to citizens in developing countries – and part of the good governance agenda – relates to personal security and the rule of law (Kaufmann et al 2005). ICTs admittedly appear to have relatively little contribution here. However, it would certainly be appropriate to consider two areas that have not appeared in any mainstream benchmarking study – e-government in the judiciary, and e-government in the police. There are certainly e-government applications in both sectors in developing countries (e.g. IRMT 2002, Anonymous 2003).

D. How to Report?

It may be that much of the focus of benchmarking goes into the data gathering and analysis without considering in any detail how to then report and disseminate the benchmarking information. Such issues are rarely written about. Maugis et al (2005) provide a discussion of innovative ways to report, and they make use of "pathway diagrams". These select particular cases – agencies or countries – that have some important feature; this could be high levels of e-government use or high levels of e-government impact (or low levels). The precursors, inputs and intermediates for these particular cases are then plotted on a pathway diagram (see Figure 16, which provides an example for e-banking rather than e-government, and focuses more on precursors and inputs than on use or impact). This allows analysts and decision-makers to visualize patterns fairly quickly and then identify what is and is not important in high (or low) e-government performers. (Of course, this visual patterning is best checked statistically through analysis of variance techniques.)

Recommendation 37: Investigate Use Of Innovative Visualization Techniques To Display Benchmarking Data

Figure 16: Pathway Diagram Illustrating Upstream—Downstream Relationship



Discussion about dissemination of e-government benchmarking is provided in Regional-IST (2004). This identifies three main "pillars" for such dissemination:

- Panels, seminars and other physical meetings that attempt to connect with as many appropriate decision-makers as possible.
- Electronic discussion forums (though they note relatively poor levels of participation in those they used).
- An interactive Web site that allows users to manipulate the data according to their own particular needs and interests rather than just presenting it in a static manner.

In addition, they note the value of a well-organized public relations exercise around the benchmarking report (such as press releases and interviews) to target a broader audience.

Recommendation 38: Make Use Of Dissemination Good Practices

One assumption of benchmarking appears to be that results merely need to be put into the public domain and that users such as policy makers will then be able to make effective use of them. However, this may not be true (RAWOO 2001). It may therefore be appropriate to offer guidance, exemplars, even a training guide covering use of benchmarking data. Such guidance needs to work within the framework of the strategic triangle (see Figure 15): data users may have some aspect of public value in mind when they come to use benchmarking studies but they will be guided as much by what is politically (including personally) desirable and feasible, and by what is operationally feasible.

Recommendation 39: If Necessary, Provide Guidance on Use of Benchmarking Results

Finally, one may wish to evaluate the benchmarking study, which takes us full circle back to the issue of researching the usage of e-government benchmarking. Formal evaluation could involve use of pop-up surveys on any benchmarking report Web site; plus telephone or other interviews

of key users, focusing on issues such as user demographics, usage of benchmarking data, impact of benchmarking data, and user views on quality and improvements. As mentioned above, creation of a user panel would be appropriate for regular benchmarking studies. An example of a full evaluation of an IT-related benchmarking and information service is IST Results (2006).

Recommendation 40: Develop A Mechanism For Providing User Feedback On The Benchmarking Study

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Chapter II

Global E-Government and E-Participation Models, Measurement and Methodology: Issues and Challenges

Greg Curtin

E-government [1] and its partner in the electronic age, e-participation, [2] have over the course of the past decade moved from concept to reality, at least at some level, and in the last 4-6 years moved from much talked about curiosities to subjects of serious inquiry. Since the turn of the 21st century, aptly called by some the electronic or digital century, a number of global or regional e-government research studies have been conducted by prominent public and private organizations including the United Nations[3] , the World Economic Forum,[4] Brown University,[5] the Economist/IBM,[6] Accenture, [7] CapGemini,[8] RAND Corporation[9] and the Pacific Council on International Policy [10] among others. Many of these have become ongoing projects, thereby developing an ever expanding body of e-government information and knowledge. Additionally, two scholarly journals, the Journal of E-Government [11] and the Journal of International Electronic Government Research,[12] have been founded specifically to review and add structure and rigor to the explosion of academic papers, articles and books written about e-government and related subjects.[13]

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[1] Electronic government, also known as digital government. For purposes of this paper the common construction "e-government" will be used.

[2] Electronic participation, also variously called e-democracy, digital engagement, and others. For purposes of this
paper the common construction "e-participation" will be used throughout and is inclusive of other terms.

[3] UN Global E-government Readiness Report 2005. http://www.unpan.org

[4]http://www.weforum.org/site/homepublic.nsf/Content/Global+Competitiveness+Programme%5CGlobal+Information+Technology+Report.

[5] http://www.insidepolitics.org/policyreports.html.

[6] http://www.eiu.com/site_info.asp?info_name=eiu_2005_e_readiness_rankings.

[7] http://www.accenture.com/xd/xd.asp?it=enweb&xd=industries\government\gove_thought.xml.

[8] Read more about the CapGemini study at
http://www.capgemini.com/news/2005/Online_availibility_of_public_services_5th_measurement.pdf.

[9] http://www.rand.org/publications/MR/MR1733/.

[10] http://www.pacificcouncil.org/pdfs/e-gov.paper.f.pdf.

[11] For more information about the Journal of E-Government visit http://www.egovjournal.com.
[12] For more information about the Journal of International Electronic Government Research visit
http://www.ideagroup.com/journals/details.asp?id=4298.

[13] See, for example, the extensive literature review provided by Bryan Reece, "E-Government Literature Review," *Journal of E-Government*, Vol. 3, Issue 1 (New York: Haworth Press, 2006).

Further, across the globe numerous research and academic programs and centers have been formed focusing on e-government and related issues. [14]14 Although still in its infancy—some would argue adolescence—e-government is developing, growing, evolving both as a viable government practice and as a compelling academic subject, if not a separate discipline. Still, much of the e-government literature and research to date have focused on anecdotal case studies [15] —with researchers and policymakers describing practices that have been particularly successful or common pitfalls they have found in implementation—or qualitative comparative surveys [16]16—with researchers scoring websites and services based on qualitative impressions of effectiveness and user-friendliness. The UN Global E-Government Readiness
Issues and Challenges: Global E-government/E-Participation, Models, Measurement and Methodology
Gregory G. Curtin, July 2006
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Reports, the primary subject of this paper and the conference within which it is being presented, have for the past three years established a robust body of data, information and knowledge based primarily on quantitative data. The Reports have provided meaningful insights into the development of e-government and e-participation on a global and regional basis—facilitating comparative analysis between regions, as well as country comparisons within regions. Following the initial three years of the Global E-Government Readiness Reports (2003-2005), the United Nations has used 2006 as a period to assess the program and refine the process and methodology if appropriate. As part of this evaluation process, formal and informal meetings of academics and practitioners have been held with the UN program managers and research team, all asking the same question: How should the UN Global E-Government Readiness Program evolve so that it remains for governments a relevant and useful source of e-government data, information and guidance into the future within the context of the UN's vision of e-inclusion for all. [17]The general purpose of this paper is to frame some of the key issues, opportunities and challenges for the UN Global E-Government Readiness Program as it moves into its next phase of development. The specific purpose within that context is to serve as a departure point and frame the discussions related to e-government and e-participation during the two day Workshop on E-Participation and E-Government: Understanding the Present and Creating the Future, sponsored by the United Nations Department of Economic and Social Affairs (UNDESA) in Budapest, Hungary, 27-29 July 2006.

I. **A Brief History Of The United Nations Global E-Government Readiness Program**

In 2001, the United Nations established the United Nations Information and

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[14] Academic centers include the E-Governance Lab at the University of Southern California (USC), the National Center for Digital Government at the University of Massachusetts Amherst and the Oxford Internet Institute (OII), as well as numerous others.

[15] See, for example, Lim Siew and Low Yin Leng, "E-Government in Action: Singapore Case Study," in *The World of E-Government*, eds. Gregory G. Curtin, Michael H. Sommer and Veronika Vis-Sommer (New York: Haworth Press, 2003). The article discusses—by both public- and private-sector actors—the state of e-Government in Singapore.

[16] See, for example, Vivienne Jupp, "Realizing the Vision of e-Government," in *The World of E-Government*. The article compares qualitatively 23 countries' e-governance maturity based on surveys conducted by Accenture.

[17] The UN's vision of e-inclusion for all is discussed elsewhere in this paper, and is introduced in the *United Nations Global E-Government Readiness Report 2005* (see, for example, the Executive Summary and all of Part II). The Report can be found at http://www.unpan.org/egovernment5.asp.

Communication Technologies (ICT) Task Force, [18]18 which aims at boosting global development and competence in information technology. UN Secretary-General Kofi Annan outlined the mission of the ICT Task Force: The new technologies that are changing our world are not a panacea or a magic bullet. But they are, without doubt, enormously powerful tools for development. They create jobs. They are transforming education, health care, commerce, politics and more. They can help in the delivery of humanitarian assistance and even contribute to peace and security. One of the most pressing challenges in the new century is to harness this extraordinary force, spread it throughout the world, and make its benefits accessible and meaningful for all humanity, in particular the poor. The principal mission of this Task Force is to tell us how we might accomplish this ambitious goal. [19]19

In this context, it is important to note that the mission of the Department of Economic and Social Affairs (UNDESA) is to provide a vital interface between global policies in the economic, social and environmental spheres and national action. As such, it has sought to explore the interlinkages between e-government and development through an assessment of the countries according to their state of e-government readiness and the extent of e-participation worldwide. The initiative began as UNDESA undertook the initial attempt to measure e-government readiness on a global scale with the UN Global E-Government Survey 2003 (2003 UN Report). [20]20 Analyzing each UN member country's national website, data were collected and analyzed to create an E-Government Readiness Index that could serve as an annual benchmark for policymakers in order to know where their country stands in comparison to the rest of the world and to establish a reference point to measure future e-government progress and development. The survey assessed the 191UN member countries based on a composite index of e-government readiness and captured in the report's quantitative index, as well as developed as a theoretical model. [21]21 The UN research team set forth the following survey objectives:

1. Present a snapshot of the state of comparative e-government readiness of the countries of the world;
2. Provide an appraisal of the use of e-government as a tool in delivery of services to the public in its capacity as consumer of such services;
3. Provide a comparative assessment of the willingness and ability of governments to involve the public in e-participation; and
4. Provide a benchmarking tool for monitoring the progress of countries as they move towards higher levels of digital public service delivery in the future. [22]22

The 2003 UN Report introduced two companion surveys—a quantitative survey of egovernment readiness and a qualitative study on e-participation. Although the e-participation component is qualitative, the research team felt it was critical to include e-participation within

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[18] For more information on the United Nations Information & Communications Technologies (ICT) Task Force, visit its website at http://www.unicttaskforce.org/index.html.

[19] Kofi Annan, United Nations Secretary-General, Press Release, April 2001. Available at http://www.unicttaskforce.org/welcome/.

[20] See *United Nations Global E-Government Survey 2003,* available at http://www.unpan.org/egovernment3.asp.

[21] For more information on the UN survey's theoretical framework, see *United Nations Global E-Government Survey 2003*, supra note, at 8-17.

[22] *Id.* at 11.

the e-government context, for, as one observer notes, "If digital government and digital democracy are to transform government service delivery and decision making, e-democracy tools must be integrated into government portals, websites, and electronic services."[23]23

It is important to note that the 2003 UN Report—as well as the follow on 2004 and 2005 UN Reports—considers e-government to "be the means to an end, the end being the development for all. It is considered to be a tool at the disposal of government" that can be used to effectively enhance the lives of its citizens and improve the functioning of its governance. [24]24 The e-government survey evaluates only quantitative, not qualitative, evidence of e-government capacity indexed for comparison to all other member countries. Consequently, the results should be placed in context with the country's overall development and capacity. Higher rankings might not necessarily predict better information and services, since the survey does not evaluate qualitative issues involved with the quality of the information and services provided, citizen access and usage, usability, and other relevant indicators. This quantitative survey merely measures information and services provided, without making normative or qualitative judgments as to veracity, accessibility, or usability. Coupled with the more qualitative e-participation component, the 2003 Report provided a meaningful snapshot of e-government development on national, regional and global levels. In its efforts to continue building useful knowledge around global e-government, the United Nations embarked on the Global E-Government Readiness Report 2004: Toward Access for Opportunity (2004 UN Report), [25]25 and the Global E-Government Readiness Report 2005: From E-Government to E-Inclusion, [26]26 both of which utilized roughly the same E-Government Readiness Index and E-Participation Index as those introduced in the 2003 UN Report. This year, 2006, the project team has embarked on a year-long assessment of the ongoing UN Global E-Government Readiness Program with an eye toward improving, and possibly expanding, it in the future.

II. The United Nations Global E-Government Readiness Reports

The annual United Nations Global E-Government Readiness Reports ("UN Report 2003, 2004, 2005") [27]27 since 2003 have provided useful composite scores and rankings on the 191 United Nations member states with respect to e-government, e-readiness, and e-participation, as well as highlighting good national e-government practices that have been identified throughout the world. In addition to reporting on and assessing the research findings, each of the UN Reports has included a policy oriented component aimed at furthering the theory and practice of e-government—and more broadly, information and communications technologies (ICTs) for development—worldwide.

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[23] William Eggers, *Government 2.0: Using Technology to Improve Education, Cut Red Tape, Reduce Gridlock, and Enhance Democracy* (Lanham, MD: Rowman & Littlefield, 2005), 148.

[24] *Id.* at 8.

[25] *United Nations Global E-Government Readiness Report 2004: Towards Access for Opportunity*, available at http://www.unpan.org/egovernment4.asp.

[26] *United Nations Global E-Government Readiness Report 2005: From E-Government to E-Inclusion*, available at http://www.unpan.org/egovernment5.asp.

[27] The United Nations published all three reports--2003, 2004 and 2005--in print and online format, and they can be accessed and downloaded from the United Nations Online Network in Public Administration and Finance (UNPAN). See *UN Report 2003*, available at http://www.unpan.org/egovernment3.asp; *UN Report 2004*, available at http://www.unpan.org/egovernment4.asp; and *UN Report 2005,* available at http://www.unpan.org/egovernment5.asp.

The UN Report 2003 reported on the first Global E-Government Survey and was published as part of the bi-annual United Nations World Public Sector Report. It focused on developing an initial baseline of information on the national e-government programs of the UN member nations, and represented the first implementation of both the UN Web Measure Survey and E-Participation Measure. Setting this baseline, the UN Report 2003 concluded that the potential of e-government as a tool for development rests largely on the existence of some threshold level of technological infrastructure, human capital, and connectivity, and that most countries were not yet harnessing e-government to effectively deliver public services and information. And, as one observer strongly noted, "Since so much is at stake, it is imperative that countries and regions step up their efforts to migrate to cyberspace." [28]28

The UN Report 2004, subtitled "Toward Access for Opportunity," focused on the concept of the digital divide. Part II of the UN Report 2004 put forth a theoretical framework called the Model of Access Acceleration which states that while some threshold level of physical ICT infrastructure is necessary for "real access," other educational, economic, social, cultural and political factors supply the ingredients for access acceleration. Upon achieving this threshold level of access acceleration, a nation can truly reap the economic and social benefits of egovernment.[29] 29 Others have written about this multi-dimensional relationship as well, noting that the bottom line is, "In the long run, improved accessibility will raise usage levels and provide a further basis for social and political transformation." [30]30 In other words, access leads to usage, usage drives change, which creates greater access, which leads to more usage, which in turn drives new change, and the cycle goes on in an upward, hopefully positive, spiral.

The UN Report 2005 serves as the capstone of the initial three annual Global E-government Readiness Reports. Sub-titled "From E-Government to E-Inclusion," the 2005 Report articulates the vision of global access for all—e-inclusion—enabled by technology generally, and e-government specifically. This vision is bolstered in the report with the incorporation of the Socially Inclusive Governance Framework, a multi-faceted approach to promoting technology driven real access, focusing on access for development and the inclusion of women and the disadvantaged in society. It further highlights the real risk of a global divide of e-haves and e-have-nots. This framework aligns nicely with the work of others in the electronic or digital inclusion area. Anthony G. Wilhelm, for instance, writing in his "Digital Nation: Towards an Inclusive Information Society" notes that a "…Digital Nation privileges bold new experimentation to improve citizen access and effective use of new technologies while using innovative approaches to address longstanding social problems." [31]31

III. MEASUREMENT METHODOLOGY

One of the real challenges in researching e-government and e-participation is how and what to measure. Others elsewhere and at this conference are addressing this challenge directly. The following outline of the measurement methodology for the UN Reports will serve as a starting point for this broader discussion. As the Report notes the measurement of e-government is an assessment of a state's use of the internet for provision of information, products and services, as well as the level of telecommunication and human capital infrastructure development in a country.

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[28] Anthony G. Wilhelm, *Digital Nation: Towards an Inclusive Information Society* (Cambridge, MA: MIT Press, 2004), 129.

[29] See Part II of the UN Report 2004, available at http://www.unpan.org/egovernment4.asp.

[30] Darrell M. West, *Digital Government: Technology and Public Sector Performance* (Princeton: Princeton University Press, 2005), 128.

[31] Wilhelm, *Digital Nation*.

Hence, the E-government Readiness Index is a composite index comprising the Web measure index, the Telecommunication Infrastructure index and the Human Capital index. [32]32

Defining E-Government

For the purposes of the UN Global E-Readiness Reports, the following broad definition of e-government which includes e-participation has been adopted: "The use of ICT and its application by the government for the provision of information and public services to the people. The aim of e-government, therefore, is to provide efficient government management of information to the citizen; better service delivery to citizens; and empowerment of the people through access to information and participation in public policy decision-making." [33]33

The UN E-Participation Index was developed as a qualitative indicator of both the capacity and the willingness of a state in encouraging the citizen in promoting deliberative, participatory decision-making in public policy and of the reach of its own socially inclusive governance program. Specifically, the E-Participation module seeks to evaluate, on a comparative basis, whether countries around the globe are:

1. Increasing e-information to citizens for decision-making;
2. Enhancing e-consultation for deliberative and participatory processes; and
3. Supporting e-decision making by increasing the input of citizens in decision making.

The UN Reports clearly constrain the scope of the E-Participation Index—it is not included, for instance, in the calculations for the E-Government Readiness Index, discussed below—and are very clear that the Index is qualitative, and the findings should be used and interpreted with great caution. The purpose of the Index is to illustrate broad trends and practices in promoting e-participation and e-inclusion.

Overview of UN E-Government Readiness Index Methodology

The UN Global Report 2005 presents an overview of the methodological framework for the E-government Readiness Reports: "The UN Global E-Government Readiness Index presents the state of e-government readiness of the Member States. It is a composite measurement of the capacity and willingness of countries to use e-government for ICT-led development. Along with an assessment of the website development patterns in a country, the e-government readiness index incorporates the access characteristics, such as the infrastructure and educational levels, to reflect how a country is using information technologies to promote access and inclusion of its people. The measurement of e-government is an assessment of a state's use of internet and the World Wide Web (WWW) for provision of information, products and services; plus the level of telecommunication and human capital infrastructure in a country."[34]34 The E-government Readiness Index is a composite score made up of the following components.

Telecommunications Infrastructure Index
The Telecommunications Infrastructure Index is a composite score itself made up of six primary indices: personal computers (PC's)/1000 persons; internet users/1000 persons; telephone lines/1000 persons; online population; mobile phones/1000 persons; and televisions/1000 persons. These data

[32] *United Nations Global E-Government Survey 2003*, 14.

[33] *United Nations Global E-Government Readiness Report 2005*, 14.
[34] *United Nations Global E-Government Readiness Report 2005*, 14 (italics in original).

were taken from the United Nations International Telecommunications Union (ITU) and the United Nations Statistics Division, and supplemented by the World Bank.

Human Capital Index

The Human Capital Index is a composite score derived from the United Nations Development Program (UNDP) education index, comprised of the adult literacy rate and the combined primary, secondary and tertiary gross enrolment ratio, with two thirds given to adult literacy and one third given to gross enrolment.

Web Measure Index

The Web Measure Index is a score derived from a quantitative analysis of the national web presence of the 191 member states (note that in each of the three annual survey periods—2003, 2004, 2005—a handful of countries did not have national government websites). The research team used a survey instrument with more than 200 indicators to assess the national government websites (at least one and in many instances two national websites/portals were identified and assessed for each country) along with five ministry sites which align with the UN Millennium Development Goals [35]35 (these ministries include education, health, labor, social welfare, and economic development/finance). In all three survey years, at least the six official languages of the United Nations (Arabic, Chinese, English, French, Russian and Spanish) and to the extent feasible and necessary (for example when a site was not available in one of the six UN languages) numerous additional languages were utilized to assess particular country sites. Notably, in 2005 every national site was assessed in the official language of the country, or in the primary language provided on the website. To our knowledge this is the first time this level of language translation has been utilized on such a large scale for research on global e-government.

During each of the survey years, the sites are assessed over a 60 day period, with the findings for each country reviewed at least once by a senior research associate who verifies all countries for consistency and in many cases a third time as part of a random final review. The researchers made at least three separate attempts on different days and at different times to open up each identified site(s) before marking them as inaccessible.

The UN Reports include as part of the measurement methodology a five stage model of e-government development, as set forth in the Web Measure Assessment Model. [36]36 A brief summary of each of the stages, included in the UN Reports, follows:

• Emerging Presence. Stage I e-government presents information which is limited and basic. The e-government online presence comprises a web page and/or an official website; links to ministerial/departments of education, health, social welfare, labor, and finance may/may not exist; links to regional/local government may/may not exist; some archived information such as the head of states' message or a document such as a constitution may be available online; most of the information remains static with the fewest options for citizens.

• Enhanced Presence. In Stage II the government provides greater public policy and governance sources of current and archived information, such as policies, laws and regulation, reports, newsletters, and downloadable databases. The user can search for a document and there is a help

[35] See the UN Millennium Goals website at http://www.un.org/millenniumgoals/.

[36] *Id.* at 16.

feature and a site map provided. A larger selection of public policy documents such as an e-government strategy, policy briefs on specific education and health issues. Though more sophisticated, the interaction is still primarily unidirectional with information flowing essentially from government to citizen.

• Interactive Presence. By Stage III the online services of the government enter the interactive mode with services to enhance convenience of the consumer such as downloadable forms for tax payment, application for license renewal. Audio and video capability is provided for relevant public information. The government officials can be contacted via email, fax, telephone and post. The site is updated with greater regularity to keep the information current and up to date for the public.

• Transactional Presence. Stage IV allows two-way interactions between the citizen and his/her government. It includes options for paying taxes; applying for ID cards, birth certificates/passports, license renewals and other similar C2G [citizen-to-government] interactions by allowing him/her to submit these online 24/7. The citizens are able to pay for relevant public services, such as motor vehicle violation, taxes, fees for postal services through their credit, bank or debit card. Providers of goods and services are able to bid online for public contracts via secure links.

• Networked Presence. Stage V represents the most sophisticated level in online e-government initiatives. It can be characterized by the integration of G2G [government-to-government], G2C [government-to-citizen], and C2G [citizen-to-government] (and reverse) interactions. The government encourages participatory deliberative decision making and is willing and able to involve the society in a two-way open dialogue. Through interactive features such as web comment forms and innovative online consultation mechanisms, the government actively solicits citizen views on public policy, law making, and democratic participatory decision making. Implicit in this state of the model is the integration of the public sector agencies with full cooperation and understanding of the concept of collective decision making, participatory democracy and citizen empowerment as a democratic right. [37] 37

It is important to note here that while the UN puts forth this "stage" model of e-government development, it is primarily as a framework for the research methodology, and not necessarily as a linear, evolutionary model of e-government. In fact, the UN Reports throughout note that countries can, and do, implement e-government services and initiatives often from the various stages without any sort of real evolution, and can, in fact leap frog whole stages of e-government development.

The indicators for the Web Measure survey were formulated as questions that were answered by researchers observing the national and ministry websites for each of the countries.
The questions were grouped according to the five stage model above to provide structure and focus to the survey process:

• Stage I evaluates whether the country has a national website with links to regional and ministry sites through questions such as whether the homepage provides a link to other national government sites;
• Stage II concerns whether the country website provides current and archived information on law and policy, as well as basic user-friendly web features through questions such as whether archived information and documents can be found on the site;
• Stage III assesses the interactive presence ranging from downloadable forms to specific contact information for public officials through questions such as whether specific contact methods are readily available;
• Stage IV evaluates whether the country provides for opportunities for online transactions through questions such as whether taxes can be filed and fees paid online;

[37] http://unpan1.un.org/intradoc/groups/public/documents/un/unpan016066.pdf. p 13-15.

• Stage V represents the most sophisticated level of e-government development with features that facilitate two-way communication—ranging from discussion groups and online surveys to web comments and online consultation through questions such as whether a feedback mechanism is readily available.

Additional, non-quantitative questions were included to provide information about good practices, to identify sectoral and government program sub-sites, to identify documents and policies for possible later collection, and for normative purposes. The quantitative scores for each of the five stages were incorporated into an overall country composite score and indexed out of the highest score of 1.0.

One of the purposes of this paper and the Workshop on *E-Government and E-participation: Understanding the Present and Creating the Future* is to discuss ways to improve the Web Measure survey specifically. This will be done through two considerations:

• Vertical consolidation/rationalization—expanding and enhancing the types of e-issues government indicators that should be measured given the development of e-government practice globally;
• Horizontal consolidation/rationalization—possibly expanding the number and types of ministries that should be included in the web measure, and also considering other types of government programs that might be included whether at the ministry level or not.

Qualitative Evaluation: E-Participation Measure

In addition to the analysis of the five stages based on the Web Measure Assessment Model, an evaluation of e-participation features was also undertaken. This survey posed several questions in three general categories: e-information (providing information resources to citizens); e-consultation (engaging in consultation with citizens); and e-decision-making (offering consideration of citizen input). Unlike the previous evaluations, this survey was qualitative in nature with researchers ranking each question from zero to four ("never" to "always"). These responses were not calculated into the E-Government Readiness Index, but used for other analyses. Similar to the Web Measure Survey, one of the goals of this paper and the Workshop is to generate discussion, feedback and possibly recommendations for enhancing the e-participation measure, and at least adding to it, if not transforming it completely into, a more quantitative measure.

IV. **National Level E-Government Models Developing A Country Classification System For E-Government**

Another opportunity that has clearly presented itself throughout the Global E-Readiness research and evaluation period is to create rich e-government profiles for each of the UN member nations. In addition to the country level e-readiness data and trends already available through the UN Global E-Readiness Reports, quantitative data on the following additional country-level variables could start the development of comprehensive e-government country profiles, or reports.

Population

The size of a country in terms of population is a factor in how a country does, and possibly how it best should, implement e-government and approach e-participation. For example, all highly populated countries, regardless their level of development will require higher levels of threshold connectivity and greater reach for their e-government programs. A basic five tier classification

system—Very Large to Very Small—utilizing United Nations data should be sufficient for the purposes of the Global E-Readiness Program: [38]38

• Very Large
• Large
• Medium
• Small
• Very Small

Geographic Area

Similar to population, countries that comprise large geographic areas generally have greater hurdles to overcome in terms of providing physical infrastructure, and thereby connectivity, to their populace. By way of an extreme comparison, providing e-government services in a very large country like China is certainly more challenging from a geographic standpoint than providing those same services communications promise to lower the threshold needs of physical infrastructure, the geographic size of a country (let alone the geographic character of a country) remains a factor. Still the question of why certain large countries are able to overcome their geographic handicap while many small, even micro countries, cannot is worthy of exploration, and this classification system will facilitate such comparisons and research. Again, a five tier classification system utilizing available UN data [39]39 and in line with the population classifications would be sufficient:
• Very Large
• Large
• Medium
• Small
• Very Small (Micro)

Country Income Level

Country income level is by all accounts a critical, if not the critical, factor in national development of e-government programs. One researcher has concluded that "Countries that were richer tended to have more electronic services on their websites. This is in keeping with the results of other studies suggesting that economic factors are vital to policy innovation in general and e-government in particular. There were no organizational or political factors that were important, only the level of fiscal capacity. Neither liberalism nor level of democracy were associated with e-government performance." [40] 40 The Global Reports have utilized World Bank gross national income per capita (GNI) levels [41]41 to compare e-government rankings among and between country income level groupings. Based on the GNI, The World Bank employs a three tier classification system for income levels, with the middle tier subdivided into two sub-classes:

- High Income
- Medium Income

[38] Population data, for example, could be supplied by The United Nations Department of Economic and Social Affairs (UNDESA) Population Division. See http://www.un.org/esa/population/unpop.htm.

[39] See, for example, available data from the United Nations Department of Economic and Social Affairs Statistics Division, at http://unstats.un.org/unsd/default.htm.

[40] West, *Digital Government*.

[41] See the World Bank income classifications and related data at http://www.worldbank.org.

- Medium High Income
- Medium Low Income
- Low Income

Government Type

A country's governmental structure is a key factor in how e-government is, and can be, implemented. The UN researchers, for example, have noted that countries with federal government systems tend to implement certain approaches to e-government most probably because of the limitations of the government system. Certain key areas, education, for instance, are often not within the federal government's jurisdiction, and are therefore missing or have very light coverage at the national level. Similarly, in federal systems where much authority is delegated to state and municipal governments, national level e-government programs often lack connection to or integration with the sub-level government programs. (Note that this lack of intergovernmental integration is typical regardless the type of national government system.)

There are available a number of approaches to classifying national governments by types (e.g., republic, federal republic, monarchy, parliamentary democracy, constitutional democracy, and numerous others); one source and classification system would have to be selected for standardization purposes. It should also be noted that no single type of government system has a hold on "good" or "effective" e-government implementation. As Darrell West has noted in his own research, "I show that non-democratic systems are as likely as democracies to perform well on new technology initiatives. Some authoritarian countries have been successful with digital government because they have top-down political structures and are able to overcome bureaucratic and political intransigence."[42]42

E-government Access Approach

Ascribing to each country a score or rating on various dimensions of e-government access (that is, access to e-services and information, as opposed to access to infrastructure, connectivity, etc.) would go far in describing a country's e-government program. How exactly to develop the rating system presents an additional methodological challenge, but could be done by a "counting" of indicators associated with each of the following dimensions:

• Access to Services/Service Delivery: Social services orientation (health, education, welfare, etc.), or civil services orientation (licenses, records, applications, etc.) or balanced services.
• Access to Information/Information Delivery: Services information orientation (how to apply for/receive benefits, how to initiate public service processes, etc.); governance information orientation (access to laws and policies, decision-making information, financial and budgetary information, etc.); balanced.
• Access to Participation: Procedural orientation (e-consultation, e-rulemaking, e-voting); inclusion orientation (encouraging access to underserved groups, providing new means of access); balanced.
• Primary Access Strategy: Transaction orientation (complete government processes online, complete financial transactions online, closed loop consultations); interactive orientation (push and/or pull services, information, etc.; provide two-way interaction between government and constituents); program orientation (information, education and services integrated in online programs aimed at specific subject/policy areas or government programs); balanced.

EMERGING NATIONAL E-GOVERNMENT MODELS AND APPROACHES

[42] West, *Digital Government*.

Over the course of the UN Global E-Government Readiness Program, a number of distinct e-government models, or strategic approaches, have emerged at the national level. To be sure, most countries are still experimenting with e-government and feeling their way down the digital path, and most cases researchers have observed instances of two or even more approaches in practice. Still, one of the models or approaches generally takes a lead, or dominant position in terms of a nation's overall e-government strategy.

Following are basic outlines for each of the emerging models. There is clearly an opportunity to develop these models more fully as part of the UN E-Government Readiness Program, thus presenting them as models or guideposts for national e-government development, and eventually implementation, by individual countries. At this point in time the descriptions of the models are just that—general descriptions based on three years of observation. They are in no particular order, and at this point in time the research team has made no comments on whether one model is better or more effective than another, other than to suggest which models might be appropriate for certain types of countries. These descriptions should serve as a good starting point for developing a more rigorous framework for each of the models.

1. Centralized, Focused-Point of Access Model
This model is typically characterized by the development of a national government web portal. There is often a consistent look, feel and terminology across national government websites. Communications and information flow with citizens is filtered through the centralized portal system, lending the appearance, if not the reality, that there is a single point of access for information and services within the national government. This model might be most appropriate for small, developed or developing nations focused on advancing government institutions, administrative structures and delivering new services to a small and accessible population (examples include Malta, Estonia); or for advanced developed nations, large or small, that can focus e-government resources on integrating and delivering quality services and information through large, complex portal systems (examples include Canada, Singapore).

2. De-centralized, Programmatic Model
This approach is characterized by the development of stand-alone websites for specific programs or program areas (e.g., health, education), often run directly out of national ministries. These stand-alone program sites often have unique branding, communications and web environments for each of the different programs, often based on the perceived characteristics and needs of the targeted users. A national homepage or even national portal may exist, but it is generally lean and used primarily to channel users to the individual program sites. The program sites are used primarily as support mechanisms for traditional service delivery systems rather than true e-services.

Although instances of the approach can be seen in a variety of settings, it might be most appropriate for developing nations desiring to focus potentially limited e-government resources on delivering critical social and human services (e.g., public health programs, education programs,) and economic development programs (e.g., rural economic development, agricultural modernization).

3. Connected Government Model
This approach is characterized by careful integration of electronic services and business processes. Along the same lines, the linkages between and among different ministries, agencies and programs are relatively seamless—a major accomplishment for any governmental entity. In its most advanced form, there are strong linkages between levels of government as well. This approach may be most appropriate for advanced developed nations—focus on providing a unified, connected government approach to citizens highlighting government efficiencies, customer service, etc. (examples include

United Kingdom, United States, Sweden, Korea), and reform oriented developing nations focusing on efficiencies, stability, transparency (examples include Chile, Mexico).

4. E-Participation Focused Model
This model, while not yet widely observed, focuses on providing citizens one or more ways to participate in government, from providing feedback and input on policies and decisions, to posing questions to elected officials and senior administrators, to simply being able to make their voices heard and opinions known online. This model can be appropriate for virtually any country, and may be as appropriate for developed countries as for developing countries that may not have the government administrative structures and business processes in place to effectively implement e-government services but that might easily be able to initiate basic e-participation activities.

5. Focused E-Government/E-Services Model
This model is most characterized by the development of specific e-government and/or eservices portals encouraging users to transact their business online and engage in other full online activities. Governments taking this approach, an approach that some observers would say is a plurality if not a majority of advanced e-government programs, often sacrifice, consciously or unconsciously, citizen participation for effective e-services: "Rather than seeing the Internet as a tool for citizen empowerment and public responsiveness, they have put more money into information and services than accountability-enhancing and interactive features that strengthen the role of the general public."43 Often the look, feel and branding is around the concept of e-government, really more of a marketing focus. Countries taking this approach to e-government sometimes couple it with the development of national identification/account programs allowing citizens/users to sign up for government information/activities and conduct government business online or via other electronic means (mobile, kiosks, cards, etc.). This approach appears to be most appropriate for advanced or advancing developed nations that seek to transform government to e-government. E-services are on the leading edge of this transformation, and the e-participation aspect, if present at all, takes a secondary position.
Issues and Challenges: Global E-government/E-Participation, Models, Measurement and

V. A FRAMEWORK FOR MOVING FORWARD

This final section puts forth a number of possibilities for moving forward with the next phase of the UN Global E-Government Readiness Program. Some of the possibilities are clearly doable without too much additional effort; others would require additional thought and planning; and still others would require additional resources, in some cases substantial. Which of the possibilities should be turned into reality as part of the UN Program remains squarely within the decision making authority of the United Nations. The purpose of this exercise, as stated in the introduction of this paper, is to provide input and guidance to the United Nations as it considers how to evolve the program. The value of the past and current work cannot be overstated—the
UN Reports are cited universally, and individual governments from around the globe have used the reports, and by extension, access to UN advice and guidance, to plan and implement national e-government programs and strategies. As one international observer puts it, "Governments all over the world compete with respect to the most ambitious electronic service delivery targets, and countless surveys try to measure their respective success. This international dimension has reinforced the commitment of the respective national politicians, and, moreover it provides ample opportunity not only to benchmark but also to learn from the successful approaches and pitfalls in other countries."44 Following are a number of possibilities for enhancing the value of the UN Program and facilitating the continued progress of e-government implementation across the globe. There are certainly numerous additional opportunities for enhancing the UN Program, but these shall serve as the starting point for discussion.

A. Refine the Baseline E-Government Readiness Index

1. Vertical Consolidation: The current list of indicators, operationalzed primarily as yes/no questions and/or number counts, could be refined. Indicators that are present in 95% of the countries (e.g., contact information) and that are less of an issue than in the initial days of e-government development could be deleted or rolled up into other indicators.
2. Vertical Consolidation: The current list of e-government indicators should be expanded in the light of new technologies (e.g., WiFi, mobile government, others) and new e-government issues and opportunities.
3. Horizontal Consolidation: The breadth of government covered by the Global E-government Readiness Index—currently the national web presence along with the education, health, labor, social welfare, and economic development/finance ministries— could be expanded to include other equally important policy and subject areas.
4. The binary approach for calculating the Web Measure Index, one of the primary sub indices of the E-government Readiness Index, should be tested and validated—is there a better or more meaningful statistical approach, given the level of data and information available.

B. Refine the Baseline E-Participation Index

1. The E-Participation Index should be transformed, or at least be supplemented with, a quantitative index. What can and should be measured to create this kind of quantitative e-participation index is one of the key discussion items of this conference, and is being considered by outside experts in the field.

2. The E-Participation Index should be broadened in some way to include more than simply the tools of e-participation. Currently the E-Participation Measure focuses only on the supply side of the e-participation spectrum, and then only on one part of the supply side. The diagram below illustrates this. It is admittedly a challenge to develop meaningful approaches to measure the other stages along the e-participation spectrum, especially any sort of impacts analysis. However, it would certainly be worthwhile and of great value to start the process of developing those approaches. Some preliminary ideas are incorporated into the additional suggestions and recommendations below.

C. Develop E-Government Impacts Evaluation Reports

Following is an example of how a specific E-Government Impact Evaluation study might be implemented through the Global E-Government Readiness Program: Example—E-Procurement Impact Evaluation: Using the UN Reports data and findings as a starting point, a research team could focus on the impact of national e-procurement initiatives.

1. Discussion of e-procurement models and e-procurement development in the global context: country by country, regionally, globally
2. Impacts Evaluation: A basic impacts model could look something like the following: E-participation policy, goals, etc.

Outputs: Action, service, policies, decisions, elections, etc.
E-participation tools
Inputs: E-participation process
Current focus of evaluation
Impacts: Economic, social, political, etc.

- Governance Impacts: For example, transparency in procurement (more transparent, less transparent); impact on corruption
- Administrative Impacts: For example, administrative costs of procurement (increased, decreased); average length of procurement (increased, decreased);
- Economic Impacts: For example, market competitiveness (increased, decreased); private sector transaction costs (higher, lower)
- Social Impacts: For example, impact on local jobs creation (increased, decreased)

3. Collection and description of e-procurement best practices according to the UN E-Government Best Practices Framework and the findings of the impacts evaluation.

D. Develop a UN Methodology for E-Government Best Practices
The UN Global Reports each include a smattering of Best Practices and Case Studies.
Other efforts both inside the UN and from outside agencies also purport to collect Best Practices, but none do so systematically or with any sort of methodology. Rather, they fall into one of two categories: Collecting what is readily available (e.g., searching online, self-reported best practices and case studies); or focusing only on one narrow subject or thematic area.
As part of the ongoing UN Global E-Government Readiness Program the research team could develop a methodology for systematically identifying, analyzing and reporting E-government Best Practices across a range of subject areas and from a range of geographic regions to keep them relevant. Following is an example of what this E-Government Best
Practice/Case Study Framework might include:

• E-Gov Readiness Baseline Information: Country Profile, Country E-Gov Classification, E-Readiness Baseline Information
• Brief Description of Selected Practice/Case
• Administrative Locus: What agency/division/department/etc. was the lead agency for the development, implementation (actual or oversight of contractor) and management of the selected practice.
• Implementation Information: Some of the most useful information for governments about e-government development and implementation is also often the least reported:
  - Cost factors
  - Funding/budgetary considerations
  - Is the Selected Practice Part of Plan/Initiative/Strategy
  - Length of Implementation
  - Technology Platforms/Components, Integration
  - Other factors specific to the selected e-government practice
• Usage: Available data/statistics on the actual usage of the selected practice.
• Evaluation Factors/Return on Investment (ROI): What criteria, if any, are in place to evaluate the success/return on the selected practice?

E. Develop National E-Government Profiles
The UN Global Reports has now created a three year foundation of national level e-government data and information. A number of other organizations (e.g., OECD, World Bank) and research initiatives have developed country-level profiles including some e-government information for various reasons, but none has developed a set of country reports covering the globe, and none has the wealth of baseline UN Global E-Government Readiness data incorporated. The UN E-Government Readiness Program team has initiated the development of country profiles from the available data. These country profiles, or reports, should be developed more fully according to the country classification scheme discussed earlier in this paper in Chapter IV.

F. Survey Member States on E-Government Application Usage
Most, but not all, governments that are implementing e-government applications in online/mobile environments will have some way to monitor or count actual usage. By creating a baseline survey for e-government usage for which countries could self-report annually, the UN
Global E-Readiness Program could standardize to some extent the key usage indicators and most relevant means of reporting usage.

G. Identify and Collect Leadership, Policy, Legal and Strategy Documents and Indicators

A major source of valuable, but still untapped, knowledge and resources for e-government are the individual national governments themselves. As e-government programs are implemented around the globe, relevant documents that could be used as models or guides for countries seeking to learn from others are being created, approved and archived. As part of the current
Global E-Government Readiness Program research process researchers identify and note links to relevant e-government policy documents, strategies, etc., but these documents are not formally collected or classified. The undertaking would admittedly be huge, but given that the process is in place, with additional resources a vast library of formal e-government documents and resources could be developed. Following are some of the types of documents and other indicators that could be identified:

• Leadership Vision: Evidence at the highest executive level of support and a vision for e-government (e.g., a national speech, a presidential policy directive, a presidential memo); creation within the executive an office or at least an official whose portfolio includes e-government.
• Policy/Legal/Regulatory Readiness: Identify for each country the primary policy support for e-government; evidence of 3-4 key legal indicators for e-government/e-readiness;
• Strategy Readiness: Is a national level e-government or similar strategy(ies) in place?

As noted, the elements described above are not intended to be comprehensive, but rather to serve as an initial "framework" for moving forward with the UN Global E-Government Readiness Program. Developing ideas for building out that framework is the task at hand for the remainder of this workshop and, indeed, is an ongoing task for the UN project team in its efforts to continually improve the program.

Chapter III

Outcomes that Matter: Developing Customer Service as a Lever for High Performance Government

Jon Brakebill

Accenture has been formally studying government's customer service programs for seven years. [1] We first looked at the emerging trend of "e-government"—government services offered through the online channel—in 1999-2000. We have followed that trend as it moved mainstream and became, eventually, an essential and integrated part of many governments' broader vision of leadership in customer service.

In our initial studies, we saw many governments subscribe to the premise that simply moving services online was in itself a "good thing," and that e-government would undoubtedly deliver benefits if adopted. Many governments, seeing the explosion of e-commerce in the private sector as the wave of the future, scrambled to follow suit. The frequent result was that governments did their best to replicate their offline world as much as possible, without developing distinct strategies that recognized the inherent differences and challenges, as well as the greater potentials, of the online world.

While Accenture's focus in our research has been in the main on industrialized countries, the principles we have developed for improving governments' customer service programs are as true in developing nations as they are elsewhere. E-government clearly has delivered and continues to deliver value. Perhaps more than any other channel of service delivery, e-government can deliver dramatic improvements in the reach of services, the ease of interaction and the costs of service delivery.

What it *cannot* do in and of itself is effect the sweeping transformation of government service that will lead to high performance—generating the outcomes citizens want and that governments need to deliver, and accomplishing those objectives in the most cost-effective way. This change is bigger than e-government alone; it implies an entirely new vision that Accenture calls "Leadership in Customer Service." Leadership in Customer Service is a vision that embraces the concepts of cross-government, citizen-centered and multi-channel interactions, and of service options that are proactively communicated to the citizenry and supported with necessary end user training.

While e-government is a catalyst of this change, it is also only one (albeit important)component of the change. For developed countries, the basic drive to put services online has now approached its limits; e-government, for them, has now become an integral component of government service. The leaders are setting their sights on the bigger picture—looking for far

[1] To download a copy of Accenture's 2006 research on governments' customer service programs, *Leadership in Customer Service: Building the Trust,* visit http://www.accenture.com/Global/Services/By_Industry/Government/R_and_I/BuildingtheTrustES.htm

greater value from their service investments (not only in e-government, but in all areas—call centers, counter services, infrastructure and process improvements and so on). This is where the real future of government customer service lies.

The importance of e-government in service to the citizen

E-government, then, is most properly viewed in its role as a strong catalyst toward a new vision of leadership in customer service.

Once governments attain leadership in customer service, they will gain the ability:

- To deliver services that are tailored to individual citizens' needs and circumstances, and to do so effectively and efficiently.
- To deliver services that are coordinated across the various channels of interaction (telephone, Internet, face-to-face, mail, short message system, and so on).
- To deliver services that yield timely and cost effective results for the citizen, consistent with the government's policy objectives.

The bigger picture of leadership in customer service is about moving beyond service delivery tactics to a level of service in which a government's interactions with its citizens are designed to build an implicit trust. In this approach, both government and citizens benefit, as building trust breeds greater citizen involvement, which in turn informs policy and dictates smart allocation of resources, right from the start.

A "how-to" for service development?

While a one-size fits-all, scripted approach is not feasible, Accenture has seen countries broadly follow certain steps toward their desired ends. Certainly, our research has shown that governments' progress toward leadership in customer service has been marked by clearly defined stages (see Figure 1).

	Establish eGovernment	Use eGovernment	Embrace Four Pillars of Leadership in Customer Service*	Build the Trust
Goal	Number of services available online	High percentage of citizen and business uptake	Government services delivered cross-channel and cross-government for one-stop/end-to-end services	Citizens trust their governments implicitly
Era	1999–2001	2001–2005	2005–2008	2007+
Key Challenges	nternet capability	• Citizen outreach • Uptake	• Cross-government collaboration • Service integration	Content of services—not just delivery
Time to Implement	2–3 years	2–5 years	5+ years	7+ years
Financial Implications	Technology cost	Investment in additional channels	Deliver more for less cost	Citizen input informs smart allocation of resources from the outset
Service Implications	Service availability	Service delivery	Service value	Service trust
Value Proposition/ Advantage	Government masters technology	• Increased convenience • Decline in transaction costs	• Citizen-centered perspective • Cost to serve declines/flattens	Country effectiveness improves

*Citizen-Centered Cross-Government, Multi-Channel, Proactively Communicated Service

Figure 1. Governments' progress toward leadership in customer service has been marked by clearly defined stages.

Governments evolve through steps, beginning with having e-government, through using-government, to internalizing the principles of leadership in customer service (citizen centered, cross-government, multi-channel, proactively communicated service). Once they have internalized these principles, governments create a new vantage point, from which they can see what the next phase of service means for themselves and for their customers (citizens and businesses).

As mentioned previously, in the future, leadership in customer service will be defined by service that builds an implicit trust between citizens and their government. Here, the definition of trust means even more than a belief that governments are acting in citizens' best interests; it implies an inviolate institution. Citizens will *know* with absolute certainty that their governments are acting to the best of their ability to ensure citizens enjoy the highest quality of life. Citizens will *feel* the value government provides. Governments, in turn, will lead more boldly because they enjoy the confidence and support of their constituents. This is an outcome far beyond the citizen satisfaction levels with individual services that many governments already measure.

The implications of building the trust can be seen as a virtuous circle: trust in government builds a more connected populace, whose true needs inform the development of more effective policy, implemented via excellent service, resulting in a strengthening of trust(see Figure 2).
The result will be self-renewing high-performance government, in which citizens have confidence in their governments and governments, in turn, sustain and build on that trust over time to foster the most positive social outcomes.

Figure 2. Building trust through leadership in customer service starts a virtuous circle.

However, as stated at the beginning of this section, there is no one prescribed approach to this level of high performance—stemming from the fact that not all countries have the same drivers. What one country defines as service excellence, may not be another country's ambition at all.

We saw from our research this year a range of drivers. As an example, the basic impetus behind Canada's current service transformation agenda is to increase the level of Canadians' confidence in their government, whereas Singapore is being driven by constant need to maintain their competitive edge in light of its scarce natural resources. Finland, meanwhile, is concerned with developing fairness and equality of services across geographic disparities. Yet all three are leaders.

How they architect service, however, is a principle that can be applied to all countries, at any stage of development: it is done with a broader emphasis on service that creates value, rather than on simply putting services online. That is, the governments in leading countries seek to understand not only what citizens want now, but also what they need in the context of broader social outcomes.

Not surprisingly, those who have comfortably mastered e-government (those that already have a broad range of services available online and a high level of transactional sophistication) recognize they have "reached the limit" with their current approaches to customer service and must step into the uncomfortable arena of transformation. They are now re-assessing and re-crafting their customer service strategies, not just to satisfy citizens, but also to create lasting value.

At the same time, they are veering away from a "best practice," one-size-fits-all template. The key here is that governments need to build their strategies based on their own unique challenges and value propositions. They must architect service to achieve the outcomes that are a priority to them. Leading countries, in particular, have recognized that there isno set definition for "citizen

centric." They are putting the "custom" back in government customer service. That is what sets leading countries apart—their recognition that generic terms such as "improving performance" and "becoming citizen-centric" are almost meaningless when the concept is without national and cultural context.

Determining citizens' real current and future needs is not easy, and in fact, the further government looks to the future of customer service, the less likely its citizens' needs will be expressed versus implicit (see Figure 3). However, this true understanding is prerequisite to building service trust.

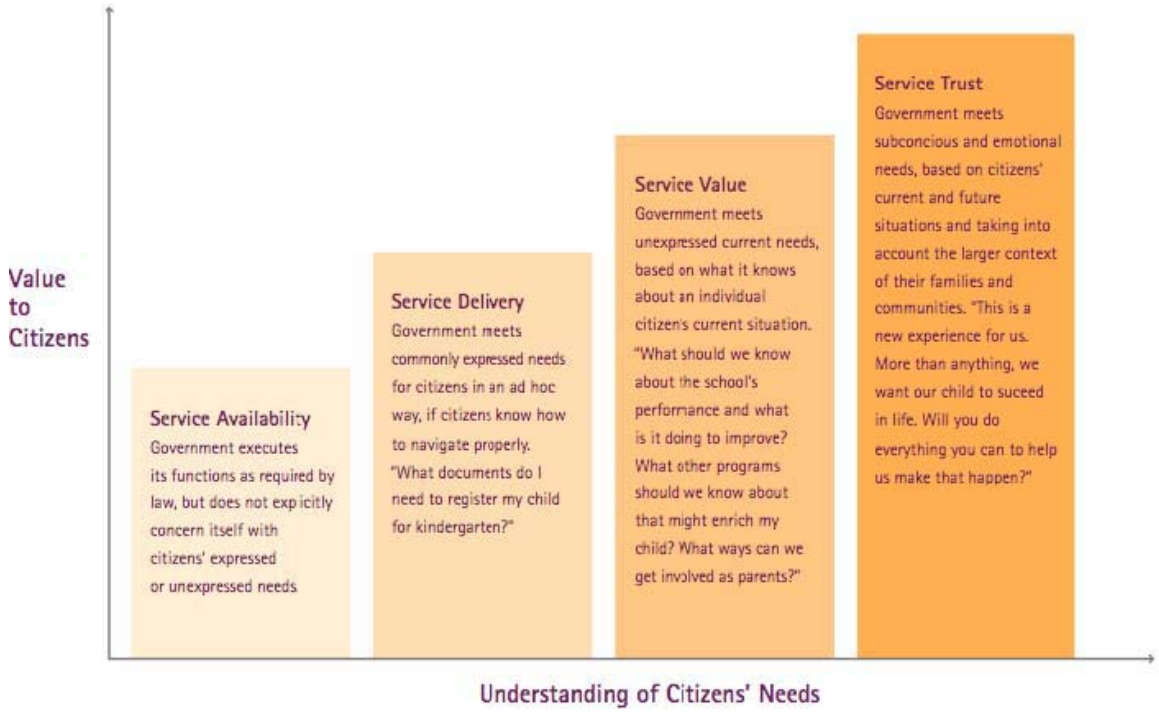


Figure 3. Governments' true understanding of citizens' needs and, correspondingly, thevalue they can deliver to citizens, increases as they move toward service trust.

Common characteristics of the leaders

Apart from service strategies that speak to their unique challenges and objectives, leading countries share a number of other characteristics worth consideration for those either looking to improve their service programs or those just getting under way.

Increasingly local connections

At the heart of governance is connecting with the people who are governed. And while the e-government channel does many things, it also disassembles that relationship. After years of emphasis on relentless automation, leading governments are beginning to realize that if they completely give up their personal interface with citizens, then people begin toolset their understanding of the relevance of government.

In contrast, by building local connections with the people they govern, governments can begin to

use these connections to inform policy in meaningful ways. Their aim is to bring strong and reliable customer voice into the design of individual services. To that end, many leading governments are developing increasingly local citizen touch points—making innovative use of their local connections to build bridges to citizens across all levels of government.

In concert with their use of technology to simplify and increasingly automate behind-the-scenes processes, they are using local centers to provide access to services traditionally provided at a national level, while building stronger citizen awareness of their governments' offerings and a stronger personal connection. They are coordinating their service delivery strategies from the national down to the local levels, determining what absolutely has to be delivered at a central level, while increasing local involvement. In the process, they are decentralizing tasks from national government where possible and empowering municipalities.

Recognizing the need for organizational and process changes, not just technology ones
Governments that are most successful in aligning their service investments to their desired outcomes share a recognition that changes in internal structures and processes are just as crucial as changes to infrastructure. For leading developed nations, that includes strong new organizational designs, relentless simplification, business reengineering, consolidation and forays into shared services. For developing nations it will mean, at the very least, a recognition that improving customer service is as much an organizational and cultural challenge as it is a technology infrastructure one.

A focus on increasing adoption of more efficient service channels
Even in advanced countries (those with high Internet penetration and relatively tech-savvy populations), the telephone continues to be the predominant means citizens use to communicate with government. Despite the relative sophistication of their e-government offerings, a number of developed countries still struggle with converting even high Internet use into genuine enthusiasm for the e-government channel.

Obviously, the value of live communication should not be underestimated. Our research showed that in-person communication is expected to deliver the best level of service across all country categories we surveyed (advanced, developing and emerging countries). In developing and emerging countries, walk-in centers were cited as the main priority for investment.
While it will be difficult for any other channel to replace personal contact, leading governments continually strive to move the boundary in terms of what services citizens are willing to transact online. A key component of their effort is changing perceptions through proactive marketing. These countries are using a combination of four proactive tactics to promote adoption of their service strategies:

- Stick—strong pressure or mandatory use of more efficient online channels for some services
- Carrot—incentives (financial and other) for online use
- Marketing pull—innovative campaigns to increase awareness and educate users on how to access and use the available services
- High-touch push—help and support; showing people and businesses how to get the most out of services

In other words, they are not relying on a "if you build it, they will come" mentality fore-

government. This is a key point, and one where governments most often stumble in their service evolution.

A passion for customer service
Finally, in all the leading governments we surveyed in our research, we found a passion for customer service among the executives charged with developing their governments' service programs. They are hungry for inspiration wherever it resides, and exhibit a keen interest in learning from their peers. Not content to rest on their laurels, leading governments talk to each other; send delegations to each other's countries to gain a more in-depth understanding of how their service programs compare; and have a voracious appetite for any information the world outside their borders can provide.

The challenges to moving forward
Perhaps nothing shows the limitation of e-government in and of itself more than citizens' perceptions of the channel.

In our *Leadership in Customer Service* research this year, Accenture conducted an extensive citizen survey.[2] In many countries surveyed—even among past world e-government leaders—citizens' increased confidence in using the Internet is not matched by improvements in their perception of e-government (see Figure 4). As they enact new service strategies with far-broader-reaching objectives than simply getting services online, developing nations are encountering some unexpected difficulties. The gaps that remain—inherent in the structure and organization of government, as well as in the culture of a country and in its citizens' deep-rooted attitudes and perceptions—present the real challenge for the future.

[2] 8,600 citizens in 21 countries.

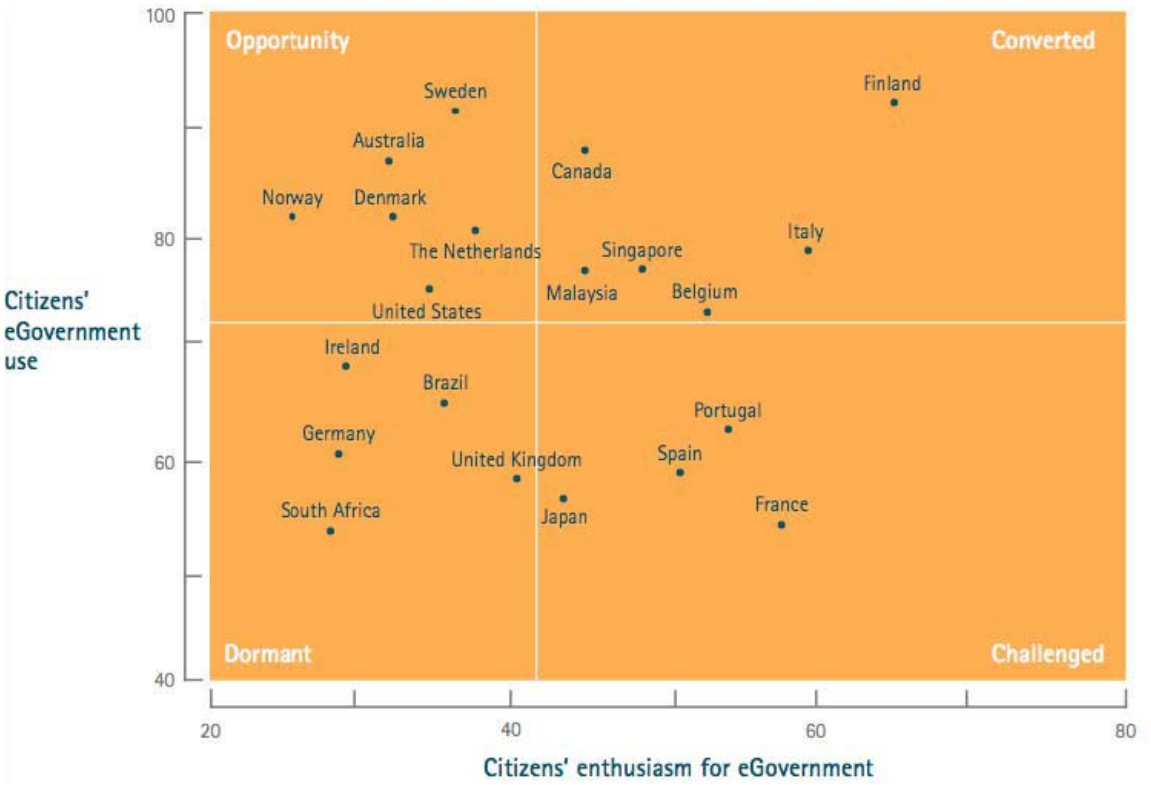


Figure 4. Even developed countries struggle with converting high e-government penetration into real enthusiasm for the online channel.

It's a cautionary tale for developing nations—even if they build magnificent e-government services, they face a number of significant hurdles, including:

Managing the complexity of exploding service channels
The proliferation of devices (channels of interaction) offers governments unparalleled opportunities for connecting with their citizens. As new channels open they provide-governments with unprecedented new reach. Yet they create both expected and unexpected pitfalls as well. With the increase in service delivery channel options comes an increase in technological, organizational and process complexity for governments to manage. Even small problems can not only disrupt one particular service, but can give customers a very poor experience, which will prevent them from using other services, and impact negatively on service trust.

Clearly, governments must ensure that every service works absolutely right before they launch it. After launch, governments need to be diligent about determining user attitudes toward the service and about finding ways of continuously improving it.

Citizens' beliefs and value systems that run counter to leading service practices
Building "customer insight" is a practice in which organizations collect and use information about their customers to tailor services more effectively to them as individuals. It is a common private sector customer service practice and is making some

inroads in certain governments.

For example, Accenture research has found that some countries, such as Norway, Denmark and Finland, have unique identifiers in place, and their populations are familiar—and comfortable—with governments cross-sharing a wide range information. More often, however, privacy remains a thorny challenge. In a number of other countries, in fact, the challenges are growing as new initiatives (unique identifiers, biometric passports, and so on) have brought privacy concerns and questions of civil liberties to the fore. Resolving citizens' concerns about privacy will be critical to enabling the holistic view of citizens that will allow governments to begin to proactively manage their needs.

The rising cost of technology for many governments
Governments are burdened by the costs of their legacy systems. Private-sector companies have the option to offshore some functions and activities that others can perform more effectively. Yet for most countries, even where it is a common private-sector practice, off shoring is unpalatable, is prevented by unions or simply goes against the cultural grain.

Some countries have sidestepped the rising cost of technology for now. For example, Singapore has been able to parlay its low-crime rate, tech-savvy population and pro-business environment into an attractive package for many high-tech companies, who look to the country as a test bed for their latest technology innovations.

Such examples are isolated, though, and for most countries, the challenge of staying abreast of technology while managing the costs of implementation (both of which factor into the country's ability to remain competitive in a global environment) is a growing issue.

Developing cooperation to enable true cross-government service
The greatest service innovations often come from an individual or small group of people who champion an idea and rally enough resources to make it happen. The problems arise when governments try to convert the informal cooperative structures that nurtured service innovations into more formal arrangements.

Most governments struggle with translating their historically informal connections into organized models when the time—and the scale of the challenges—demands. These-governments find it uncommonly difficult to answer the question of how long to allow processes to grow organically, versus when to apply the "muscles and the money" to drive programs forward. The result is that "seamless" cross-government service quite often begins to unravel when put under the pressure of scale.

Too great a focus on customer satisfaction metrics
Leading governments have listened to the call for citizen-centricity. They understand that the ultimate determinant of service success will be whether, in fact, citizens use the service. With so much riding on citizens moving to the more efficient self-service channels, it is little wonder that these governments are trying to tune in to citizens' attitudes and perceptions. To that end, many governments implement satisfaction surveys for citizens after completing their transactions. Others focus on working to service level agreements.

While these steps are important, the challenge arises when governments do such a good job at implementing service-level metrics and at measuring satisfaction against what citizens ask for, they forget to consider what citizens really need. Moving beyond point-in-time snapshots is critical for developing the insight that can eventually be translated into service trust.

Moreover, the picture is complicated by governments' need to balance its obligations to its many different stakeholder groups, which includes not only a wide range of citizen and business groups (and their widely varying requirements), but also government employees, politicians, non-governmental organizations, even the international community. The question is, how do governments create transparency into their investments so that they can better assess the value they are delivering through their service programs and manage for improvement?

How do you measure value?

Unlike the private sector, which has widely understood metrics (such as share price), as well as a stock market with publicly available company performance information, there are no universally accepted standards for measuring and assessing value in public services. Therefore, individual agencies or central governments impose targets that often do not align with what constitutes real value for citizens. Public service organizations may hit the targets set without ever really adding value for citizens or achieving a true understanding of what performance factors drive value. Likewise, they cannot use their baseline measures to develop focused and methodical processes to deliver more efficient and effective service.

The net result is that increases in government spending do not necessarily lead to improved service delivery, and cost-cutting measures do not necessarily lead to increased efficiency.

Accenture has developed the Accenture Public Service Value Model **(**patent pending**)** to help government agencies analyze how they deliver value to citizens and how they can improve their performance to deliver increased value and become high-performance-governments. (See sidebar, The Accenture Public Service Value Model.)

The Accenture Public Service Value Model The Accenture Public Service Value Model was developed to address the challenge agencies face in developing a meaningful framework for measuring and managing performance. It proposes a more complete approach to determining successful actions and provides a process for tracking progress overtime.

At its simplest, the Accenture Public Service Value Model considers two levers of public value—outcomes and cost-effectiveness. By increasing one or the other, agencies can be understood to be creating value. By increasing one at the expense of the other, they can be understood to be making a trade-off between their two fundamental means of creating value. A decrease in both levers represents a clear reduction in value.

A Public Service Value analysis defines outcomes for government agencies based on their:

. • Statutory purpose - What the agency is established to do (for example, a revenue agency is established to collect tax revenues; a school board is established to educate children; and a police force is established to maintain public order).

. • Stakeholder expectations - What the stakeholders expect of an agency as it performs its statutory duties (for example, that a social security agency's interactions with

citizens will be prompt, accurate and courteous and that a revenue agency will minimize the burden of compliance on businesses).

These outcomes are weighted, based on relevant external factors for specific administrations. They are then measured using metrics, which can be grouped to develop an outcome score. Separately, the cost of the resources deployed in delivering these outcomes is calculated. Then, by dividing cost into outcomes a cost-effectiveness score is developed, as shown in Figure 5.

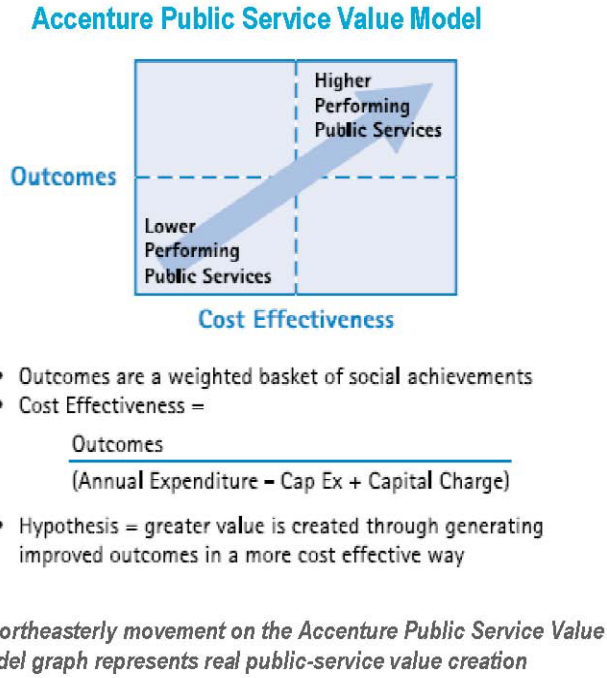


Figure 5. The Accenture Public Service Value Model

Public-sector value is created as the delivery of outcomes is improved in a cost-effective fashion. Accenture believes high-performance governments will consistently increase the public-sector value they deliver year after year by balancing service improvements against improved cost efficiency.

While this model is not focused on customer service specifically, its principles can be applied to help all administrations take a more balanced approach to their service programs that will further them on their journeys to becoming high-performance-governments. Specifically, its focus on outcomes versus cost effectiveness can help government agencies consider the wider transformational opportunities in customer service and, conversely, to be more skeptical about the benefits of some more superficial approaches to putting government services online.

By adopting the Accenture Public Service Value Model, governments' customer service strategies will increase value when they:

- Improve an agency's delivery of its statutory purposes.
- Meet stakeholder expectations more effectively.
- Enable both of these outcomes more cost effectively than other strategies.

It is unlikely that simply replicating existing services electronically will optimize the opportunity to add value when judged against this standard. Here again, we see the fundamental weakness in many e-government strategies: to a considerable extent customer service strategies have been an "act of faith" on the part of governments. Wholesome benefits in terms of increased automation and improved access have been relatively obvious, others have been harder to quantify—in particular, the general belief that providing online access to government services must always be a good thing in and of itself.

Applying the concepts of the Accenture Public Service Value Model, then, should bring a rigor to future customer service strategies that has been lacking previously. Governments will see that effective, value-adding strategies leverage the opportunities inherent in Web-based technologies to dramatically alter their customer service business models. In somecases, services will be transformed (and improved) so radically that old service models will disappear completely. Such strategies will have targets that are clearly quantified immeasurable outcomes.

Implementing new, technology-enabled business models for customer service will also allow governments to improve cost effectiveness. By improving the integration of services within and across agencies, governments can not only meet stakeholder expectations through service improvements, they can also improve cost effectiveness by automating services (resulting in reduced administration) and integrating services,(resulting in the elimination of duplicated efforts and greater cost effectiveness).

Ultimately, using the Accenture Public Service Value Model will help governments address three key questions in the future:

1. How will the strategy improve the performance of government agencies in the delivery of their core statutory duties?
2. How will the strategy meet rising stakeholder expectations of government services?

3. How will the strategy contribute to improved cost effectiveness in the provision of government services?

Effective strategies will seek to add value in all three dimensions.

While to date the Accenture Public Service Value Model has been applied mainly in developed countries, the focus on achieving best outcomes in the most cost-effective fashion is a universal principle that will work equally well in developing nations. In the end, what is most important is to have a structured approach to discussing outcomes and to create a balance between the expectations of different stakeholders. Whether the discussion is technical or non technical—no matter the economic question or the complexity of the organization—it is an established methodology and a robust, transferable framework. While the outcomes that matter to a particular government differ, any government can go step-by-step through the model and build its own specific outcomes into the framework. The approach provides a practicable framework for creating a direct—and manageable—link between outcomes and day-to-day management decisions.

Recommendations for moving leadership in customer service forward

In this section, we offer some brief recommendations for governments' next steps toward leadership in customer service—and ultimately, toward high performance. These recommendations stem from an understanding of public-sector service based on our research, as well as Accenture's experience working with hundreds of governments around the globe. They apply equally well to developed and developing nations:

- *Drive out complacency.* The leaders of the future will be the ones that have a taste for continuous improvement. When it comes to leadership in customer service, standing still is equivalent to falling behind.
- *Set your own standards for excellence.* Governments in pursuit of high-performance must develop a more strategic vision of service that reflects their own culture, aspirations and values.
- *Organize for effective execution.* Tomorrow's leaders will recognize that good policy is only possible when it is linked to good execution. Organizing for effective execution means getting both the top-down and the horizontal organizational structures right.
- *Strengthen connections with the citizen, while using technology to continue to try to push the limits of what can be done online.* Building service trust means getting citizens engaged. Tomorrow's leaders understand that sophisticated technologies, coupled with growing citizens' trust, allows governments to push the boundaries of what services citizens will willingly transact online.
- *Aggressively incorporate private-sector learnings, but in a way that makes sense in a public-service context.* Tomorrow's leaders will aggressively pursue the private-sector's best thinking and lessons learned. They seek out the innovations and fold them into the governmental framework.
- *Develop accountability and transparency, especially across initiatives that span multiple governmental organizations.* How well governments act as one—both within and across jurisdictions—depends on strong models for building accountability that will ensure progress is made.
- *Develop continuity of leadership.* Without continuity of leadership, transformative initiatives quite easily fall apart. Even in countries with frequent turnover of administrations, leadership continuity can be established in the ranks of the civil service.

Conclusion

Governments' future approaches to citizen service will determine whether they build an implicit trust with citizens and continue to progress—or fail to improve their connections to citizens, and stall.

Transformation of this magnitude encompasses far more than e-government. It is built on governments' embracing a much broader vision of leadership in customer service that values e-government as a catalyst, but moves far beyond e-government into all channels of interaction and across multiple levels of government.

While developing true leadership in customer service takes significant time and effort, the payoffs are tremendous for both governments and those they serve. When governments sustain

leadership in customer service over time, citizens' needs are anticipated and met, and governments develop the most effective policy from the outset.

Leaders are already taking action to that end. They are employing all the tools at their disposal to orchestrate a new understanding with citizens that will foster the most positive social outcomes and ultimately drive their governments toward high performance. For those not as far along this path, the principles outlined here will help them set a new course for optimizing the value they can reap from their future investments in customer service.

PART II: E-PARTICIPATION CONCEPTS AND APPROACHES

Chapter IV

E-governance and E-participation: Lessons in promoting inclusion and empowerment

Jeremy Millard

This paper examines the relationship between e-governance and e-participation from a European perspective in terms of promoting inclusion and empowerment. This includes an examination of current and future challenges, especially the so-called democratic deficit and the need to create a future around a new understanding of citizen inclusion, empowerment, openness, transparency and trust. How does and can ICT support these developments, and how can we understand and measure them?

First, the paper will outline a methodological approach designed to understand the evolution and dynamism of governance, inclusion and empowerment and how this relates to an ICT context. This involves using insights gained from Maslow's needs hierarchy as well as from a conceptual framework designed to separate the 'means' of ICT and governance activities as tools from the 'ends' of socio-economic and other forms of development. It is suggested that this could contribute to developing the UN conceptual and measurement framework for E-readiness and E-governance.

Second, the paper will address the changes taking place in the values and needs of European citizens and communities concerning the rights and responsibilities of individuals and of the societal collective, and how these are changing. Inclusion and empowerment are becoming increasingly important in the 21st Century as the democratic welfare state evolves. The concept of empowerment re-engages with basic human rights and needs, both by 'going beyond formal democracy', but also re-casting formal democracy, ensuring that all are included in a pluralistic landscape, whilst addressing issues of conflict and trade-off between individual and collective interests. Empowerment which goes beyond formal democracy also presents dangers (such as whose interests do NGOs represent and are they accountable, communities taking decisions without understanding the longer term or wider consequences and thus not being adequately responsible for those decisions, etc.), but also potentially provides large and important benefits, such as social inclusion and increased participation.

Third, inclusion and empowerment in the context of e-government and e-participation also need re-thinking. Some new data from a European research project is presented which sheds some light on these issues. There is a need to retreat from a narrow technology-driven approach in which E-government is seen as a separate activity, and instead take a holistic view from a multi-channel perspective in which the fulfilment of citizens' needs increasingly depends on their ability to switch and make choices between technology, human and other channels suited to preference, location, service and task. This recent research shows that users of E-government successfully use more government services generally, also through non-technology channels, and that the important factors are access and digital skills rather than income, education or age. There is also a need to examine the role of E-government intermediaries between the service provider and citizen user, both professional intermediaries (from the public and private sectors) and those embedded in family or community as 'social intermediaries'. Evidence is now showing that almost half of all users of E-government also act informally on behalf of family or friends as 'social intermediaries', and that a quarter receive assistance from such an intermediary. Understanding and exploiting these developments is crucial in promoting service fulfilment, inclusion and empowerment.

This paper does not directly address the traditional issues of eDemocracy and E-participaiton, such as citizenship, participation through representation, participation through direct engagement, and similar. It instead examines new developments, challenges and ideas concerning empowerment and inclusion which are posing questions about their relative importance and impact, not just in Europe but also globally, and in relation to how they can be measured.

2. 'Ends' and 'means': separating what society wants from how society gets what it wants

The European e-government vision for 2010 "... points at the role of E-government as an enabler for better government, an intrinsic political objective encompassing a series of democratic, economic, social, environment and governance objectives. These objectives can be articulated around two major axes: pursuing cost-effectiveness and efficiency, and the creation of public value…" (European Commission, 2004)

The approach adopted in this paper builds on this vision and starts by taking its two major axes (cost efficiency and effectiveness and the creation of public value) as capturing the main issues and essence of e-government looking forward over the next few years. However, this paper needs to look further forward than 2010, and thereby proposes that the two pillars should not be seen as independent and equal, but rather as 'means' and 'ends', with the interrelationship that this implies.

Figure 1: (e)Government 'ends' and 'means'

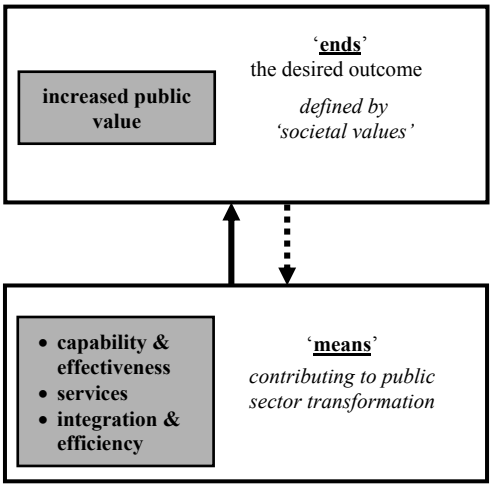


Figure 1 is designed to imply, not only that public value and efficiency/effectiveness are not equal and independent, but also that public value is the 'superior' ends of the operational means. Public value is thus the ultimate goal, and efficiency and effectiveness are 'only' means to this higher end.

First, therefore, we need to focus on public value which can be provided by governments, as articulated through societal values. What are these and how can the public sector in general and ICTs in particular contribute to realising them?

Recent research (Millard, 2006a forthcoming) has identified four overarching societal 'ends' to which the public sector can contribute. These are defined as the 'public values' we aspire to create. They are articulated as societal values (to stress that all aspects of society are potentially covered, and not only ´public' aspects), and are defined as general qualities and principles we wish to promote using the public sector, i.e. the embedded normative characteristics of society we wish to create:

1. Liberal values: covering constitutional and subsidiarity structures; the legal framework: law, regulations and rules; law enforcement, defence and security; personal justice; and individual rights.
2. Democratic values: covering citizenship; democratic participation through representation; democratic participation through direct engagement; engaging private interests; and developing the plural society.

3. Social values: covering how needs for and responses to socio-economic support are determined; service design and production; service delivery; inclusion of all; environmental sustainability; place development; and quality of life.
4. Empowerment values: covering how citizens, communities, groups and interests in society can be empowered to further their own as well as collective benefits; extending subsidiarity and reciprocity; governance coherence and balance; transparency and openness; ethics and accountability; trust; empowering the public sector as an individual actor; empowering the private sector; personalising services for individual users; and empowering the individual service user

Some (new) approaches to thinking about the 'means' (as governance roles and tasks supported by ICT) to achieve these 'ends', in the context of this paper, are addressed in section 3 below.

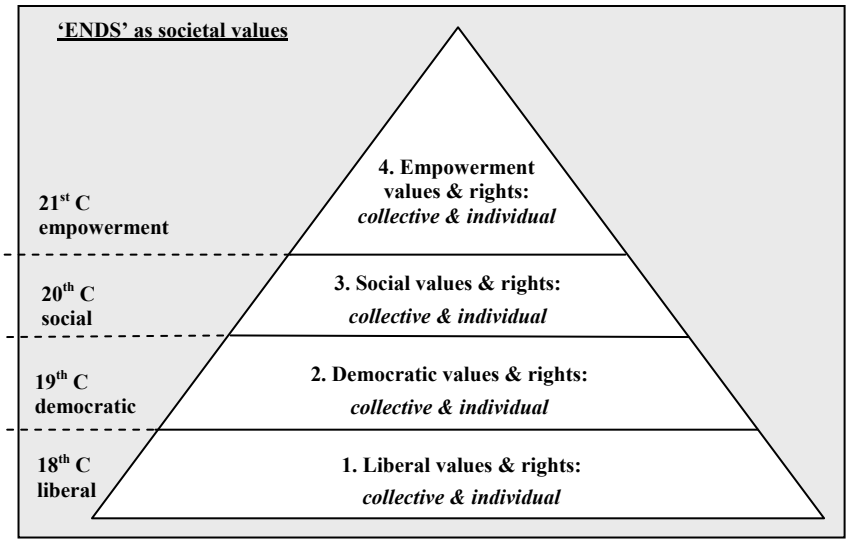
The societal value 'ends', defined above, are derived from a number of sources. First, the structure of the European digital constitutional state, proposed by Bovens (2002) which is portrayed as a 'house', an edifice to which new storeys and rooms have been added and furnished over the course of centuries. Each storey of this house originated as a result of the major societal transitions that occurred during previous centuries. Although the house's foundations had been laid earlier, it began to assume a well defined shape during the 18th century with the development of the liberal constitutional state. This thus becomes the first layer, or the ground floor, and consists of a number of 'rooms', such as liberty, legal protection, the rule of law, etc., which have as their central focus the protection of citizens from government as well as from each other. In the19th century, a second layer was added, consisting of the democratic constitutional state where the focus is on civic participation in government. This included, according to Bovens, political rights, the parliamentary system and the separation of politics from administration.

The 20th Century provided the social layer as it saw the enactment of the first social legislation with the key emphasis on the protection by government of citizens against an assortment of socio-economic calamities, expressed in a number of broadly formulated social constitutional rights. This required a whole array of social and economic regulation, including the regulation of competition, of industrial relations, and of the provision of goods and services in the context of the so-called welfare state. Although Bovens house is thereby complete, he goes on to suggest some of the possible 'rooms' in a new layer, including information rights and transparency. This 21st Century layer he terms 'digital', although here we instead substitute the term 'empowerment', and extend the analysis to reflect much of the current evidence which points to the likelihood of this being an area of prime focus for European government during at least the early years of this new century.

At this 21st Century 'empowerment' level, focus is increasingly on values which incorporates public and civil interests, space, culture and sanctuaries, i.e. outside the logic of the market and individual profit, and beyond most of the current roles of the formal public sector. The empowerment domain is thus seen more and more as wider (possibly much wider) than the public sector and government. It now also includes and actively promotes civil society; the active support of which we can now argue should be a main priority of government perhaps for the first time. In this upper and future-oriented layer, many of the roles and tasks are quite new, but many also re-examine and re-interpret roles already established. For example, there is a need to re-think and perhaps transform our existing notions of democracy, participation and subsidiarity. Understanding this need for re-interpretation is facilitated by the historical evolution approach adopted.

The other main source for guiding the arrangement of the societal values is Maslow's needs hierarchy. (Maslow, 1943).[1] This well established analysis of needs places each one within a pyramid with those at the bottom being basic needs which must be satisfied before needs further up the hierarchy and pyramid are even contemplated let alone fulfilled. Thus, the lower layers are necessary conditions for each succeeding layer, whilst the upper layers are more specialised and sophisticated. In Maslow's original needs hierarchy, the first basic need consists of the simple physical requirement of survival, including food, warmth and shelter. This can be compared to the first layer in Bovens' adapted model which is, as described above, concerned with the protection of citizens from government as well as from each other. Higher needs progress through social and then cultural and psychological needs. Arranging the societal values within Bovens' house-like structure of the constitutional state seems to provide an instructive analogy with increasingly specialised values, each dependent on the existence of the values in the layer below for their realisation. (See Figure 2)

Figure 2: Maslow's needs hierarchy adapted to European societal values



As shown in the diagram above, each societal value can also be seen in the perspective of 'collective' and 'individual' values. This approach is based on long standing social and political science approaches[2] which often see society composed of these two realms as both competing but also complementary in modern Western capitalist democracies.

Thus, the collective value system is seen as:
- promoting common and shared interests (both across and between individuals)
- focusing on outward-facing and external interests
- promoting cooperation, solidarity, social bonding and inter-dependency
- upholding values which are general and universal, and thus in potential 'equilibrium'.

Whilst, the individual value system is seen as:
- promoting specific interests (such as of individuals, groups and geographic areas)
- focusing on inward-facing and internal interests
- promoting choice, personal freedom and self-orientation
- upholding values which are specific and not universal, and thus in potential 'dis-equilibrium' with the values of other individuals or groups.

[1] Other sources include: Bentley, T and Wilsdon (2003), Leadbeater, C (2004), Stedman, JD (2003), Demos (2006), Miliband (2006), European Commission (2006), Castells (1996), Marshall (1950), Drache (2004).
[2] For example through the work of Tönnies (1955), Durkheim (1964), and Wright Mills (1959).

The role of the public sector and government is to promote both collective and individual values, and thereby also to address the conflict and trade-off between them. For example, by distinguishing between individual user 'demand' where the users of public goods and services are treated as individual customers, on the one hand, and collective societal 'need', where government needs to pursue longer term policy objectives which may not always be in the (short-term) interest of all individuals or groups, on the other. There is rarely a true market in public services and government must also address longer term societal need through public policy.

3. The 'means' to empower individuals and communities

Empowerment values comprise the top, and historically most recent, layer in the development of societal needs and values proposed in this paper. It is more forward-looking in the sense that many of the means to achieve it have not yet been seriously addressed in practice, whilst these also need to be seen in the context of earlier means of governance which remain important. Thus, promoting empowerment values requires a dual approach. First, re-evaluating and re-designing the means used to achieve earlier values but within a 21st Century and forward-looking empowerment context. Second, addressing quite new means which derive from an empowerment philosophy.

In the words of Drache (2004) and Nevitte (2000), the old clientelism of the welfare state (derived from the social values developed during the 20th Century) is outmoded and citizens feel that they have much to add to public life but those who are elected to Parliament and legislatures tend to listen less and less. The old narrow idea of government in which citizens passively receive services and vote every four or five years, and where the state acts on their behalf (government for the people but not by the people) is being challenged by the responsible parent, the informed patient, the active citizen, the dedicated teacher, nurse or local public servant, and by outsourcing to individual volunteers or private companies. Each of these could, with an extension of choice and voice, both individual and collective, be enabled to take greater control over their own lives and the lives of their communities, with or without direct support from the formal democratic and government institutions. We need to decide the extent to which we wish to see such developments take place.

In this context, citizens must take back government from the administration and the politicians.(Millard, 2003) Government is too important to be left to administrators and politicians alone. An historic shift in governance away from earlier systems is required:

- Stalinism, 1950s to 1970s, "we know what people want" approach – and this wasn't just in Eastern Europe.
- Consumerism, 1970s to today and still rampant, "give people a choice [but within restricted parameters and ignoring pluralist needs], and treat them like consumers". In essence, only a few steps on from 'Stalinism', but in a prettier package.
- Empowerment, the next big challenge – initiative, control and influence should be devolved as widely as possible throughout society commensurate with good governance and promoting the wealth, welfare, cohesion and sustainability of society.

Empowerment should thus also be seen from a community perspective. The concept of 'community' comes alive in a myriad of local associations, charities, informal and semi-formal interest groups (both short and long-term), and voluntary organisations. These can perhaps do things the state finds it less easy to do. They focus on the local, on one-to-one help, on unearthing and stimulating local resources, and on being innovative. They can be practical and responsible

citizens in action, which governments could encourage. For example, in the UK the current debate is about encouraging new forms of community involvement through so-called citizens' juries, neighbourhood agreements on service delivery, and the transfer of assets to community groups and neighbourhoods with their own budgets and spending ballots. (Miliband, 2006)

Much of the current European unease about the public sector is expressed in the term the 'democratic deficit', which sees millions of people across Europe turning away from elections and political parties in favour of single issue campaigns and direct action. Thus, although there may be a long term decline in trust in the political system, civil culture and involvement are on the increase. People may feel empowered as consumers but often not as citizens. The gap between politics and citizens seems to be growing. People are becoming disengaged because they feel they are disempowered. A less deferential, more democratic world is threatening a crisis of legitimacy, in which state institutions framed for the old world seem less and less capable of responding to the new.

A new paradigm is needed. At its core should be a desire to redistribute power so that responsibility for meeting the challenge of economic, demographic, environmental, social and cultural change is shared between citizens, states and communities, as well as with the private sector. For example, instead of people orbiting around public services, public services should revolve around people. Without citizen and community empowerment and engagement none of these challenges can be met.

Above all, there is an increasing 'power gap' below the lowest level of elected government, and thus beyond formal democracy and politics. One of the 21st Century challenges to government is to fill this gap. The empowerment of public and civil sectors can also greatly enhance the empowerment and well-being of individuals, of groups and of the private sector. Getting the balance right between these collective and individual empowerment values becomes even more critical in the 21st Century. A series of 'means' to address empowerment values can be proposed, each of which can be supported, to a greater or lesser extent, by ICT. These are summarised here but a full account can be found in Millard (2006a).[3]

- Empowering communities
  - social enterprise and social entrepreneurs
  - knowledge generation and learning in communities
  - local area agreements between public and community sectors

- Extending subsidiarity and reciprocity
  - 'double devolution' (i.e. both down to the most local public sector jurisdictions and then further to local communities and neighbourhoods), and closing the power gap
  - social justice and advocacy through campaigning groups and individuals
  - independence, accountability and viability of communities

- Ensuring governance coherence and balance
  - centralisation for minimum standards, simplicity and efficiency
  - de-centralisation for responsiveness, subsidiarity and diversity
  - the networked public sector combines these two, to find the balance or 'sweet spot' between them

[3] Note, as stated in section 1, this account does not directly address the traditional issues of eDemocracy and eParticipation, such as citizenship, participation through representation, participation through direct engagement, and similar. However, the account in Millard (2006a) does address these issues.

  - balancing simplicity with complexity
  - balancing stability with change
  - balancing rights with responsibilities

- Ensuring transparency and openness
  - access to public information, e.g. the concept of freedom of information
  - total transparency and openness. e.g. including tracking & tracing, but also opening up the whole purpose, operations and functioning of government
  - responsive decision-making, e.g. where citizens can see responses to their needs or grievances or be made aware of why these cannot be met
  - protection of legitimate interests from transparency and openness (e.g. some aspects of the work of civil servants, the data privacy of citizens and firms, etc.)

- Improving ethics and accountability
  - public service ethic in the civil service
  - accountability (e.g. responsiveness and clarity)
  - codes and charters, e.g. for service quality and delivery
  - government as arbiter / referee between competing interests
  - accountability when government is just one player together with private and civil sector actors

- Promoting trust
  - confidence (e.g. data privacy, few errors but rapid rectification when they occur)
  - mediation and reciprocation: both fair and balanced but also seen to be fair and balanced
  - risk (e.g. made explicit and open)
  - appropriate scale (e.g. trust is often obtained at local level)

- Personalising services for individual users
  - user segmentation (there is no such thing as an average user), particularly in relation to disadvantaged users
  - awareness and responsiveness to changing user needs
  - close government-citizen relations, where needed such as through civil servants working closely with specific individuals or groups of users and thus acting as 'citizen account managers' (cf. customer account managers in the private sector)
  - pro-active service delivery, where the public sector takes the initiative and responsibility for providing services
  - multi-channel (not just ICT, and not just PC and Internet), including intermediaries as an often overlooked channel

- Empowering the individual service user
  - individual self service, where the individual user takes the initiative and responsibility for providing services
  - pro-sumerism and dis-intermediation, where the 'middle-man' intermediary (including the civil servant) is cut out of the process so the user in effect becomes her/his own government agent
  - individualised security and identity, as a basis for all contact with government and between citizens.

4. E-government for an inclusive society: flexi-channelling and social intermediation

This section looks at two highly important but often neglected examples of how E-government can support inclusion and empowerment: social intermediation and flexi-channelling. It draws mainly on some new empirical research (Millard, 2006c) and attempts to relate this to the wider debate on inclusion and empowerment.

4.1 Use of government services

According to the Millard (2006c), almost 70% of all adults had direct contact with the public administration in the previous 12 months, although the average number of contacts was only 1.6 per person during that period. Using multivariate statistical analysis techniques, the data show that a citizen's educational level is the most important factor determining whether or not they use government services, for example, citizens with a tertiary education are 2.5 times more likely to be government users than those with the lowest educational level. Other important factors include income, where citizens with over median income are 1.3 times more likely to be government users than citizens below the poverty level, and employment status which shows that not-employed citizens, followed closely by those who are early retired and invalids, are marginally more likely to be government users than other groups. Finally, citizens in the over 65 age group are 1.9 times more likely to be government users than the 18-24 age group.

The data thus paint a picture of the typical government service user as an able, well educated and higher income citizen who is in an older age group, and who is not working because of unemployment, invalidity or retirement. Therefore, such citizens are those who couple the abilities and background to know about and access government with a strong need for such services. The issue remains that those citizens without such abilities and backgrounds, but who similarly need government services, are more likely to be socially excluded from using them.

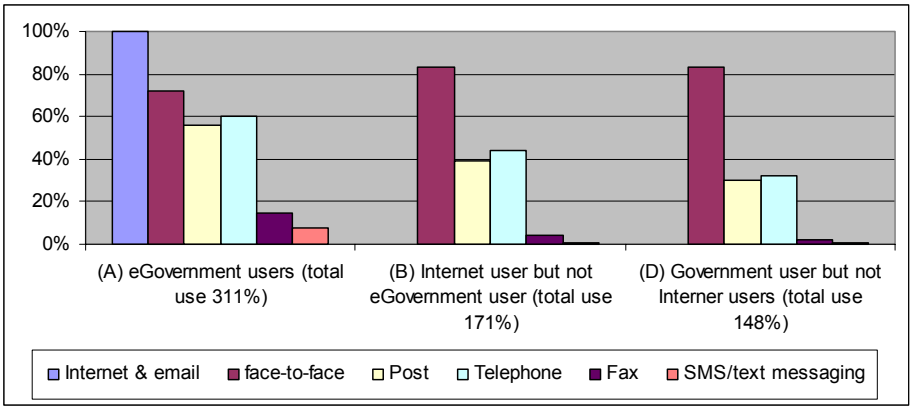
4.2 Use of E-government services

The data show that the media channel used when contacting government is still overwhelming face-to-face. However, there are very large differences between countries, so that Denmark is the leading country in the sample with over 40% of government users using eChannels, whilst in the Czech Republic the figure is less than 9%. Also, in the UK and Ireland the use of the postal services and the telephone has overtaken face-to-face. Overall, new ICT media provide access for about 20% of all contacts with government, 17% of this via the Internet or e-mail and about 3% via SMS.

There is a strong tendency for the E-government user to use a wider range of government services, whether or not accessed online, than non-E-government users. In addition, as shown in Figure 3, E-government users use government services on average 3.1 times a year compared with non-E-government users who only tend to use government services 1.5. times a year. Further, E-government users are 'flexi-channellers' and 'channel balancers', in that 60% to 70% of them also use other channels and freely make channel choices suited to their preference, to the specific service and to the specific task in hand. This is in some contrast to non-E-government users who tend much more to be 'single channellers', relying mainly on the face-to-face channel to access government services. The strong overall conclusion is, therefore, that the individual E-government user tends to use government services more than non-E-government users, to use a wider range of such services, and to do so through a more flexible channel mix, which includes

both electronic and traditional channels. The behaviour of E-government users is thus typically quite different from government users.

Figure 3: Media channels used for government services by type of user (Source: Millard, 2006c)



The profile of e-government users is also quite different from government users. Using multivariate data analysis, the factors determining whether or not an individual is likely to be an E-government user are country, Internet, or skill related, whilst socio-demographic factors are much less significant. Thus, an individual living in a country with high Internet availability and high roll-out of E-government services, and having well developed eSkills and eAttitudes, is highly likely to use E-government. The only important socio-demographic factor seems to be labour market status, i.e. where citizens in employment are 2.4 times more likely to be E-government users than retired persons. This is in some contrast to users of government services generally (rather than E-government services specifically) where, education, income, labour market status and age are the most important factors. Encouraging E-government use is thus more a question of providing access and skills, rather than tackling income, education or age, although the latter are important for wider inclusion issues, and this clearly has important policy implications.

However, it is still the case that those E-government users who use the Internet from PC platforms tend to be in higher income groups, of lower age and with a tertiary education. In contrast to this, the data show that access to E-government services through hand-held devices, like mobile phones or PDAs (personal digital assistants or organizers, i.e. ‘m’ or mobile government), is both becoming more important generally, and is particularly important for people who are otherwise likely to be digitally excluded. These include groups with below secondary level education, those not working (but not unemployed) or those invalided, as well as those living in countries where access is a greater problem.

4.3 Flexi-channeling for an inclusive society

Both Millard (2006c) and other sources show that a multi-channel, rather than single channel, strategy can successfully reach out to existing users in new ways, as well as to previously excluded users, both by providing new channels and through better tailored and more appropriate services. Although the face-to-face and increasingly telephone channels remain most important, particularly to disadvantaged groups, the use of electronic channels is rapidly increasing and

channel balance is dynamic and evolving. ICT in the back-office can also help the civil servant provide better services to users in traditional ways, and this may be for the time being more important. (OECD, 2005)

There is evidence that appropriate channel strategies, built on good user research, increase service uptake and channel migration, as well as generate cost efficiencies within individual public sector departments. (Electronic Data Systems Corporation, 2005) There can also be increasing user fulfilment given that, in the absence of well thought out channel strategies, many citizens regularly demonstrate they are prepared to trade off inconvenience, poor environments and service for the reliability of traditional channels. Overall experience of the multi-channel approach shows that success means (Millard et al, 2006):

- providing better services for the user, which are flexible, accessible, direct, rapid, complete, of high quality, easy to use, more secure and ensure fulfilment
- channel strategies should be designed to match channel features with actor requirements (e.g. user needs, cost efficiency, etc.), and a business case needs to be developed to provide the basis for rational decision making
- appropriate organisational requirements in terms of organisational integration, administrative or legal rules
- appropriate human resource requirements in terms of staff culture, ways of working, jobs and roles, numbers, qualifications, skills and competencies
- technological architectures must be in place which enable channels to interoperate instead of merely co-existing, i.e. they must ensure integration of channels and applications, take account of phases in user sessions and switch points between channels, as well as the re-use of data and of generic service components, and this will often require the integration of backend business processes.

Examples of successful multi-channel strategies from the private sector include Amazon (the most successful eRetailer) which now is also moving to multi-channel and exploring ways to acquire physical outlets, for example by entering into cooperation with the book store retailer Waterstones in the UK. This is both good for Amazon and Waterstones by developing physical coffee shops, environments for reading, discussion groups, etc. Also, Tescos (the UK's largest retailer) is both increasing its physical and e-outlets. There seems to be a strong move in some sectors to multi-channel and switching between channels, so that more 'e' leads to more 'p' (physical), and vice versa. The public sector should learn from this, especially in policies to support an inclusive society. Wider evidence from other areas of ICT application shows that creating more online participation does not mean creating less human or physical participation, but typically quite the opposite, as Figure 3 amply illustrates.

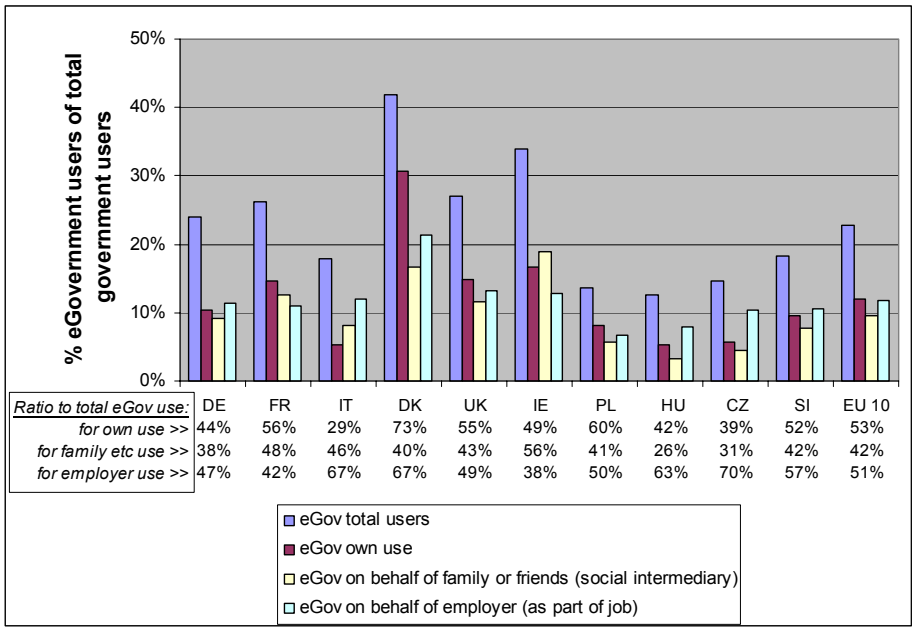
Despite the benefits of a multi-channel strategy for inclusion, there is much evidence of strong moves away from multi- towards single ICT channels. The efficiency programme in the UK targets services where most of the users are already online, such as students applying for higher education. Government to business online services like corporation tax are already mandatory for large businesses in many countries (Spain, Denmark, UK) and are fast also becoming so for SMEs (Denmark). Even where multi-channel options are maintained, all are rapidly becoming supported by ICT and shared databases. The move to the single 'e' channel means the full automation of services which can sometimes lead to less information being accessible, for example when citizens cannot change or even check their medical records, although it should also be borne in mind that the traditional system may not have been any better than this and that provision costs also need to be considered.

Problems and tensions could arise if the movement to a single eChannel quickens and extends to non-specialists target groups, perhaps triggering a 'reverse-engineering' of eInclusion in the medium to longer term. When everything is 'e' and 'e' is virtually without cost, and if efficiency is prioritised higher than inclusion, human contact will become expensive, given that labour costs compared to other costs will rise dramatically. Thus, the already included and better-off citizens will use their resources and skills to access human contact with government in situations where this gives them a better service (for example, in terms of personal advice, care, social support, etc.). The excluded and worse-off citizens will, however, only have recourse to the ubiquitous and inexpensive 'e' services, and will not be able to supplement these with human contact. The e-exclusion of today will thus be replaced by the h-exclusion of the future, where 'h' refers to human service contact. The EU will need to run h-inclusion programmes. (Millard et al, 2006)

4.4 Social intermediaries for E-government

Figure 4 shows that using E-government services on behalf of others (i.e. as an 'intermediary') is undertaken by about 11% of all users of government services. The data also show that 53% of users of E-government do so for their own purpose, 51% as part of their job, and 42% on behalf of family or friends, the latter thus being termed 'social intermediaries' for E-government.

Figure 4: E-government users: on behalf of whom (Source: Millard, 2006c)

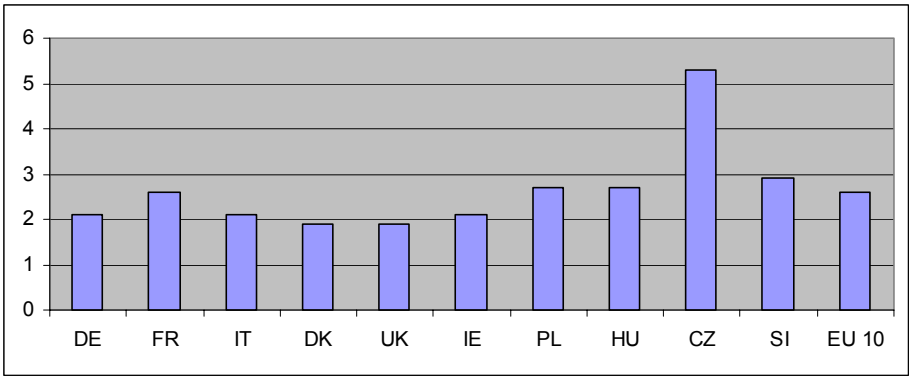


In terms of national differences, countries with the highest E-government use are also those with the highest use on behalf of family or friends, i.e. Ireland, Denmark, the UK and France. In addition, Ireland and France stand out as having greater use for family and friends than they do for their employer, and are also conspicuous as having by far the highest ratios of use for family or friends in relation to total E-government use, perhaps because of their strong family and community centred culture. Further, it can be seen that the New Member States have the lowest E-government use for family or friends in terms of total government use, as well as an average or a lower than average percentage in terms of total E-government use. The former relates to their lower overall use of E-government, and the latter, perhaps, to the higher ratio of total E-

government use on behalf of their employer. The latter appears to be an important route in the New Member States for people to become familiar with E-government.

This picture changes, however, when it comes to the number of people assisted by social intermediaries, as shown in Figure 5, where the New Member States are all above the mean of 2.6, with the Czech Republic soaring to 5.3. This may be due to the fact that these countries, particularly those in this sample, generally have greater access problems and lower digital skills, so that more of the population may need to use E-government via the more skilled social intermediaries. Part of the explanation for this could also be that it reflects different levels of development (particularly sophistication and user friendliness) of E-government services in these countries.

Figure 5: Average number of other persons assisted by social intermediaries for E-government (Source: Millard, 2006c)



The mean of 2.6 other persons assisted by social intermediaries for E-government, coupled with the generally high numbers of such intermediaries (10% of total government users and 42% of E-government users), indicates that the phenomenon is probably a lot more widespread and important than has previously been appreciated.

A multivariate data analysis shows that there is a quite striking profile of a social intermediary for E-government as one who tends to be a user of a large number of different E-government services, with both a functional and leisure orientation to the Internet, and who belongs to the group of early retired, permanently invalided, not employed, or otherwise not working before the formal retirement age. Moreover, social intermediaries tend to have well developed application and technical digital skills, to be interested in new technology, to have a mixed educational background (either very little or very high), and to live in countries which are only 'emerging' in terms of E-government readiness, as opposed to those which are 'intermediate' or 'advanced'. They also tend to be male, between the ages of 35 and 64 and with quite low income, although these latter factors are not statistically significant. Thus, overall, social intermediaries are far from being typical E-government users or Internet 'nerds', but are instead likely to be individuals with plenty of free time and with good digital skills and orientation in not very advanced E-government countries. Such people, of whom there could be a large number, represent an important resource to help deliver the benefits of E-government.

There is also some evidence of civil servants acting as intermediaries as part of their job. (Millard et al, 2006) User inclusion and personalisation strategies could include a 'one-to-one' relationship

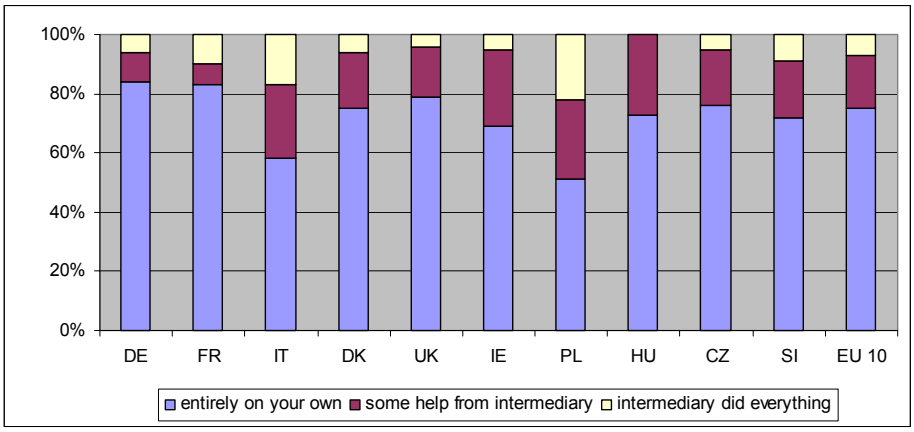
between the citizen and the public sector, where an individual civil servant, a small team of civil servants, or an electronic agent, have the responsibility to fully support individual (or groups of) users, whether these be citizens or businesses. This concept could be crystallised around the term 'citizen account manager' (in order to draw an analogy with 'key account managers' in business), citizen service activist, or sometimes the term 'street-level bureaucrat' has been used.

Intermediated and personalised support and services can best be provided in this way to users if deep knowledge is available about each individual, obtained both through highly intelligent ICT systems, including electronic agents, but also, critically, through human and personal experiences based on tacit knowledge which ICT cannot always capture and which is only built up through trust established by contact over time. Thus, this role moves on from the earlier one-stop-shop concept, in which a user approached a single desk (or portal) for further access to different services, but where the desk officer did not necessarily have any prior relationship with the user, to a concept based on longer-term and more stable relationships.
Some moves in some countries have already been made towards some aspects of the citizen account manager strategy. For example, the use of human civil servant 'intermediaries' operating out of small citizen offices located in the more deprived areas of Berlin, and using a digital suitcase to visit old people's homes, hospitals and the like. Such beneficial mixing of technical, human and other channels is being increasingly used to target groups with special needs. Also, in Seattle in the USA a system of mobile civil servants visiting citizens, rather than citizens travelling to the town hall, is being established based on the capabilities of the city ICT backbone. (Millard et al, 2006)

4.5 Receiving assistance from a social intermediary for E-government

Figure 6 shows that on average 18% of all E-government users receive some help from an intermediary, whilst 7% receive complete help. Support from an intermediary is highest in the New Member States, which may be due to greater access problems and lower digital skills, so that more of the population may need to use E-government via the more skilled social intermediaries. This probably also reflects different national levels of E-government service development, particularly in terms of sophistication and user friendliness. Italy and Ireland are the only older Member States with greater than average numbers of users receiving help from a social intermediary.

Figure 6: E-government users receiving support from a social intermediary (Source: Millard, 2006c)



As with social intermediaries themselves, the profile of the typical citizen receiving assistance in using E-government, derived from the above analysis, is also highly specific. Such assisted users are very likely to have low digital engagement and skills, to be in manual and unskilled occupations, to be a rare Internet user and to live in countries with low Internet penetration. They also tend to be aged 50 and over, to demonstrate a markedly low functional and low leisure online orientation, to be female rather than male, with below secondary level education, unemployed or not working, with an income below the poverty level or no higher than median income, to have Internet access outside the home, and to have started to 'use' the Internet only very recently. These latter factors are, however, not statistically significant.

4.6 Conclusions and recommendations on flexi-channelling and social intermediation

Users often report that they do not care how a service is delivered, or who delivers it, as long as it is easy, cheap, quick and provides service fulfilment. The evidence and analysis presented in this section show that there are two often overlooked strategies for including disadvantaged users in the benefits provided by government services, i.e. flexi-channelling and social intermediaries. From the strictly ePolicy perspective this could provide a challenge as both involve the blending of electronic and non-electronic channels. As in other policy areas, it is necessary to avoid the trap of assuming that the eChannel provides all the answers, particularly when seen from the perspective of the (disadvantaged) citizen.

On the one hand, using non-electronic channels, including social intermediaries, could be a barrier to users' own use of eServices, but on the other hand, intermediaries are clearly already able to include many citizens who would otherwise be excluded. One way of envisaging flexi-channelling and the use of intermediaries is as a powerful transition phase for many, prior to their own use of eServices. This is certainly the historical pattern of diffusion of new technology in which leaders (temporarily) assist laggards, such as radio in the 1920s, TV in the 1950s, and PCs and telecottages in the 1980s and 1990s.
This paper has also shown, however, that flexi-channelling is extremely important in its own right and may not be a temporary phase at all. It involves informed and skilled users switching between channels according to their personal preferences, to the service being accessed and to the task involved, and is strongly associated with both greater and more successful use of government services generally. Such flexi-channelling strategies are used much more by E-government users

than others, and this appears to be a deliberate choice based on each channel's own strengths and weaknesses, which taken together are highly complementary and beneficial to users.

Extrapolation into the future leads to the prediction that most if not all activities which become 'routine', which manipulate, match and mine data, and which require access to information and systematised intelligence, will become codified and automated by ICT, resulting in the squeezing out of direct human presence. In the future, on the other hand, human presence will focus even more than at present on activities which humans are innately better equipped to do than machines. Fortunately, this still appears to encompass a large potential area of growth in the numbers and quality of tasks, revolving around the use and creation of implicit and tacit knowledge. These areas include care, teaching, consulting, counselling, advising, controlling and coordinating, decision- and policy-making, creating, brainstorming, empathising, socialising, etc. In each case, of course, such human presence will increasingly be strongly supported by powerful ICT systems. (Millard et al, 2006)

In contrast to these flexi-channelling strategies used by E-government users, many non-E-government users access government services through social intermediaries. This is already providing immense benefits by ensuring that potentially disadvantaged users, who may otherwise not receive the services they need, successfully receive them. The types of individuals receiving assistance from social intermediaries for E-government tend to be those who are otherwise beyond the digital divide and excluded from E-government, as well as from other Information Society benefits, and who are living in countries which are not leading in E-government.

The social intermediaries themselves represent a potentially rich resource, given that up to half of all E-government users are already acting in this way and assist many other individuals. It is clear that assistance networks bringing online benefits to a large number of people, who would not otherwise enjoy them, already exist. It is also likely, of course, that this is nothing new, and that such networks have existed at family and community levels helping to disseminate the benefits of public and private services long before the Internet provided another channel. Policy design should recognise and promote these networks in a flexi-channel future.

It was noted above that there is a serious E-government digital divide, and that online services seem, even more than traditional government services, to be used by a social elite rather than by a representative cross section of adults. However, traditional channels, including the increasingly important telephone-based services, are likely to continue to be offered and used by all types of users, including those beyond the digital divide, as described above. Moreover, these human and physical channels are more and more supported and enhanced by ICT as part of the user interface of a transformed and digitised back-office. In addition, there are burgeoning examples of eChannels which are increasingly being used by those beyond the digital divide, such as mobile devices. This section has not looked at digital TV, as it is not yet widely rolled out for government services, but also here the potential seems significant.

Despite these conclusions, however, this section has shown that people who themselves use eChannels for government seem thereby to increase their overall interaction with government and to obtain important benefits which non-E-government users do not readily enjoy. So, although the weaker members of society will continue to be served particularly by traditional channels, and increasingly by mobile devices or social intermediaries, the overall benefits they receive from government are still likely to remain considerably less than mainstream E-government users.

Thus, in addition to recognizing and promoting flexi-channelling and the role of social intermediaries for E-government, inclusion policy should also promote wider own-use E-

government take up. This paper has shown that the important factors involved are not socio-demographic but rather related directly to E-government supply and Internet penetration, as well as to individual skills and online engagement. These are factors which can be tackled within the present policy time frame as concrete strategies with relatively easily recognized and measurable results and impacts.

5. The needs of disadvantaged groups

One of the biggest challenges to (e)governance is how to reach out to and include disadvantaged groups in society. Disadvantage can be defined in many ways (see for example, Table 1 below), but needs to be seen, first, in the context of inclusion as a societal value, i.e. an 'end' in itself. This implies that no one is left out or behind, and thus takes account of individuals or groups who are disadvantaged in some way so their life chances or quality of life are (or are likely to be) reduced. Inclusion thus also involves both social solidarity and socio-economic benefits.

A 'means' for helping to achieve inclusion is eInclusion (such as through E-government). This must ensure that the benefits of ICT for inclusion are available to all, whether these are directly or indirectly provided, and that the 'digital divide' is tackled. The direct use of E-government services by disadvantaged groups must focus not only on traditional PCs and Internet access but also on other technologies like the telephone, mobile phone, digital TV, multi-media home platforms, etc., which have been shown to often be more important for weaker groups (Millard, 2006c). However it is also very important to understand and exploit the indirect use of E-government services by disadvantaged groups, i.e. where the public sector itself (often in partnership with the private and civil sectors, and typically through so-called back-office re-engineering) digitises its processes which leads to better information sharing, better management, greater efficiency, etc. Thus, civil service staff, or intermediaries, can use ICT-enhanced systems and services as, for example, telecare, health monitoring, CCTV, environmental scanners, etc., and provide the benefits of eServices to users without requiring that the users themselves have to use the technology.

The benefits gained by disadvantaged groups, whether through the direct or indirect use of eServices are manifold, but include better service access; easing their daily life burdens (such as engaged with public administration), improvements to government-citizen relations, better access to education, training, work and jobs, improvements to their personal capacity (quality of life and life chances), and enhancing their social networks and participation.

It is important to focus on, and include, disadvantaged groups because their needs have typically been over-looked in favour of 'mainstream' needs. Using Maslow's needs hierarchy again, but this time at the individual user level as opposed to the societal level above, Figure 7 shows how the needs of disadvantaged groups can be more clearly articulated as often distinct and specific when compared to those of mainstream users.

Figure 7 shows that many of the pressing needs of the disadvantaged are not currently being met. Government ICT policy has typically not addressed these needs, but rather focused on ICT access and use to meet the mainstream needs of the mainstream population. The focus has been on existing services, often irrelevant to the disadvantaged groups. To date the best examples of meeting these basic needs through eServices have been small scale and through the civil sector (NGOs, community and voluntary groups, etc.)

In addition to the more specific approach illustrated in Figure 7, disadvantaged users need to be better segmented as the needs, and the barriers to meeting those needs, are likely to be highly dependent on different types of disadvantage. Table 1 shows two working taxonomies presently being developed by the author in the context of work undertaken for the European Commission.[4] The first taxonomy, though conceptually simple is likely to be replaced by the more detailed second taxonomy in order in ensure adequate focus on real practical problems, benefits and barriers.

Figure 7: Maslow's needs hierarchy adapted to individual needs (source: Digital Inclusion Team, UK, 2006)

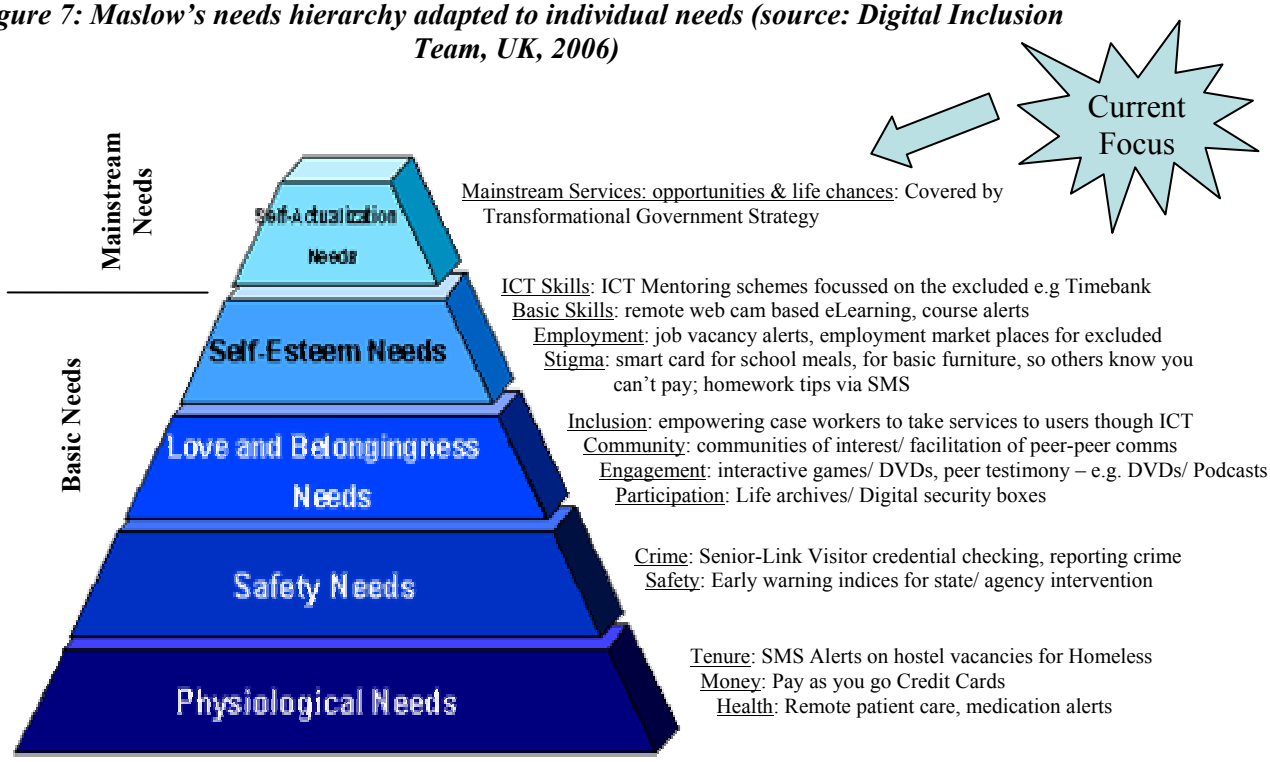


Table 1: Working taxonomies for disadvantaged user segmentation strategies for E-government

Six categories	Twelve categories
1. Physiological or mental disadvantage 2. Behavioural disadvantage 3. Socio-economic disadvantage 4. Demographic disadvantage 5. Ethnic / cultural disadvantage	1. Families & children at risk (incl. single parents, large families, domestic abuse) 2. Young people at risk (incl. teenage pregnancy) 3. Homeless, poor housing, frequent moving 4. Unemployment, job problems 5. Older persons 6. Anti-social or criminal behaviour (incl. substance abuse, ex-prisoners) 7. Victims or anti-social or criminal behaviour

[4] The Inclusive eGovernment Ad-Hoc Subgroup of the eGovernment Subgroup, consisting of the European Commission's eGovernment Unit (DG Information Society and Media) in cooperation with Member States within the i2010 High Level Group.

6. Geographic disadvantage	8. Ethnic, cultural, language minorities (incl. refugees, asylum seekers ?) 9. Geographically deprived 10. Disabled 11. Poor education / training (incl. low literacy) 12. Health and long-term care

Table 2 shows, as an example, an initial attempt to relate the needs articulated using Maslow's needs hierarchy in Figure 7 to the first disadvantaged group of families and children at risk. Similar and further work on all the twelve groups is currently taking place.

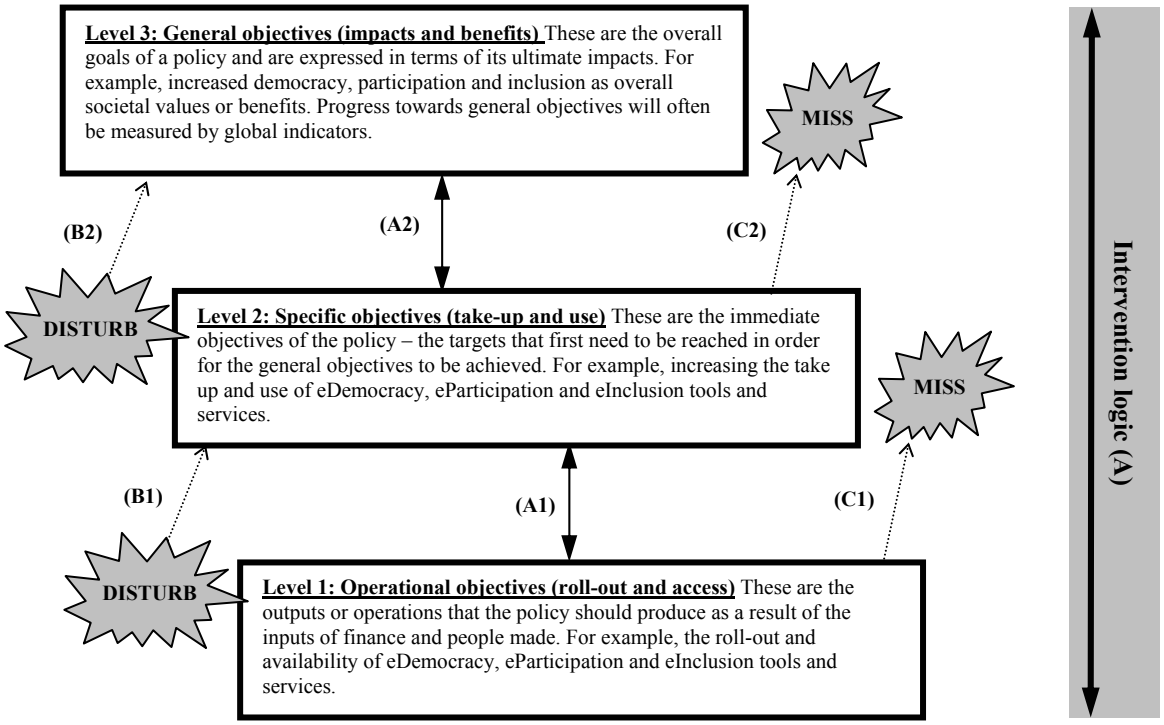
Table 2: Example needs of the families and children at risk disadvantaged group

a) Physiological needs	• Income and housing support
b) Safety needs	• Support for safety in the home (e.g. advice and equipment) • Protection against domestic abuse
c) Love and belonging needs	• Support for child care in or outside home • Peer support by linking families with similar problems, and/or mentor schemes linking problem families with families who have solved their problem(s), or in the local community • Better embedding in local community through family and young children activities, clubs, etc.
d) Self esteem needs	• Support for improved parenting skills • Support to juggle work and family responsibilities

6. A framework for analysis

In order to design the 'means' to successfully achieve the desired 'ends' it is necessary to carefully design and analyse the policy making process whilst, at the same time, provide a robust framework for measurement and benchmarking. A suitable way forward could be to adopt the approach often used by the European Commission (2005) and refined by Millard et al (2006) which posits a hierarchy of three objectives levels. The levels are described as a hierarchy as each one contributes to the level above, and is thus subservient to it. Thus, each level needs to be evaluated and benchmarked in relation to the level above to which it contributes, as shown in Figure 8.

Figure 8: Levels of policy analysis and measurement



Objectives need to be set because without a clear understanding of what a future policy (the 'ends') is supposed to achieve, it is difficult to identify possible courses of action. It is even more difficult to determine the most suitable policy option. Put differently, unless you know where you are going (the 'ends'), you are unlikely to get there. Being explicit about pursued objectives also allows policy-makers to verify that the proposed logic of intervention is reasonably strong. Further, this is also a way to promote a common understanding of the 'ends' of the policy, which can help later on with implementation, monitoring progress through specified indicators, as well as benchmarking and evaluating the success or otherwise of the intervention.

Objectives should be directly related to the needs or problems being addressed, i.e. what is the 'demand' for the policy. In most cases, objectives apply at different levels and should be thought of as a hierarchy. It is thus important that the links between the objectives are clarified. For example, designing and rolling-out E-government services and access to them at the operational level must be able to promote the use of (e)government services at the specific objectives level, and finally this usage must be able to contribute to an increase in positive impacts (or benefits) at the general objectives level. Levels 1 and 2 constitute the 'means' of the policy, whilst level 3 constitutes the 'ends'. This kind of domino effect is usually called the 'intervention logic'. As the 'intervention logic' arrow indicates in Figure 8, defining the objectives can be approached by starting from either the more general or the operational end. In practice, the iterative nature of objective-setting means that, regardless of where you start, you will go up and down from level to level until the objectives are consistent with each other and with the need or problem to be addressed.

Figure 8 also shows the importance of attempting to align the different levels in the hierarchy, as there is a possibility that achievements at one level will not contribute to meeting the objectives of the next level. This is a problem typically overlooked in policy making and in the development of indicators. This could be for any of three reasons, numbered (A), (B) and (C) in Figure 8:

(A) The intervention logic is faulty, in which case it needs to be re-designed.

(B) Disturbance, resulting from other actions or policies, which are necessary to meet the objectives (some of which could be conflicting) over and above the (e)inclusion policy in question, not being in place or being unsuccessful. These other actions or policies are thus beyond the immediate control of the particular policy actors, and may not even be directly related to eInclusion. For example, other government or public sector policies related to economic development, infrastructure, education and training, policies by other economic sectors, actions by consumers, civil society, etc. However well the (e)inclusion objectives at one level contribute to the next level through the policy's intervention logic, the next level objectives may not be (fully) realised unless these external actions and policies are in place and successful.

(C) Missing the next level, due to structural or other factors, which are beyond the immediate control of the actors concerned with the (e)inclusion policy (but which are nevertheless important, and perhaps crucial, for ensuring that the achievements of a given level) are not in place or are not conducive. For example, missing or non-conducive political, institutional, cultural, economic and democratic conditions, legal framework, sector and market conditions, organisational factors, etc., affecting the ability of communities, regions or countries to benefit from (e)inclusion policies.

Situation (A) is largely under the control of the E-government stakeholders, but situations (B) and (C) are not, and can thus be termed *externalities* which are recognised through the assimilation of a number of assumptions and risks. In assuming that the necessary conducive policies and factors are in place, it is important to ascertain which are important for reaching the next level, and, for those which are important, the risk of them not being conducive. For policies and factors which are both important and high risk, an analysis should be made of whether or not the stakeholders can exert any control to make them conducive. Where the possibility of such control is minimal, consideration needs to be given as to whether or not there is an adequate link between the levels, and thus whether or not the policy should take place at all. These can be termed 'killer assumptions'. Measures for such externalities could also be developed providing an additional and useful dimension to indicator development over and above those which measure each objective level. Thus, it is not sufficient to measure achievement at each objectives level in isolation, but in addition clear links through the intervention logic need to be established. Moreover, the externalities likely to disrupt the proper functioning of the intervention logic need to be analysed and perhaps measured so that they can be mitigated.

7. Conclusions and recommendations

This paper has outlined a methodological approach designed to understand the evolution and dynamism of governance, as well as why and how it is necessary to separate what society wants from how society gets what it wants through a better articulation and separation of 'ends' and 'means'. It has shown how important it is to distinguish 'ends' from 'means', and to build policies, models and measurement frameworks which recognise this distinction. The 'ends'

relevant for a European context have been described, and it has also been shown that the 'means' do not only include ICT, but that some (perhaps many) 'means' can be supported or facilitated by ICT.

It is clear, however, that societies are different, and have different 'ends' (societal values), which themselves evolve over time. But, there may be some globally agreed values which can assist us in finding a common denominator across all UN Member States, such as the UN Charter of Human Rights and the 2015 Millennium Goals.

The paper has also shown that inclusion and empowerment in the context of E-government and E-participation also need re-thinking. In particular, intermediaries and flexi-channelling have been examined in some detail and shown to be highly important issues, despite not having received much attention. This analysis has also incorporated an examination of the needs of disadvantaged groups, which, it is proposed, are central when examining inclusion and empowerment, and shows how important it is to focus much more on pragmatic user segmentation derived from real life problems and needs.

A summary framework for the articulation and linking of 'ends' and 'means' has also been presented, which shows how these can be translated into a linked hierarchy of levels for policy development, analysis and measurement:

- Level 1: roll-out and access:
  - very easy to achieve and measure
  - mainly under the control of E-government implementers, with few if any 'externalities' which could disturb the capacity of 'means' to lead to the 'ends' desired.

- Level 2: take-up and use:
  - quite easy to achieve and measure, although this is only now becoming commonplace
  - some 'externalities'.

- Level 3: impacts and benefits
  - quite hard to achieve and measure, but some promising progress
  - many 'externalities' and thus some reduced control of 'ends' achievement by E-government implementers.

It is suggested that the approaches in this paper could be useful for the future understanding and measurement of E-government and e-inclusion on a global basis. At least it is hoped that the ideas here provide the basis for further thought and discussion. For example, the United Nations should think about tackling level 2 measurement in addition to the current focus on level 1. In addition, although level 3 is too difficult and too resource demanding to measure at this stage, it should be included in the overall conceptual framework.

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Chapter V

An Anthology of E-Participation Models

Nahleen Ahmed

I. INTRODUCTION

> "E-Readiness… ascertains how ready Governments… are in employing the opportunities offered by ICT to improve the access to, and the use of, ICTs in providing basic social services." [1]

Strategic and meaningful application of ICT for the purpose of improving the efficiency, transparency, accountability and accessibility of government is possible if the ultimate objective of e-government is to promote social inclusion, or e-inclusion. The real challenge lies in not only ensuring that certain preconditions are met for e-inclusion such as access to ICT tools, networks and literacy, but the degree to which e-inclusion enables an individual to participate more fully in the social, cultural and political arenas of society. Particularly in policy-making, e-participation makes use of the digital communications media to allow citizens to participate through a more inclusive, open, responsive and deliberative process.[2] Where the relative difference between ICT penetration and its use among different socio-economic groups is high, it increases the digital divide between the "e-haves" and the "e-have-nots" in the world. Consequently, the focus of e-inclusion and e-participation should examine issues of ***empowerment*** rather than just access which will contribute to greater social cohesiveness, competition and democracy.

A more critical analysis of the concept of empowerment is essential for understanding why it is not simply an inevitable consequence of providing access to ICT.[3] E-inclusion initiatives have not always resulted in promoting social inclusion; to the contrary, they have, at times, resulted in promoting isolation and exclusion, despite advances in the provision of online services and communications. Conversely, some communities feel empowered even when individuals do not make personal use of ICT tools and services. [4]

The emerging debate in OECD countries, and particularly in the UK, is focusing on the question of how to define the concept of empowerment. First, the term itself requires greater conceptual clarity and analysis since empowerment is an idea, not a policy. Furthermore, since empowerment also implies giving power to those who do not currently have it, it is more important than ever to understand the nature of power and how it should be re-distributed. For example, does empowerment principally involve the removal of economic barriers and the creation of a more equal society? Or should it be viewed within a wider frame of reference, whereby empowerment means providing more opportunities to citizens to participate in the

[1] *United Nations Global E-Government Readiness Report, 2005.*
[2] UK Local e-Democracy National Project: *http://www.e-democracy.gov.uk/knowledgepool/*
[3] International Association for Public Participation, IAP2
[4] E-Inclusion: New Challenges and Policy Recommendations, eEurope Advisory Group, July 2005

political system, improve their capacity to participate, stimulate a culture of civic engagement, or all of the above?

Furthermore, e-inclusion and e-participation are "moving targets": while on the one hand, innovations in ICT continue to create new gaps or exacerbate the digital divide for the vast majority of people in the world, several underprivileged communities are also learning to bridge the gap by developing creative ways of using ICTs, individually and collectively.[5] However, e-participation endeavours are still in their infancy and few countries have actively promoted it to date; so examples of good practice are rare. In fact, it is not easy to assess the impact of e-consultations and e-participation because there are few examples of dramatic policy outcomes as a result of this process.[6]

Use of collaborative technologies is challenging the traditional notions of democratic involvement by allowing citizens greater opportunity to express their individual political will. There are not only top-down but also bottom-up initiatives that are transforming the way governments interact with their citizens and vice versa. These innovative models of engagement are creating communities that are virtual and fluid, and impact policies and practices in a variety of ways and with varying degrees of success.[7]

The UN e-Readiness Reports focus primarily on reviewing e-government websites for 191 member countries of the United Nations. This paper will undertake to review reports, studies, websites and evaluations of e-government initiatives with a view to highlighting good practices and lessons learned for the express purpose of making suggestions and recommendations for the future direction of e-Readiness Reports, particularly focusing on e-participation. Based on the research, the paper will attempt to identify issues for the future direction of the UN's review of e-government and e-participation models, as well as draw upon lessons learned for governments contemplating e-participation endeavors.

II. A REVIEW OF SELECTED E-PARTICIPATION MODELS

A study of e-consultations and e-participation in policy-making will inevitably arrive at the following conclusions:

- Examples of e-participation and e-consultation are few in number;
- Where they exist, they are still of an experimental nature and not very clearly defined in terms of expected outcomes; and
- The public is not very well informed about these initiatives, and nor is there a clear mechanism for integrating the result of these processes into effective policy outcomes.

E-government performance tends to mostly focus on the delivery and provision of online public services, and less on feedback mechanisms that allow citizens and stakeholders to engage in policy debates and consultations. In recent years, however, e-government has been gradually evolving into a more interactive process whereby citizen engagement through e-consultation and

[5] Ibid. p.5
[6] http://www1.oecd.org/publications/e-book/4204011E.PDF
[7] http://europa.eu.int/information_society/activities/egovernment_research/focus/edemocracy/index_en.htm

e-participation is now being viewed as a necessary next step towards the promotion of a more inclusive society.

Clearly, the issue of the digital divide continues to be a major concern to governments worldwide. Even in technologically advanced countries, such as in the EU, the digital gap is quite significant, despite a significant increase in the access to ICT equipment and services. It is estimated that about one-fourth to a third of the EU population are still outside the pale of e-government services.[8] Various surveys have identified six kinds of socio-demographic factors that account for the gap, namely: geography, income and social status, education, gender, age and disabilities. However, the nature of the digital divide needs to be better understood in shaping e-government strategies and policy in terms of: (i) the differences between individuals and groups (cultural, employment profiles, etc); (ii) transitory gaps, such as gender, age, time and market forces; and (iii) structural or socio-economic gaps, such as in education and income.[9]

So what is being done to respond to the ***drivers*** of demand for e-government? A recent study of the EU member countries found that the digital divide is lower where the level of ICT adoption is high. In other words, "changes over time indicate that increased use of ICT will mitigate some digital divides, in particular those related to gender, region and to some extent, age," but strong policy support would be needed in order to bring that about.[10]

While on the one hand, innovations in technology promise greater access to information and connectivity between governments and the citizens, the proliferation of ICT is also creating new social and professional requirements that threaten to further exclude those who are unable to meet them. Efforts are being made to explore multi-channel approaches to reach the under-privileged and marginalized groups, at times combining them with traditional approaches such as town hall meetings and face-to-face interaction with the public.

E-participation models have been grouped under three broad categories: (i) information, i.e., a one-way flow of information from the government to the citizens; (ii) consultation, i.e., a two-way relationship whereby citizens are encouraged to provide feedback to the government; and (iii) active participation, i.e., a partnership arrangement with the government in which citizen engagement is actively solicited for defining and shaping policy.[11]

The International Association for Public Participation (IAPP), on the other hand, provides a spectrum of consultation and participation tools that range from information provision to active participation. They include:[12]

- *Information provision*: fact sheets, web sites, open houses
- *Consultation*: public comment, focus groups, surveys, public meetings
- *Involving the public*: workshops, deliberative polling
- *Collaboration*: citizen advisory committees, consensus-building, participatory decision making
- *Empowerment*: citizens' juries, ballots, delegated decisions.

[8] eEurope Advisory Group – WG2 – e-Inclusion: Final Report, 2005
[9] Ibid.
[10] EU: Information Society Benchmarking Report, 2005
[11] "*Characterizing E-Participation in Policy-Making*" by Dr. Ann Macintosh, 2004
[12] IAP2, 2000

In IAPP's 5-tiered classification, however, the e-participation model culminates in 'empowerment' which allows citizens the prerogative to influence policies and laws that govern their lives. To varying degrees, the following countries illustrate different levels of e-participation in various parts of the world:

United States:
In the UN's Global e-Government Readiness Report 2005, the United States is ranked as the world leader in e-government readiness. Its strength and uniqueness lies in the fact that that the US government's web portal collects and consolidates information from 51 million government web pages for the convenience of the public. It is extremely user friendly, enabling citizens to ask questions that are not already covered in the searchable database, and targets users by groups. Although the portal is in English, the official language, it is nevertheless accessible to Spanish speakers as well.

The seamless integration of government services and good examples of transformational government are also evident at the local government level, such as New York City's 311, non-emergency (phone service) program. The service integrates 40 call centers into a one-stop shop arrangement whereby citizens can directly access City Government without having to understand the organizational complexity of where and how to get the required services.

Commentary: Given the size and complexity of the federal government structure in the US, online consultation at the national level on policy issues would neither be feasible nor desirable, except for elections and referendums. Citizen engagement is mostly relegated to the state and local levels, where government portals offer access to a variety of public services. However, active e-consultation and e-participation opportunities are almost non-existent, although grassroots initiatives, including online blogs, are becoming increasingly popular means for energizing the voting population to take an active interest in elections and policy issues.

United Kingdom:
In the UK, the government identified certain criteria to revitalize its relationship with citizens and ensure a continuing dialog beyond just during the elections. In so doing, it set forth guidelines for information dissemination to the public, to provide opportunities for consultation, and facilitate the provision of online services.[13] A striking feature of the UK government portal is its focus on e-consultation, which makes it a leading proponent of e-participation in the world (although in the e-Government Readiness index, it ranks third in Europe, after Denmark and Sweden).[14] An outstanding feature is the linkage to formal consultation sites from the main web portal, encouraging citizen consultation and participation, including detailed descriptions and instructions to facilitate the consultation process itself. The Cabinet Office issues annual reports on compliance with the Code of Practice on Consultations, which ensures that officials are held accountable for managing the process and its outcome.

Furthermore, the UK Transformational Government Initiative strategy is based on the needs of the citizen and focuses on the provision of services through training of front line staff. The strategy is to direct all government departments to work together, integrate service delivery systems, and balance data sharing with data protection legislation in order to develop a truly innovative and citizen-centric approach to delivering services.[15]

[13] eParticipation Scoping Study, OFMDFM, 2004
[14] Global E-Government Readiness Report, 2005
[15] http://www.egovmonitor.com/node/3964

Commentary: The UK government has taken the lead among OECD countries in e-participation initiatives, actively exploring ways and means to engage in consultations and policy discussions with its citizens. In fact, lessons learned from the Local e-Democracy experience offers many insights into how e-consultations should be designed and developed and how the results of the process can be linked to tangible, policy outcomes. The accountability factor deserves particular mention given that the government is taking a proactive approach to publish audited, annual reports on the consultation process with the express desire to keep the public informed.

Singapore:

Singapore is ranked seventh in global e-government readiness ranking, according to the UN. It reflects a strong commitment from the government to promote access and use of ICTs. It maintains excellent, informative, and up-to-date sites with easily accessible information. More significantly, it also includes a Government Consultation Portal which encourages feedback from citizens regarding policy, as well as a forum for suggesting ways to cut government waste. The most notable aspect of Singapore's overall online presence is the integration process, which makes it one of the 'best practices' for integrated portals and one-stop-shop sites, and therefore an effective way forward in e-government.

Commentary: A noteworthy factor in Singapore's online presence is the way service delivery has been integrated to facilitate access to citizens. Instead of developing 'silos' of information by separating information by departments, they are grouped under categories instead, which makes the site extremely user friendly. The government portal also actively encourages feedback from the public in order to improve its services.

Canada:

In Canada, e-services are organized by category and not on a department-by-department basis, which makes it user-friendly, and responsive to citizen demands.[16] In order to gauge the efficacy of their services, the government uses a unique Canadian outcomes analysis approach called 'Citizens First' in the case of individuals and families, and 'Taking Care of Business' in the case of companies, which used further surveys against the Common Measurement Tool that the government officials responsible for GOL have developed. With this tool the government has been able to measure client expectations, priorities and actual percentage satisfaction with government services at all levels of government, and track how that is changing.

In a recent survey, GOL Canada was assessed to have not only service maturity (i.e., the level to which a government has developed an on-line presence in terms of service breadth and service depth), but also customer service maturity, which measured the extent to which government agencies manage interactions with their customers and deliver service in an integrated way across all channels.

Commentary: The political will to engage its citizens in policy discussions and to improve public services is amply manifested by the development of a measurement tool to gauge the usefulness of the information and services provided on its website. This is an encouraging first step for the future of e-services and e-participation in Canada, which aims to design its services based on public demand and user needs.

UAE:

The United Arab Emirates (UAE) is one of the countries that have made tremendous strides in advancing its e-readiness global ranking from 2004 to 2005. The gain is largely attributed to a

[16] http://www.egovmonitor.com/node/709

revamped national site that integrates information and services into a single gateway where its services can be easily located. The UAE national site was not only completely re-done but also re-branded. Furthermore, the government took steps to provide participatory features on one of its ministry websites, i.e., the Ministry of Education, which is one of the few government sites in the Middle East to offer an open-ended discussion forum.

An interesting feature on the UAE gateway is the organization of the site by topics that are geared towards addressing the needs of the end-users, integrating information, services, and transactions under separate sections for residents, business, visitors, and government, thereby enhancing its interactive presence.

Commentary: The government has articulated a vision for its e-government strategy with the intention of "enabling integrated policy formulation by facilitating a knowledge-based world class government." It purports to do so by soliciting "ideas and feedback from external stakeholders."[17] *On its website, the government also explicitly outlines the need to develop performance indicators, both quantitative and qualitative, in an effort to be transparent and accountable. It goes on to state that specific performance targets and tangible benefits to the government also need to be outlined in order to measure performance and success. Although the e-government strategy does not explicitly refer to e-consultation and e-participation processes, the experience with the Ministry of Education is nevertheless a salutary example of the government's openness to engage citizens in a participatory process in the future.*

South Africa:
South Africa provides some facility for public comment on its government portal. Although the range of public services offered on the website is not very extensive, it nevertheless offers citizens the opportunity to comment on a number of public documents on issues that are under consideration by policy-makers.

A particularly notable feature is the launching of a national accessibility portal in 2004 to make ICT available for four million people with disabilities, as part of their social inclusion strategy. Termed as the South African National Accessibility Portal (NAP), the site will be a one-stop information, services and communications channel that will support persons with disabilities, caregivers, the medical profession, and those offering services in this domain once it is completed in 2006.

Commentary: This is an example of an e-government portal that is beginning to evolve from e-information to e-consultation. The range of public services is not fully developed, but there is clearly an attempt to organize the information according to the perceived needs of the public, and in several different languages. Furthermore, the number of documents available for public comment is quite impressive, which indicates the government's desire to solicit feedback from the citizens before finalizing the documents for legislative action. It is not clear, however, how the government intends to publish the results of its consultative process and assess the performance of its portal.

Brazil:
Brazil improved its global e-readiness ranking in 2005 by reinforcing its infrastructure and services. It's one-stop-shop site is perhaps the most effective in Latin America, with the most pertinent information and services on the main page organized in easily-defined categories. They range from tax payment and health services to legislation information and utilities. The image

[17] http://www.government.ae/gov/en/gov/projects/strategy.jsp

logos make the site particularly user friendly. As for engaging citizens in discussing key policy issues, the portal offers limited choice of topics for online discussion.

The e-procurement website for government contracts for goods and services provides information on relevant legislation and current news on economic development issues. It includes an online bidding site for government contracts, as well as links to services for new and emerging businesses in Brazil. To use the online services, the website installs specific software for the user's computer and allows for online registration of potential government contractors.

Commentary: A review of the web portal demonstrates that considerable thought has been expended to organize and present information to the public in a manner that is both logical and user-friendly. However, it is not easy to determine whether some of the pages are still under construction or if the information is simply not accessible because many of the pages are not available, and the "URL not found" message pops up after clicking on the links.

As the above examples demonstrate, countries worldwide are exploring different ways of developing interactive mechanisms to encourage e-engagement and e-participation. However, the quality of the consultations and their results cannot be evaluated against any universal standard of measurement since such a measurement does not exist. Furthermore, few countries have developed qualitative or quantitative indicators to actually link the initiatives with policy outcomes. Ideally, audited annual reports should be posted on the websites for both government entities and the public to review the outcome of the deliberative process and learn from the process.

In the final analysis, it is difficult to assess the usefulness, cost-effectiveness and value added of official web portals without conducting nationwide surveys, opinion polls and/or online rating systems. Under the circumstances, it is even more difficult to compare one portal against another since user needs and requirements vary widely from one country to another, as do the size and structure of government. The complexity of these endeavors make it all the more necessary to compile and highlight the lessons learned thus far from global experiences, and make a systematic effort in disseminating good practices that will be of immense value in driving the future growth of e-inclusion and e-participation.

III. TRANSFORMING THE G2C MODEL

Expanding the public's access to ICTs and broadening the reach and affordability of these technologies and services is an important first step, and much emphasis has been given to these issues by governments and donors alike. But why is it imperative for developing countries to invest in e-government?

Since e-government aims to make government more effective, transparent and accountable in the global knowledge economy, it naturally follows that in so doing, it will be better positioned to promote human development and ensure good governance. Therefore, the objective of e-government should be to transform itself to be more citizen-centered.

In putting citizens first, governments are required to be more responsive to citizens' needs and inputs. In other words, the natural progression of effective e-government is towards e-consultation and e-participation in order to promote more citizen-centric services. But how will that be manifested? Will "citizen-centric" e-government be identified primarily with the availability and quality of online services? Or will it be determined by the nature and volume of

e-consultations? How can the process be made meaningful? What kind of indicators should be developed to measure the impact?

Another compelling argument for investing in e-government can be made from a macroeconomic perspective: government constitutes a significant part of the GDP and therefore has a significant impact on the economy. As such, ensuring efficiency and effectiveness in government is not only essential, but highly desirable in order to improve its functioning and its ability to promote national development. A more efficacious government will also be better prepared to engage more fully in the global economy and to make use of the opportunities of globalization.

Issues for Consideration

The promotion of e-participation in evolving democracies should be undertaken with caution in terms of managing expectations. Many developing countries are nascent or evolving democracies, and therefore have not experienced conventional democratic practices that involve consultation with, and the active participation of, citizens. Under the circumstances, designing e-government programs will have to consider the limitations of technology in promoting participatory government unless the process of democratization is already underway.

Political will: The success of e-government rests largely on the political will of governments to engage citizens in an inclusive process that leads to participatory decision-making. The difficulty has been – and continues to be - in developing appropriate tools that can effectively measure policy outcomes as a result of e-participation. Some recent attempts however, are noteworthy, such as the Government of Canada's 'Citizens First' tool for measuring client expectations, priorities and satisfaction (in actual percentages) with government services at all levels of government, including tracking changes over time, and the client surveys and feedback from citizens in the UK on the quality of online services.

Expectations from e-government: The issues are twofold: (i) countries need to be fully aware that incorporating ICTs in government will not *automatically* lead to promoting greater efficiency and effectiveness without a fundamental transformation of the internal workings of government; and (ii) the use of ICT alone cannot accelerate the democratic process because the process itself has to be thought through so that the use of ICT is designed to promote and nurture it.

A critical element in measuring the success of e-participation is not how the "e" in e-government automatically translates to a more inclusive form of government, but how ICT can facilitate and promote the evolving notion of citizen participation in shaping policies.

Shortcomings in management: Management failure is often cited for lack of improvement in public service delivery because public services can be overwhelmed by matters of internal administration, such as technology, and burdened by complex restructuring efforts, with little regard to the needs of the end-user. There seems to be little understanding of how to 'virtualize' public services beyond the technical or organizational change.

Over-emphasis on "e": Despite the growing number of e-participation endeavors in developed countries, citizen interest and engagement in politics and policy-making has been declining. This apparent contradiction stems from the fact that e-inclusion measures have mostly focused on accessibility issues, overshadowing other inclusion factors such as taking steps to e-enable

existing social inclusion policies.[18] In other words, e-health, e-education, e-social services, etc, should focus more on health, education and social services per se, rather than on "e". As a result, e-participation has not necessarily translated to improved public service delivery or desired policy outcomes, resulting in decreased levels of confidence in government.

***Tracking policy outcomes*:** The trend in some governments is increasingly towards linking e-consultations and e-participation on specific social policy issues to their outcome, i.e., policies that directly relate to improving the delivery of public services. As a result, governments are under pressure to publish survey results, audit reports and legislative action on their official websites that have resulted directly from the online policy deliberations, as information and feedback to the public. However, such examples are few and far between.

The more obvious and successful attempts at measuring e-consultation is through e-voting, e-referendums and e-surveys. It is relatively more easy to publish the results, provided that the questions are not open-ended that require subjective evaluation of individual responses. Active participation, however, requires a great deal of thought about how to design the interactive process in order to generate meaningful feedback, as well as how governments should manage online interactions with the citizens and moderate the discussions in an unbiased manner. The latter process, by its very nature, presupposes a certain level of maturity on the part of both the government and the citizens.

Tracking grassroots e-engagement: ICT is increasingly being used in a variety of different ways to influence policy, both directly and indirectly. E-government interaction is traditionally defined as government-to-government (G2G), government-to-citizen (G2C) and government-to-business (G2B). However, innovative, pro-active, bottom-up, grassroots-led approaches are being tried in some countries to force governments to engage with their citizens. In Bangladesh, for example, one of the most prominent national newspapers has started a campaign to solicit viewer comments/feedback by email on policy issues that should be reflected on the ballot in the upcoming elections in late 2006. Another example is the BBC's Action Network which provides a public forum to discuss policy issues and solicit viewer feedback on any number of issues on the legislative agenda in the UK. This new form of e-participation is neither a top-down approach nor led by governments. But how can these innovative mechanisms be monitored and measured?

Challenges facing e-inclusion and e-participation indicators: The European Commission's i2010 vision includes e-government as a crucial part of it main policy dimensions. The focus is on making e-government inclusive and on addressing the digital divide. In reviewing the National Action Plans (NAP) for Social Inclusion (2003-2005), a recent report commissioned by the EU states that e-government endeavors seem to be

> "…more of isolated initiatives and actions than broad ranging strategies. As a matter of fact, only few NAPs attribute a really strategic importance to e-Inclusion while most National Plans choose to focus on other priorities. We are still far from a system of indicators which could really allow the monitoring of progress at national level."[19]

The report further states that it is difficult to assess the status of e-inclusion in the countries reviewed. In other words, it is unclear whether the countries are only at the initial stage of

[18] E-Inclusion: New Challenges and Policy Recommendations, eEurope Advisory Group – WG2 – 2005.
[19] eEurope Advisory Group – WG2 – e-Inclusion: Final Report, 2005

declaring their "intent", at the planning stage, or actually engaged in fully implementing the initiatives. The difficulty stems from the fact that often the objectives may have been determined but details regarding specific measures, projects, approaches, targets, financial envelopes, etc., are yet to be worked out. Statistical data still requires a great deal of improvement and e-inclusion targets need to be defined more clearly. In fact, only a few Member States have defined any indicators.

Marketing/publicizing e-participation: One of the main reasons for lack of interest in e-participation stems from the fact that public authorities do not take the trouble to market the initiative or explain the use and advantages of e-participation efforts.

Overuse of e-participation techniques: While e-participation models of consultation do much to promote democracy, there is also reason for concern that overuse of these techniques can undermine the democratic process.[20] Direct democracy has many advantages, but if e-consultation is misused, it will undermine the democratic system by undercutting the responsible decision-making processes of the elected representatives or policy-makers.

The downside to e-participation: Considerable thought needs to be given to the issue of how much e-consultation and e-participation is desirable and can be managed by governments. There is always the question of what citizens are actually capable of contributing and reasoning. It is possible that engaging an uninformed and ignorant citizenry could be counter-productive and "lead to errors in judgment and bad policy decisions.[21]

Democratic disengagement: Furthermore, technology fatigue, lack of credibility in government, and "democratic disengagement"[22] all beg the question whether a new e-democracy framework is needed to revive citizen participation.

IV. INNOVATIONS IN ICT TO PROMOTE E-PARTICIPATION

The development of socially inclusive policies should have, as its objective, providing access to ICT-related services to the largest possible number of people and communities in order to improve their participation in a knowledge-based society and economy. The process should be facilitated, either directly or through intermediaries, by taking proactive measures to neutralize socio-economic differences such as education, location, employment, disability, age or gender.

To achieve this objective, alternative devices could be considered as viable means for promoting e-government and e-participation, through multi-channel strategies and solutions, such as cell phones, community computing, etc. By its very nature, inclusive, e-government implies that pro-active measures should be taken by governments to ensure that public services are available and accessible to all and that digital exclusion through e-government is avoided at all costs. Cell phones, speech technology & wireless networking**,** for example, could make e-participation more accessible to those with little or no educational attainment, as well as hard-to-reach and marginalized groups in society, thereby narrowing the digital divide.[23] The 'Village

[20] "Inquiry into Electronic Democracy" 2004, by Scrutiny of Acts and Regulations Committee
[21] " Promise and Problems of E-Democracy, OECD, 2003
[22] E-Participation in Local Government, IPPR, 2002
[23] Wireless Networking for the Developing World, 2006

Phone Program' promoted by the Grameen Technology Center is one example of a successful outreach programme.[24] A critical issue in incorporating the use of ICT in government is to keep the gap between the "information rich" and the "information poor" from widening further.

This new direction in the transformation of government is called ***mobile government, or "m-government."*** It is a subset of e-government where ICTs are limited to mobile and/or wireless technologies like cell or mobile phones, and laptops and personal digital assistants (PDAs)) connected to wireless local area networks (LANs). M-government, which is being used in several countries, including Sweden, the Netherlands, Malta, Singapore, Hong Kong, South Korea, China, and the Philippines, can help make public information and government services available anytime, anywhere to citizens and officials.[25] Examples include sending security alerts, reminders to renew licenses, results of medical examinations, tax returns, etc. Most of these endeavors are still at the experimental stage and limited in scope, but they nonetheless presage a dramatic shift in the traditional roles and functions of government.

The relevance of m-government lies in the fact that it is particularly suited for developing countries where Internet access rates are low but mobile phone penetration is growing rapidly, particularly in urban areas. Globally, the number of mobile phones has surpassed the number of fixed/wired phones. This is the case in 49 middle-income and 36 low-income countries, including Burkina Faso, Chad, Honduras, Indonesia, Jordan, Mexico, Mongolia, Nigeria, Philippines, Saudi Arabia, and South Africa. According to a recent study, the population of global SMS users will grow to 1.36 billion in 2006. [26]

Another innovative tool as part of e-participation solutions in the UK is the launch of the VOICE toolkit, a "suite of easy-to-use interactive tools for creating and developing e-communities where citizens, communities and authorities can come together online to discuss issues, work in partnership and share information and ideas. The VOICE toolkit includes e-participation, e-consultation and website publishing tools to support the e-enabling, as well as develop existing e-enabled parish and town councils, the voluntary community sector, neighborhood groups and other local initiatives."[27]

V. WHAT'S NEXT IN E-GOVERNMENT?

Any discussions about the future of e-government will have to address the following questions:

- To what extent will e-participation facilitate the functioning of government?
- Is e-participation feasible without first achieving literacy rates, internet connectivity and universal access that prevail in developed countries?
- How can governments evolve from e-government to e-participation?
- What are the technological, political, social and cultural impediments to e-participation?
- How can developing countries bridge the digital divide with the developed countries?
- Will the existing lag between the developed and developing countries further exacerbate the divide?
- What measurable indicators can we use to assess the impact of e-participation?

[24] http://www.gfusa.org/technology_center/village_phone/
[25] http://www.worldwidewords.org/turnsofphrase/tp-mgo1.htm
[26] http://www.egov4dev.org/mgovdefn.htm
[27] http://www.publictechnology.net/modules.php?op=modload&name=News&file=article&sid=4823

These questions can be effectively answered only if the objectives of e-inclusion and e-participation are clearly understood and delineated by stakeholders. Socio-economic, cultural and political environments will largely determine how these initiatives can be realistically designed and implemented in their respective countries.

So, how much of the policy terrain should be covered by the new empowerment agenda? Should empowerment be defined in terms of gaining political clout or, should it also incorporate economic empowerment, empowerment in the workplace or feeling empowered as a consumer?

And last, but not least, what would genuinely empowering public services look like and how do we guide the reform process to ensure that outcome? What would be the characteristics of the empowering state, the distribution of power within it, and the nature of relationships between it and the private and voluntary sectors?

To promote e-participation, what should governments focus on?

(a) ***Targeting specific groups*** only (e.g., the underprivileged, women, youth, the marginalized, those living in remote areas)?
(b) ***Targeting specific issues*** of greater concern to the majority of the citizens, such as social benefits, job creation, maternal and child health care, etc? Should they be issue-based or policy-based? Or,
(c) ***Selecting a small number of priorities*** that require meaningful dialogue and have a high policy impact?

Policy discussions have to focus on addressing the above issues before determining any other requirements, such as technology, access and connectivity issues. Another critical consideration in the uptake of e-consultation and e-participation initiatives is the time factor. Adoption of new technology takes time to be accepted, understood and adopted. Although the accelerated pace of globalization is compelling governments to invest in internet technology and by extension, in some form of e-government, a rush to embrace ICT for use in government could backfire unless e-government strategies are designed and developed within the socio-cultural, economic and political context of the country. Expectations should therefore be realistic in terms of what is achievable given resource constraints, adequate time for adoption and implementation, and socio-political considerations.

It goes without saying that from an accountability standpoint, more thought has to be given to understanding how best to capture the results of e-consultation and e-participation endeavors. The results should be assessed by specifically outlining measurable indictors and linking policy outcomes to the process, which would then be published for public review.

Lessons gleaned from the limited examples of e-consultation initiatives include the following:

E-participation at the local level: Lessons of e-participation initiatives from OECD countries show that centers of power and the locus of citizen empowerment is progressively devolving to smaller units of government, i.e., from the center to the local level and from the local level to communities and neighborhoods (e.g., the UK, Sweden, etc).[28] In the UK, for example, the creation of the 'new empowerment agenda' is an attempt by political parties to address a growing sense of powerlessness among the general public and to the crisis of participation being faced by the political and governing institutions. It is also a response to a cultural climate in which citizens demand more control over decisions that affect their daily lives.

Use of Open Source Software: To make the transition to e-government and e-participation generally acceptable globally, investments have to be made to indigenize the local content matter, so as to incorporate linguistic, culture and social considerations, as well as to gain the public trust. One of the means to do so relatively quickly and easily is the open source software or free software, also known as FLOSS or FOSS. The basic idea behind open source is very simple: FOSS programs are programs whose licenses give users the freedom to run the program for any purpose, to study and modify the program, and to redistribute copies of either the original or modified program (without having to pay royalties to previous developers. It can be used copied, studied, modified and redistributed without restriction, which is highly significant for developing countries because it represents a viable alternative to the traditional licensing model that can help to free up public funds. "Affordability aside, the adoption of FOSS also presents opportunities for industry and capacity development, software piracy reduction, and localization and customization for diverse cultural and development needs."[29]

***Focus on service delivery*:** Increasingly, the focus of e-government is shifting towards the improvement of public service delivery. Since public services are mostly provided at the local level, it is an issue that most governments have to address head-on. Moreover, with a dramatic increase in urban populations worldwide, governments increasingly have to cope with the rising expectations and demands in cities and local communities. Under the circumstances, localizing the provision of public services is becoming more of a necessity than a matter of choice, challenging both national and local governments alike.

***Consensus-based policy-making at the local level*:** Unlike at the national level, local authorities seem to be increasingly more inclined to engage in issues-based consultations (such as, for example, in neighborhood planning and building purposes), and consensus-based decision-making which facilitates better acceptance, adoption and implementation of laws, regulations and ordinances.

What lessons can national governments learn from local level e-participation and e-consultation initiatives?

- Since local government bodies are smaller in scope, they have more experience in engaging a greater number of citizens in e-discussions and consultations, and can provide valuable lessons for national governments in designing and developing their e-government strategies;
- Experiments in innovation, whether in the use of technology or in the type of political engagement, is easier to start and less risky when experimented at the local level;
- The degree of local autonomy will determine the degree of citizen engagement. So, if the result of e-participation is felt to be beneficial to the local communities, national

[28] http://www.ippr.org/articles/?id=2044
[29] http://www.iosn.net/about/news/iosn-nodes

governments – which are traditionally very risk averse – may be more willing to experiment with it as well. It should be kept in mind however, that policy innovation in this field cannot be left to the local authorities alone, but should be taken in conjunction, consultation and with the support of the central government and supporting bodies.

Research into new interactive technology: The EU is investing in the HOPS EU Research Project to improve the accessibility and delivery of public services by creating a new "delivery platform" that will combine automated human voice interaction with innovations in ICT. In other words, the new system is expected to integrate e-services with voice activated technology so as to enable both the computer-literate and illiterate to easily access e-services and information, thereby bringing the largest number of people within the ambit of online services.[30]

It is apparent from the multitude of approaches and innovations in ICT and related tools that much research and thought is being expended by governments and the private sector alike, on ways to: (a) connect with the citizens by expanding e-government and e-services; (b) develop policies to promote more inclusive e-government; and (c) develop strategies to enable greater citizen participation through a consultative process for consensus-based decision-making. Notwithstanding the plethora of choices, some pertinent questions still remain:

- How will governments determine the appropriate combination of policies, tools and technology for developing e-government and e-participation strategies?
- Will resource constraints compel governments to restrict the development of e-government and e-participation?
- How can governments effectively map their evolution or transition from e-government to e-participation?
- How will governments define e-participation? Will they be used to fit their policy objectives, or vice versa? Will they translate to political, economic and social empowerment of citizens?
- And lastly, what type of indicators will be required to assess performance?

30 http://europa.eu.int/information_society/activities/egovernment_research/doc/minconf2005/inclusive_egov.pdf

Chapter VI

Comparing Local e-Democracy in Europe: A Preliminary Report

Lawrence Pratchett[1]

Despite the widespread take-up of e-government across the world, surprisingly little research exists that enables systematic comparison of e-participation and e-democracy initiatives between countries. Publications such as the UN's Global e-Government Readiness Report (2005) provide a powerful overview of the main trends but there remains a significant gap in analysing developments on the ground.[2] This report addresses that gap by analysing e-democracy developments across five European countries. The focus is upon developments especially at a sub-central government level and, most particularly (but not exclusively), upon local government sponsored initiatives.

This report is one of two reports. The research focused not only upon what is happening in Europe but, also, developments in USA local government. Although data collection in the USA differed from the method adopted in Europe, research in the two continents was driven by the same overarching analytical framework. Consequently, the two reports are able to offer a strong analytical comparison. The USA case is explored in a second report, produced by Professor Don Norris.

The main aim of the research was to develop a systematic high level comparison of e-democracy developments in local governments across Europe and the USA. Consequently, the research addressed the following high level questions:

1. What is the range of e-democracy initiatives being developed in the various countries under analysis?

2. How much variation is there ***between*** countries in terms of the e-democracy developments and what are the main reasons for these variations?

3. How much variation is there ***within*** countries in terms of the e-democracy developments and what are the main reasons for these variations?

The research both provides a stock take of different local e-democracy initiatives in each country and develops an understanding of the factors affecting take-up. In particular, it focuses on understanding the directions that democracy is developing in each locality and the factors affecting it.

[1] The research was led jointly by the Local Governance Research Unit at De Montfort University, UK (Lawrence Pratchett) and the e-Democracy Centre at the University of Geneva, Switzerland (Uwe Seurdult and Fernando Mendez). Country reports were developed by specialist country analysts: Estonia - Liia Hanni (e-Governance Academy, Estonia); Hungary - Gabor Soos (Tocqueville Research Centre, Budapest); Spain – Yanina Welp (Barcelona); Switzerland – (e-democracy centre, Geneva); United Kingdom (Scott Wright, De Montfort University). While this report is based upon the contributions of all these people, responsibility for the analysis presented here remains that of the author.

[2] The one exception is: Lourdes, T., V. Pina, et al. (2006). However, this article only provides evidence based on a website analysis and does not investigate actual initiatives.

Analytical Framework

The focus of the research is on democratic institutions and the ways in which e-democracy is being used as a tool to reinforce, change or develop democracy in particular ways. More than simply examining the range of e-democracy initiatives in different countries, therefore, the research also examined the wider institutional context in which democracy is developing and the direction of change that is taking place. The research takes as its starting point the assumption that e-democracy is not a benign tool but has significant implications for reinforcing or changing democratic practices in a locality. e-Democracy devices may be top-down, in so far as they are developed by governance organisations to structure citizen behaviour in democratic engagement; or they may be bottom-up, in so far as they are instigated and owned by citizens acting collectively to influence public policy. The analytical framework analyses two dimensions:

1. The type of democratic devices deployed

At a very simple level it is possible to distinguish three main forms of democratic devices: aggregative, negotiative or deliberative.[3] **Aggregative devices**, such as elections, seek to establish the public will by adding up the preferences of all individuals and reaching a majority decision. These devices place great emphasis upon establishing and maintaining political equality. **Negotiative devices**, such as community forums, recognise that there are competing preferences in communities and seek to provide opportunities for different stakeholders to bargain with each other to reach mutually acceptable compromises in policy. **Deliberative devices**, such as a citizens' jury, recognise that not all people's preferences are fixed and seek to provide opportunities for ideas to be developed and changed through a process of discussion and deliberation. Although all three devices are normally found in functioning democracies, the interesting question in relation to e-democracy is what emphasis is being placed on these devices through its implementation? In implementing particular e-participation initiatives, policy makers are inevitably affecting the balance between these three types of devices and, thereby seeking to shape the direction in which democracy is developing.

2. The direction of change

It is important to recognise that democracy is not a stable or settled concept: democratic institutions and processes continuously change and adapt in response to changing social, political and demographic trends. In this context, e-democracy initiatives provide tools for shaping democratic change. In implementing e-democracy, project sponsors and other actors are either explicitly or implicitly seeking to:

- ***Reinforce*** contemporary democratic institutions (e.g. e-voting may be seen as an attempt to reinforce parliamentary style democracy)
- ***Change*** existing institutions to make them work in different ways (e.g. webcasting may both improve elected member performance and increase transparency)
- ***Replace*** democratic institutions with new forms (e.g. online bulletin boards may be used to replace out-moded forms of communication with citizens)
- ***Develop*** democratic institutions (e.g. online forums may be seen as a way of developing new modes of deliberative democracy within or across communities)

[3] See, for example, Schmitter, P., A. Trechsel, et al. (2004). The Future of Democracy in Europe: Trends, Analyses and Reforms. Strasbourg, Council of Europe Publishing.

- ***Extend*** democracy by using e-democracy to include groups that are marginalised by conventional institutions (e.g. activities directed specifically at young people, ethnic minorities etc).

This framework provides an analytical overview with which to compare very different cases from various European and US cities. Evidence drawn from different tools and contextualised to take account of different national circumstances can be compared using this framework to develop a meta-analysis of e-democracy developments in Europe and the USA. In this report the focus is particularly upon the European experience.

Method

To explore the themes developed in the analytical framework, a method was devised that enabled an exploration of local e-democracy initiatives in five countries – the method has been developed to enable further country studies to be added over time, thereby facilitating the development of a growing database of local e-democracy experience that can be systematically compared over time.

The method involved a specialist analyst in each country identifying the main local e-democracy initiatives taking place in that country.[4] The analyst then interviewed key experts associated with each initiative, using a structured interview template.[5] In addition, the analyst produced an overview of developments in their country, highlighting the key themes and issues that had emerged from the interviews. It is these reports that form the basis of the analysis which follows.

Five countries were selected as providing a broad cross-section of the e-democracy experience. Ideally, it would be good to cover all 25 European Union states plus those that are currently in the process of negotiating entry to the EU. However, within the time and budgetary constraints, the five countries selected cover a number of dimensions that are normally taken into account when comparing local democracy in Europe including northern and southern European countries, and both old and recently acceded EU countries.[6] In addition, in selecting the countries the team were particularly keen to find contrasting experiences of democratic development and those that have already developed a reputation for e-government or e-democracy. Consequently, the five countries selected were:

- **Estonia** – represents a Nordic commitment to new technologies – a small country but with material commitment to and reputation for innovative e-government and e-democracy.

- **Hungary** – represents a recent accession EU country (2004) spanning a significant territory.

- **Spain** – represents a major southern EU country with a substantial commitment to (and experience of) local democracy.

- **Switzerland** – represents one of the leading European countries on e-democracy (especially e-voting) but outside of the EU.

[4] The criteria used for this selection is included as Appendix 1
[5] Copies of the instruments are available on the project website: http://edc.unige.ch/projects/index.php?page_id=1
[6] For example, see John, P. (2001). Local Governance in Western Europe. London, Sage.

- **United Kingdom** – represents a major European Union country (in economic and population terms) with a substantial commitment to e-government and e-democracy.

The collection of data in these countries took place between April and June 2006, although some of the initiatives analysed had been in existence, or had occurred, some time before these dates. In total, 49 cases were analysed in the five countries, including both the most prominent examples of e-democracy in each country and a combination of 'typical' and 'unusual' examples of e-democracy initiatives.

Data collection was premised on the need to understand not only the range of initiatives that are underway or have taken place in each country but also the institutional context. Consequently, the analytical framework was operationalised through a series of more specific topic headings and questions that formed the basis of the 'expert interviews':

1. Basis of initiative
   - Who initiated the project? (Type of actor: political leader, citizens, civil servant, private sector) and was it bottom-up or top-down?
   - When was it initiated?
   - How was it developed from the initial idea?
   - How does this initiative relate to other democracy initiatives in the area (both online and offline)?

2. Management
   - Who had overall responsibility for the project (position etc?)
   - What partners were there and what were there roles?
   - Were there other key actors?
   - How was the project financed?
   - What plans are there for sustainability/follow up?

3. Focus
   - What technologies were used?
   - What was the focus of the initiative (e.g. a neighbourhood, a particular group of citizens etc)?
   - What policy issues were the subject of the initiative?
   - How was participation in the initiative promoted?

4. Lessons (where relevant_
   - What problems did the initiative encounter (e.g. central/regional government support, finance, legal barriers etc) and how were these addressed?
   - Were there any specific financial or technical constraints which inhibited the development of the initiative?
   - What factors provided political support for the initiative?
   - How did the local government address the digital divide issue (citizen's access to the relevant technologies)?What understanding does the municipality have of citizens' access to the relevant technologies (digital divide issues)?
   - What (if any) are the demands/expectations from citizens for such initiatives?

5. Evaluation
   - What were the main achievements of initiatives?
   - What criteria have been used to evaluate the initiative (e.g. degree of participation, responsiveness of decision-makers, citizen satisfaction etc)?
   - What initiatives are emerging as a result of this one?

As the analysis which follows will show, this framework provides a rich level of detail about local e-democracy experiences in the five countries. From this evidence it is possible to paint a broad picture of how e-democracy is developing in Europe.

Institutions, devices and democratic sequencing

This paper is premised in an institutional understanding of democracy. Democracy works through the establishment, maintenance and development of particular institutions: institutions structure behaviour and provide incentives for political actors to behave in particular ways. Democratic institutions are not static: as a recent Council of Europe Green Paper on the future of democracy argued:

…in order to remain the same, that is to sustain its legitimacy, democracy as we know it will have to change and to change significantly – *pace* de Lampedusa – and this is likely to affect all of Europe's multiple levels of aggregation and sites of decision making (Schmitter, Trechsel et al. 2004)

Institutions have particular characteristics:

- They are sets of rules, both informal and formal (rules of the game) – democracy works not only because of formal rules (e.g. election rules, Freedom of Information Acts etc) but also through informal norms or rules (e.g. activities of political\parties, the media etc).
- They embed/ reflect power relations - rules create patterns of distributional advantage (Knight 1992);
- Complex institutional environments shape particular institutions - diversity in democratic institutions exists as a consequence of overlap and learning between tiers of government and so on
- History matters – democratic institutions are shaped by their 'inherited world'. Past political processes and experience shape existing institutions and determine the legitimacy of particular democratic devices. Institutions are also governed by path-dependent processes, making it increasingly difficult to change direction once particular devices or processes are selected (Pierson 2000). The implementation of new technologies provides an opportunity to break path dependency (a critical juncture) and shift paths.

Democratic institutions 'work' by shaping the behaviour of political actors: politicians, civil servants, interest groups, and individual citizens. The rules of the game do not determine outcomes (think of a game of football), but they do provide the framework within which actors select and pursue their strategies. Institutions provide a set of specific constraints and opportunities for the practice of democracy.

The assumption is that, in implementing e-democracy, stakeholders are seeking to affect democratic institutions: either by changing them or by reinforcing them. The tools of e-democracy tools are, in effect, devices for realising particular democratic values (transparency, political equality and so on). However, it s not the devices themselves that deliver democracy but, rather they way in which they are sequenced that matters (Saward 2003).

What might e-tools do for democracy?

Despite the hyperbole that often surrounds e-participation and e-democracy, the range of applications and their intended effects are actually quite limited. The effects can be captured along two dimensions. First, there is the extent to which devices are seeking to affect the institutions of representation or citizenship:

Representation – e-democracy devices may support or enhance the mechanisms of representation (for example, e-voting) or improve the functioning of representatives (intranet websites). They may also serve to enhance the transparency and accountability of elected representatives or public administrations (through Blogging, webcasting of meetings, online newspapers, publishing minutes and records on the web and so on).

Citizenship – e-democracy devices may also be used to support more participatory forms of citizenship, whether through consultation devices (e-panels, e-consultation and so on) through to deliberative mechanisms (such as online forums) or 'bottom-up' initiatives that seek to support the development of citizen action (from e-petitioning devices through to supporting community organisation online).

These two points are not necessarily in competition with one another. Indeed, the institutions of representative government are wholly dependent upon concepts of citizenship. Moreover, the different points do not capture homogenous concepts. At its most simple, the distinction between Schumpeter's 'realist' view that leaders and representatives should be left to govern between elections (Schumpeter 1943) and theories concerned with more participatory (Pateman 1970) or communitarian (Etzioni 1995; Tam 1998) forms of democracy provide a useful contrast. More recently, concerns with the 'deliberative turn' in democratic theory (Dowding, Goodin et al. 2004) have provided other ways of conceptualising political engagement that emphasise political learning through dialogue. However, it is the relationships between these two extremes and the emphasis that particular devices are giving to different actors that is important. The tools of e-democracy may be seeking either to support existing relationships between citizens and the institutions of representative democracy, or indeed, to change fundamentally, this relationship.

Second, the distinction between devices that provide communication and those that seek to enhance interaction is important. Much of the same technologies recur here, but it is the way in which they map against the other dimension that adds value to this distinction.

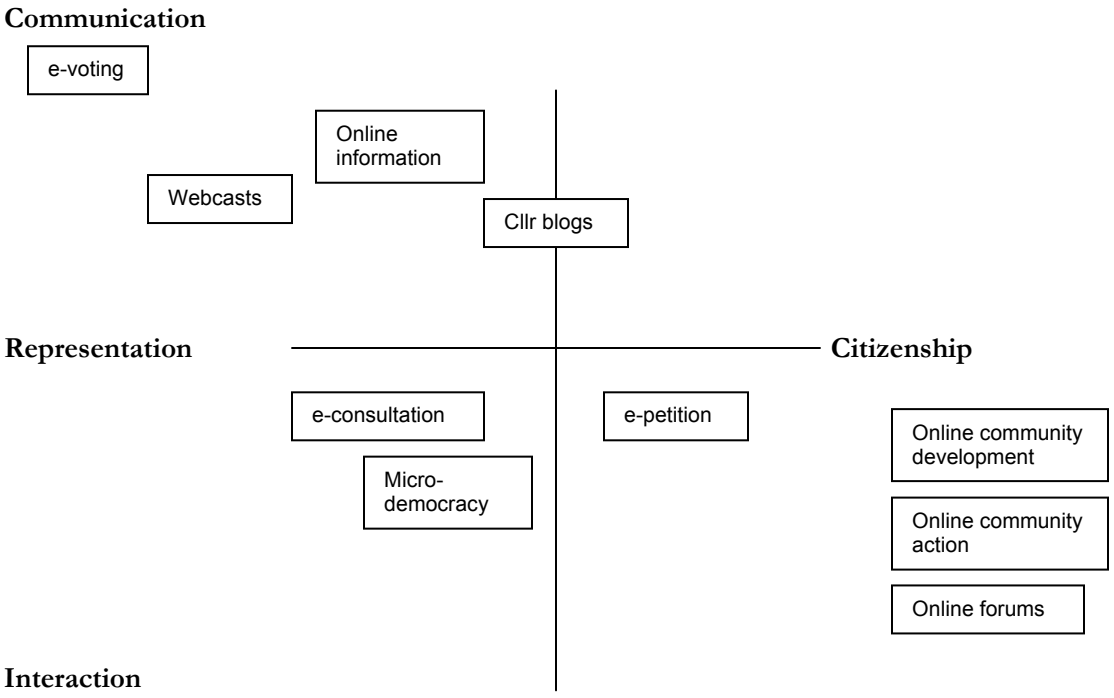
Communication - at its most simple, the internet and other new technologies provide the opportunity for public bodies to communicate more effectively with citizens. Devices here might vary from enhancing democratic education among particular citizen groups (such as young people) through to enhancing transparency by improving access to information, webcasting meetings and so on. It may also include opportunities for politicians to communicate with citizens and, indeed, the opportunity for citizens to contact public bodies (e.g. through e-voting).

Interaction – this other end of the scale clearly involves communication but it implies a more reflexive and iterative approach to communication, in which technologies facilitate two or more actors to engage in a dialogue. Online forums clearly sit at this end of the scale but other activities, such as participatory budgeting or those that facilitate community development are also significant here.

Figure 1 illustrates the relationship between these two dimensions, with some illustrative examples of technologies. These examples, however, are illustrative only. Depending upon how the devices are

used (and sequenced) may affect where they are placed on the matrix. Blogs, for example, may be very interactive and may also lead to great levels of citizen debate.

Figure 1: Examples of e-democracy initiatives



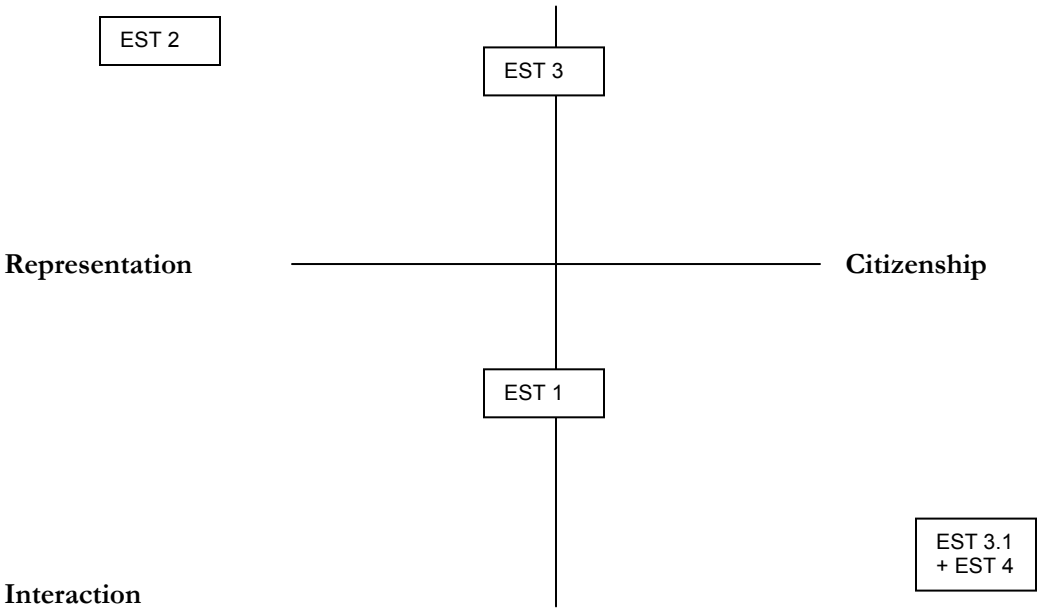
Analysis by country

Having established the basis for comparison, this section will now provide brief portraits of local e-democracy developments in the five countries. In doing so, the focus is on both identifying the main trends that emerge in those countries and relating them to the main issues of change in each country. A concluding section will develop a comparative overview. The analysis is limited, in some countries, by the number of cases available. This limitation, however, reflects the availability of projects to analyse and, therefore, is instructive in its own right.

Estonia

Estonia is interesting because it has pushed the e-government agenda very hard over the last decade. There are some important conclusions on e-democracy, however, which show that a strong e-government infrastructure may be a precondition in supporting wider e-democracy initiatives but it is not a sufficient precondition.

Figure 2: Country analysis - Estonia

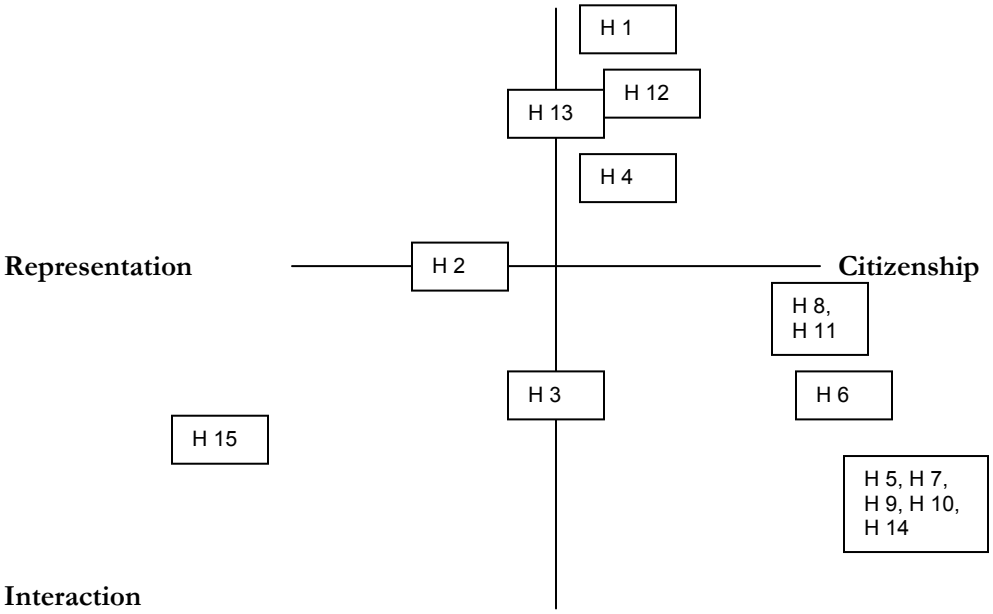


1. e-voting has been the major e-democracy development in Estonia – this is led primarily at central government level
2. There are no well known local government e-democracy initiatives. However, where they are happening, they are normally explicitly linked to wider e-government initiatives – there seems to be an emphasis upon comprehensive initiatives
3. Data provided by the e-Governance Academy shows that 30% of towns and 25 % of rural areas have online forums
4. There is an explicit understanding of sequencing – e.g. Today I Decide (EST 1) which follows a five stage process: idea submission; 14 days of comments; revision; vote; ministry (for response)

Hungary

One of the larger countries to accede to the EU in 2004, Hungary has a large number of very small local governments (out of a total of 3,127, nearly 55% have populations of less than 1000 citizens – although there are 9 cities of 100,000+).

Figure 3: Country analysis - Hungary



1. e-Democracy is a low priority at a national level
2. For most initiatives, e-democracy is an add on to existing or developing e-government initiatives
3. There is a big emphasis in using the internet to enhance transparency
4. Middle-sized local governments seem more likely to adopt democratic innovation than the large cities
5. Online forums are the most popular and well known initiatives, although take-up in most of them is fairly low.
6. There seems to be a strong emphasis upon developing citizenship and engagement, through projects that

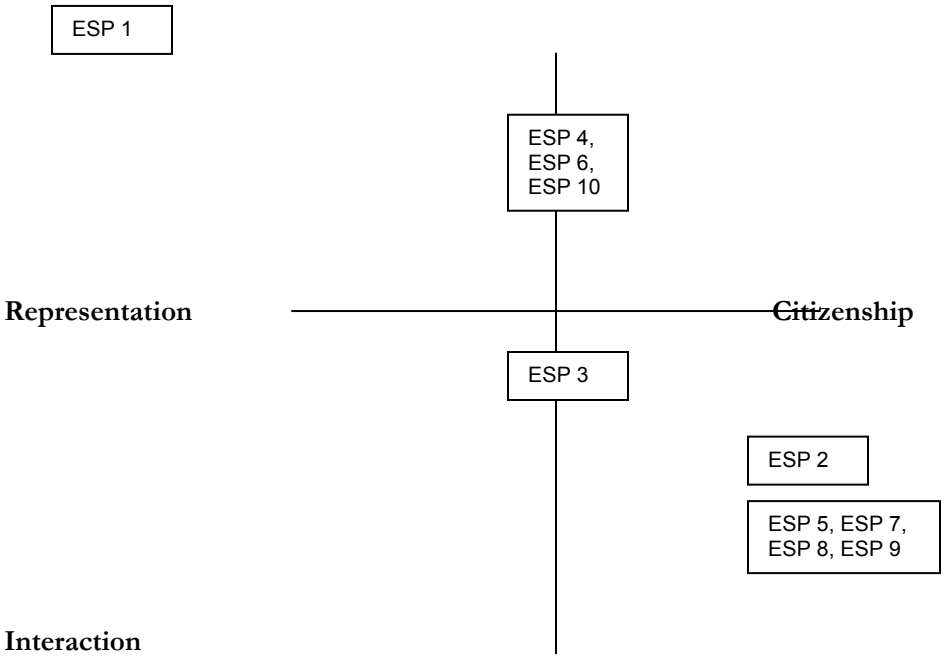
support education, online take-up and deliberation

7. Sponsorship of e-democracy initiatives appears to rest particularly with press and communication departments – perhaps suggesting that it is primarily a communications exercise?
8. The green number initiative is a good example of how quickly technological innovation can become redundant or obsolete

Spain

Spain has been engaged in a number of offline participation experiences. This experience is, to some extent, replicated online – note the large number of forums.

Figure 4: Country analysis - Spain



Some of the well known participation experiments, such as Madrid Participa, have not been that successful in attracting widespread participation (0.56% of relevant population). Nevertheless, this experience does not appear to have dampened local government's enthusiasm for experimenting with e-participation.

1. Two initiatives are specifically promoting e-democracy: Ciudadanos2010.net – allows proposals to be elaborated; Consensus – consultation and citizen organisation. Both

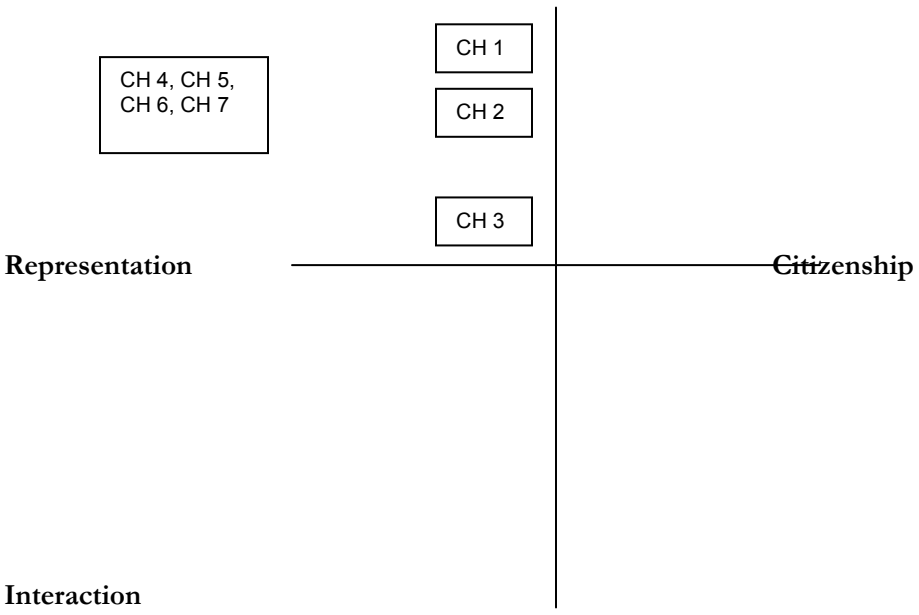
seem to offer a 'comprehensive' e-government and e-democracy solution for local authorities.

2. Note the role of EU funding and private enterprise (including NGOs) in developing these initiatives
3. There is a noted mismatch between the tools offered to citizens and politicians willingness/ability to engage with them.
4. e-voting is being developed in a number of autonomous regions, especially for referendum purposes – criticised for high cost and low impact
5. e-tools are being used to support participatory budgeting processes (sequencing) rather than to lead it.

Switzerland

Switzerland is interesting for a number of reasons. First it is outside of the EU but has very close relationships with it. Second, the country's emphasis upon direct democracy seems to have a significant impact upon the focus of e-democracy.

Figure 5: Country analysis - Switzerland

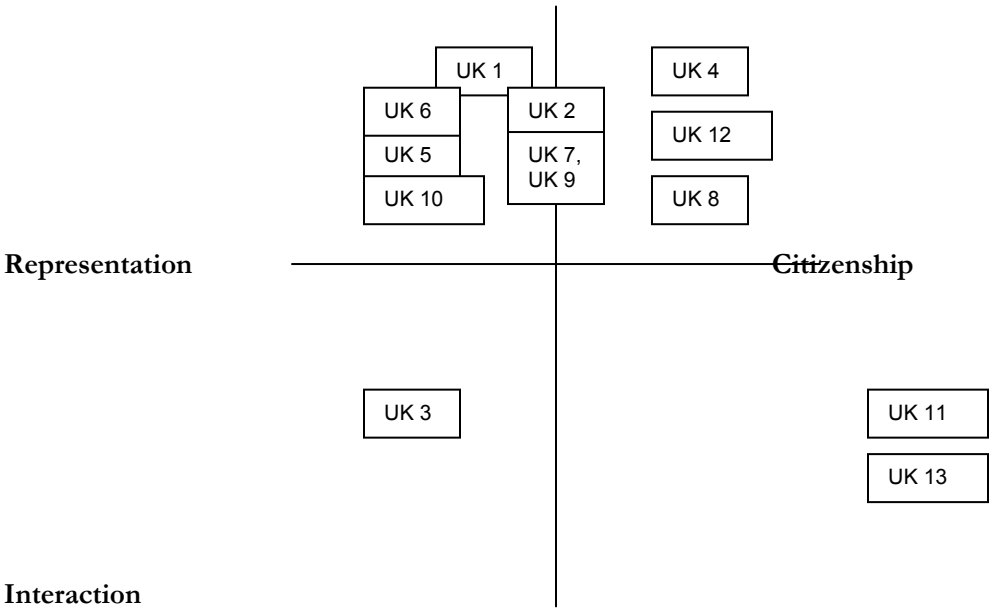


1. Strong emphasis upon e-voting and learning from it
2. Big central government support for e-voting initiatives (funding 80% of costs for many of the experiments)
3. Other e-democracy initiatives are focused especially upon improving responsiveness of public services (through e-counters)
4. Other e-democracy initiatives are largely absent.

United Kingdom

Local e-democracy in the UK has received significant central government funding (primarily for English local authorities) in the form of the Local e-Democracy National project (£4.5 million – around 6 million Euros). This investment has clearly affected the direction of e-democracy development. However, this project investigated projects from beyond this programme if work, as well as high profile developments within it.

Figure 6: Country analysis – United Kingdom



1. A high emphasis upon initiatives that communicate information
2. Especially strong on consultative techniques – even those that are citizen initiated (e.g. e-petitioner)
3. e-Participation is conceptualised primarily as engagement of individuals rather than groups/interests
4. There are some NGO and commercial providers but they are at risk of being squeezed out by state actors – organisations such as My Society are undertaking important roles in terms of creating new forms of mediation
5. Blogging seems to be particular trend among many politicians – despite the fact that most seem to be read by only a few constituents

Conclusions: some broader trends in local e-democracy

Is e-democracy making a difference to local government in Europe? There is a wide range of initiatives under way, many of which are far more nuanced than can be reported here. However, it is possible to point to some significant trends that are observable from the five countries analysed here.

1. Change or reinforcement?

Superficially, e-democracy initiatives appear to be supporting widespread change in both the nature and style of democracy. There are more deliberative tools available than ever before. However, beneath the surface there appears to be a great deal of continuity. Many e-democracy tools appear to be addressing perceived problems in the host country's democratic institutions, reinforcing them rather than changing fundamentally the balance. In Switzerland, e-voting further supports notions of direct democracy. In the UK, consultation remains high on the political and e-democracy agenda.

2. Online and offline

Despite the reinforcement argument, there appears to be little relationship between existing offline forms of political engagement and participation and contemporary e-democracy initiatives. Most are implemented in isolation from offline initiatives but have more relationship with other e-government policies.

3. Barriers and resistance to e-democracy

There remain significant barriers to e-democracy, especially resistance among key political actors. This problem reflects, in part, tensions between competing conceptions of democracy. However, there is also a significant question around how much citizens really want from democracy and whether the tools on offer really 'scratch where citizens are itching'.

4. Evaluating e-democracy

Establishing the impact and success of e-democracy initiatives remains elusive. Across the five countries there is a temptation to use take-up as a measure: a metric which has a simple allure. However, there is a general reluctance to examine the wider implications of initiatives and the extent to which they are achieving more implicit goals around change or reinforcement of particular democratic values.

A broader issue is the direction of change. There is no one direction in which democratic change is taking place. Putative deliberative democracy is being supported through online forums and so on but it is often other initiatives that are having more take-up and a more significant impact. This outcome is partly because of the path-dependent nature of democratic institutions and the difficulty in creating change. However, it also highlights the problems of deliberative concepts when applied to reality.

One effect of the technologies, however, is to highlight and, arguably, to exacerbate tensions between different democratic values and principles. In particular, there is a clear tension emerging between concepts of representation (and attempts to use new technologies to bolster it) and varying ideas of more participatory democracy: a problem that has always existed in democratic theory but which is

now being played out in real democracies. The implementation of new technologies highlights these tensions.

Finally, there appear to be tensions between individualistic and collective forms of engagement, which are exposed by different e-democracy initiatives. Many initiatives appear to seek a circumvention of traditional institutions of interest mediation in favour of going 'direct to the citizens'. At the same time, however, there are also attempts to enhance the organisations of civil society and collective action. Moreover, the technologies also have the potential to offer new modes of interest mediation and collective action. The challenge for local democracy is to ensure that what is developed in a top-down form both supports and works with bottom-up developments.

Appendix 1

Criteria for identifying initiatives within each country

The main criterion for identifying initiatives is for the analyst to feel confident that they have an overview of all the main e-democracy projects. Attention should be on the most recent initiatives but it may also be important for initiatives from the last 4-5 years to be explored, especially where they have had a significant impact. Anything before 2001 is unlikely to be of significance to this project, unless it has been carried through to something more contemporary.

Because the aim is to identify the main initiatives in each country, it is important for the analyst to feel free to focus on those that are most representative of that country, rather than to be constrained by specific criteria. However, in seeking initiatives, the analyst should reflect upon the following criteria:

1. Territory

Where possible, the analyst should identify initiatives from all regions of the country. However, where some regions are notably more developed than others, this should be reflected in the choice of initiatives. The absence of initiatives in some regions (or indeed, a concentration of initiatives in others) may well be a research finding in its own right and analysts should feel free to report such findings where they are confident that they are correct. Any country specific insights or explanations for such variations are also welcomed.

2. Scale

The focus of the research is on local government rather than initiatives that are occurring primarily at national or regional level. However, we recognise that there is often an overlap between different levels of government, especially in promoting e-democracy initiatives. Analysts should feel free to capture a range of initiatives, from those that focus on a specific neighbourhood through to those that occur across a number of levels or are a collaboration between a number of agencies. Initiatives may also be targeted at particular communities of interest or identity (young people, ethnic minorities etc) – again, these are of interest.

3. Type

The working definition provided above allows for a wide range of initiatives which both support existing democratic institutions or seek to create new opportunities for political participation or influence. The range of products developed by the UK National Project provides a good indication of the types of initiative we are seeking to uncover:

Enhancing transparency

- Improving access to information
- Webcasting of meetings

Supporting political activity

- Developing/supporting councillor (elected representatives) websites
- Developing councillor blogs
- Local authorities providing online facilities for councillors to hold regular consultations with their constituents

Improving consultation

- online consultation tools (quick surveys etc)
- e-panels for regular consultation
- micro-democracy (text/email alerts on neighbourhood issues)

Facilitating community development

- Offering community online resources
- Tools to allow grass-roots community action groups to come together

Building democratic knowledge

- e-democracy icon to make the democratic aspects of websites more accessible
- online games for citizen education

Enhancing participation

- e-Voting
- online participatory budgeting

This list is a non-exclusive indication of the range of initiatives that we are interested in. Analysts are free to add to the list. Equally, there may be some forms of initiative that are inappropriate or irrelevant in a particular country context. Again, this is relevant as a research finding.

Appendix 2

e-Democracy cases

	Title of initiative
Estonia	
EST 1	Today I Decide
EST 2	Internet voting
EST 3	E-dem home page
EST 4	Web forum
Hungary	
H 1	Green number
H 2	The online mayor
H 3	Televised forum
H 4	Guest book
H 5	Forum
H 6	Strategy
H7	Forum
H8	Telehut
H9	Forum
H 10	Forum
H 11	Free hot spot
H 12	Send an SMS to the Mayor
H 13	Website for the blind
H 14	e-Point
H15	Councillor intranet
Spain	
ESP 1	e-Vote
ESP 2	Digital village
ESP 3	Madrid participa
ESP 4	Participative budget
ESP 5	Ciudadanos2010.net
ESP 6	Participative budget
ESP 7	Ciudadanos2010.net
ESP 8	Ciudadanos2010.net
ESP 9	Consensus
ESP 10	Participative budget
Switzerland	
CH 1	Smartvote
CH 2	Finanical info
CH 3	e-Consultation
CH 4	Bulach e-vote
CH 5	Anieres e-vote
CH 6	Neuchatel e-vote
CH 7	Zurich e-vote

United Kingdom

UK 1	Webcasting
UK 2	Micro-democracy
UK 3	HearFromYourMP.com
UK 4	Online newspaper
UK 5	e-consultation & e-panel
UK 6	Your Norfolk Your Say
UK 7	Cllr Blog
UK 8	e-Petitioner
UK 9	Cllr Blog
UK 10	Ask Bristol
UK 11	Essex info
UK 12	Youth Parliament
UK 13	BBC Action Network

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Chapter VII

E-Democracy and E-Participation among Local Governments in the United States

Donald F. Norris

In this paper, I report findings from the first ever nation-wide survey of electronic democracy or electronic participation among U. S. local government.[1] Presently, I will discuss that survey, including its methodology, in detail.

Perhaps, however, I should begin by asking why we should care about e-democracy? The first reason is that over the past 30 years or more, public participation in civic affairs and voter turnout in democratic elections have declined both in the U. S. and in Western Europe. Many feel that this "democratic deficit" is or will soon become a serious crisis in democratic nations. Observers also believe that action must be taken immediately to rectify the democratic deficit.

A second reason has to do with electronic government, a phenomenon that, within the past ten years, has seen widespread adoption by governments through out the world. By electronic or e-government, I mean:

> *The delivery by electronic means of governmental information and services, 24 hours per day, 7 days per week (Holden, Norris and Fletcher, 2003).*

E-government advocates, and more than a few scholars in the field, argue that the end state of e-government will include widespread citizen participation, including voting, increased trust in government, and generally more citizen centric government. They essentially make the claim that e-government, as it (almost certainly) morphs into e-democracy, can and will fix what is broken about democracy today. See, for example, the principal models of e-government and their claims about the progressive development of e-government and the literal transformation e-government will bring about (i.e., Baum and diMaio, 2000; Hiller and Belanger, 2001; Layne and Lee, 2001; Ronaghan, 2001; Westcott, 2001).[2]

In this paper, I assess not so much whether e-democracy or e-participation works as its advocates claim (although I do discuss some reported early impacts), but whether it exists at all among local governments in the U. S. I do so because, unless e-democracy exists in some form or forms, it can hardly be expected to work its predicted wonders. Therefore, it is important to obtain and understand baseline data about e-democracy among governments in the U. S. Since local governments in the U. S. are the closest governments to the people, deliver the most services directly

[1] Funding for this research was provided by the government of the United Kingdom, as part of an international research endeavor to understand electronic participation and electronic democracy. I would like to express my appreciation to Dylan Jeffrey of Her Majesty's Government, Department of ….. and to Evelina Moulder and Sebia Clark of the ICMA for their assistance in getting this survey conducted. Finally, I want to thank Tonya Zimmerman, research assistant at the Maryland Institute for Policy Analysis and Research for conducting the SPSS data runs from which the tabular data for this paper come.

[2] These authors make such claims, notwithstanding considerable evidence to the contrary. See, for example, Kraemer, 1991. More recent works, e.g., those works written after these models were initially proposed, support Kraemer's argument that e-government is unlikely to produce either reform or transformation (Danziger and Andersen, 200x; Kraemer and King, 2006; and Coursey and Norris, 2006).

to the people, have the most impact on the people and elect the largest number of office holders, studying e-democracy at the American grassroots is an appropriate place to begin this examination.

Methodology

The data for this paper are from the very first nationwide survey of e-democracy among U. S. local governments. I contracted with the International City/County Management Association (ICMA), which is the premiere local government association in the U. S., to conduct the survey. ICMA is well-known among local governments and has a strong record of conducting surveys among these governments. ICMA mailed survey instruments (a four page questionnaire) in two rounds of mailings in May and June of 2006 to all municipal governments of 25,000 population or larger (n = 1,434) and all county governments that had either elected executives or appointed administrators (n = 611) for a total of 2,045 governments. ICMA received the responses, entered them into a database, "cleaned" the data, and provided me with a usable dataset. ICMA received a total of 593 usable responses for a response rate of 28.99 percent.[3]

I examined the responses for representativeness – that is, were the responding local governments reasonably similar to or significantly different from all local governments in the sample (Table 1). I found that, generally, these governments were reasonably representative, except as follows. Governments between 500,000 and 1 million and those between 100,000 and 249,999 were slightly over-represented among respondents (24.2 percent each versus 33.3 percent for all respondents) while governments between 250,000 and 500,000 were slightly under-represented (38.7 percent). Governments in the Northeastern U. S. were substantially under-represented (17.3 percent) while those in the West were over-represented (34.1 percent). There were no differences among governments by metropolitan status.

Among municipalities, mayor-council and "other" forms were considerably under-represented (16.1 and 11.5 percent) while council-manager cities were over-represented 36.9 percent). Among county governments, there were no substantial differences by form of government.

These data suggest that, for the most part, responding governments were reasonably representative of all local governments over 25,000 in the U. S. However, governments in the Northeast and mayor council governments were substantially under-represented while governments in the West and council-manager governments were substantially over-represented. Over-representation of local governments in the West and among council-manager governments may be related because of the preponderance of council manager governments in the West and of mayor-council governments in the Northeast.

The survey instrument inquired about several aspects of e-participation (see appendix for the questionnaire). These included whether local governments undertook citizen surveys when deciding their e-participation mechanisms, whether they actively engaged in planning for e-participation, what e-participation mechanisms they placed on line, whether they evaluated their e-participation activities, perceived the impacts from e-participation, perceived barriers to e-participation, and whether local officials and citizens groups promoted e-participation.

The survey screened out governments that did not have official sites on the World Wide Web. Thus, these data are from only governments with web presences. I did this because the focus of this survey was on governments that could have engaged in e-participation. Those without websites could not have done so. Hence, they were screened out of the survey.

[3] A third mailing, that is expected to improve the response rate to approximately 40 percent, is in the field and results are expected by the end of summer.

Findings

The survey instrument defined e-democracy or e-participation (terms that I use synonymously) for respondents as follows:

Electronic participation or electronic democracy *is defined as the use of electronic means, principally although not solely, local government web sites and the Internet, to promote and enhance citizen engagement with and participation in governmental activities, programs and decision-making.*

The instrument contained a number of questions that addressed particular aspects of e-participation. I report findings in the narrative that follows.

Citizen Surveys

First, the survey inquired if, within the previous three years, local governments surveyed their citizens when determining "what types of online information, services or participation they want available on the local government website." In other words, did these governments systematically try to learn their citizens' preferences when developing their websites? Only a minority (one in five or 20.8 percent) of responding governments did so (Table 2). Slightly less than half of those governments (46.4 percent) asked only about online information and services while slightly over half (50.9 percent) asked about information, services and participation. Just under 3 (2.7) percent asked about participation only. Among local governments that conducted citizen surveys, most (50.0 percent) had conducted only one survey while an additional 25.4 percent had conducted two surveys. The rest (24.6 percent) had conducted three surveys or more, including nine percent (11.0 governments) that reported having conducted five surveys or more.

I was also interested in the types of surveys conducted and extent to which they were professional or scientific surveys (Table 3). (Answers to these questions may indicate a great deal about the validity and reliability of the information the local governments received from the surveys.) Because there could be some overlap in these responses (governments could have conducted more than one type of survey), percents will be greater than 100.

Nearly half (45.9 percent) conducted web surveys; just over one-third (36.1 percent) conducted telephone surveys; slightly less than one-third (31.1 percent) conducted mail surveys. Nearly one in five (18.9 percent) reported conducting surveys by another method.

For the most part, the surveys were conducted by local government staff (62.3 percent), followed by professional polling organizations (36.1 percent), university survey groups (14.8 percent), volunteers (1.6 percent), think tanks and advocacy groups (0.8 percent each), and other (4.1 percent).

I then asked the local governments that had conducted citizen surveys whether they believed that the surveys were *"scientific,"* like those conducted by university survey research centers or professional polling organizations." To my surprise, the answers split nearly 50-50, with 56 (49.6 percent) responding governments saying that they had conducted scientific surveys and 57 (50.4 percent) saying that their surveys were non-scientific. Fully 80 (71 percent) of these 113 governments said that the surveys were available for others to review.[4]

Finally, I asked if these local governments had concrete plans to conduct citizen surveys about online information, services or participation within the next 12 months. Here, the vast majority (83.3

[4] A further effort of this research will be to collect and analyze those surveys.

percent) said that they had no such plans. Nearly 10 percent planned to conduct surveys about online information, services and participation; nearly seven percent about online information and services only; and less than one percent about online participation alone.

On the whole, these data tell us that local governments in the U. S. do rather little by way of seeking the opinions of their constituents, at least formally, in the development of their websites whether with regard to information, services or participation. Nor do these governments plan to do much more in the near future.

Planning for E-Participation

What about planning for e-participation in general? Here I asked if the local governments had engaged in formal planning or had conducted cost-benefit or other types of analysis for e-participation projects (Table 4).

As might be expected based on the results of other surveys of local government IT and e-government and on the results of the previous question about citizen surveys, few governments engaged in formal planning for e-participation (22.4 percent). Of these, 59.1 percent engaged in such planning as part of local e-government planning; 52.3 percent via local IT planning; and17.0 percent via e-participation planning alone. In terms of cost benefit (or other formal analyses) *before* undertaking e-participation projects, only 16 governments (4.0 percent) reported doing so.

Online E-Participation Activities

Next I asked whether the local governments had undertaken any of a series of e-participation activities "electronically *(e.g., via your website or otherwise via the Internet)*" within the past year and whether they had concrete plans to do so within the next year (Table 5). The results are dramatic. Hardly any local governments in the U. S. have done *anything* to enable e-participation. With one exception, web surveys (23.4 percent), fewer than 10 percent of local governments reported having any online e-participation activities. The greatest percentages of local governments reporting e-participation activities were: formal public hearings – 9.9 percent; informal public meetings –7.9 percent; straw polls – 7.6 percent; public consultations – 6.2 percent; and non-narrated discussions – 5.9 percent. All other e-participation activities were reported by fewer than five percent of the responding governments.

The existence of concrete plans to provide one or more of these e-participation activities fared even worse. Here, even fewer governments had plans to undertake e-participation activities: i.e., web surveys –10.5 percent; formal public hearings – 5.9 percent; and all others less than five percent.

Evaluations

Next I wanted to know if local governments evaluated the impact or effectiveness of their e-participation projects (Table 6). For the most part, they did not. Only 12 governments (3.2 percent) reported that they had conducted such analyses. Thus, we must conclude that local governments (at least those few that support online e-participation) simply "roll-out" e-participation projects or activities and let them do whatever they will do without after-the-fact appraisals of their impacts or effectiveness. Additionally, of the 12 governments that indicated that they had conducted such analyses, only two reported having shut down or modified an e-participation project based on the results of these analyses.

Impacts

I also wanted to know whether U. S. local governments believed that e-participation had had any impacts (Table 7). The first thing that is really remarkable about these data is that far less than a majority of governments surveyed indicated that e-participation had had any impacts at all. The greatest number of governments reporting impacts (222) represented less than four in ten (37.4 percent) of all surveyed governments. Second, the reported impacts were not always in the direction predicted by the models of e-government or the hype surrounding it. Most responding local governments (56.6 percent), for example, reported that e-participation increased the workload of technology personnel, and more than one third (36.7 percent) said that e-participation increased work for line personnel.

On a more positive note, majorities of those that reported impacts said that e-participation increased the quantity of information for decision-making (61.4 percent), the quality of information for decision-making (53.8 percent) and the quantity of citizen participation (64.8 percent). However, respondents were divided about whether e-participation improved the quality of citizen participation (51.6 percent said it made no difference while 47.4 percent said it improved the quality).

Similarly, respondents were divided about how e-participation affected relationships between citizens and their governments. Here, less than half (46.8 percent) reported that e-participation improved the relationship between citizens and elected officials while just over half (52.3 percent) said that there had been no change. Exactly half felt that the relationship between citizens and the governmental administration had improved because of e-participation while 49.1 percent said that there had been no change.

Barriers to E-participation

It is possible that local governments are not engaging more extensively in e-participation because of specific barriers to such efforts. The survey questioned governments about the existence of barriers to e-participation (Table 8). Several barriers stand out. For example, majorities of local governments reported that they faced the following barriers to e-participation: lack of funding – 74.9 percent; lack of technology staff – 62.2 percent; need to upgrade existing technology – 60.7 percent; lack of citizen demand – 59.5 percent; lack of demand by elected officials – 58.0 percent); and security issues – 54.4 percent. Other barriers achieving substantial though not majority responses were: concerns about the digital divide -- 46.9 percent; privacy issues – 43.5 percent; and lack of technology expertise – 41.4 percent. On the whole, these appear to be very substantial barriers – especially those relating to money, technology and demand – that may well explain a considerable fraction of why local governments in the U. S. do so little respecting e-participation.

I next asked whether local officials (elected or appointed) or citizens actively promoted or pushed for e-participation. For the most part, the answer was no or not much (Table 9). On a scale of one to five (with one meaning "don't promote or give little or no attention to e-participation and five meaning actively promote or give great attention, nearly half of the respondents (48.8 percent) rated their elected officials as either a one or a two. This means that those elected officials actively promoted e-participation none or only a little. More than a quarter (28.3 percent) of the respondents gave their elected officials a three, meaning that they promoted e-participation somewhat, more than a little but not a lot. Finally, 22.9 percent gave their elected officials a four of five meaning that these officials actively prompted or gave great attention to e-participation.

The respondents – most of whom were administrators of local governments – were more generous to fellow administrators (appointed officials) regarding their support for e-participation. Here, only one-third (34.3 percent) were deemed to be non-supportive of e-participation receiving rankings of one or two. More than a quarter (28.9 percent, were ranked in the middle (a three – not too little but not a great deal of support for e-participation). More than a third (36.8 percent) gave administrators

either a four or a five for support of e-participation (i.e., they actively prompted or gave great attention to e-participation).

Finally, I wanted to know these governments' views about citizen demand for e-participation. Here, I asked if citizens groups were actively pushing for e-participation (using a five point scale from one meaning none and five meaning significant active pushing for e-participation). The vast majority (80.5 percent) of responding governments gave citizens groups in their communities either a one of a two (little or no active push for e-participation) and only 3.9 percent said that citizens groups were actively doing so (scores of four or five). The rest (15.7) percent placed citizens groups in their communities as not doing much to push for e-participation but not doing little either (a score of three).

Considering the barriers previously discussed and the apparent lack of any strong (especially grass roots) demand for e-participation, it may be easier to understand why local governments in the U. S. have not embraced e-participation in any significant of meaningful ways (in the aggregate at least).

Conclusions

Data from this, first ever, nationwide survey of e-democracy or e-participation among U. S. local governments do not paint an especially flattering portrait of the practice of e-participation by these governments, nor does it provide much basis for optimism about the future of local e-participation at the American grassroots. To begin with, very few of these governments report providing the opportunity for e-participation through their websites (for the most part, less than 10 percent). Few do formal planning around e-participation (less than one-quarter), few involve citizen desires or needs in any such planning (about one in five), and hardly any conduct prospective cost-benefit (4.0 percent) or retrospective impact analyses (3.2 percent). Finally, few governments reported impacts from e-participation (only around one-third of all of the governments responding to this survey). Nevertheless, governments that answered impact questions believe that most of the impacts form e-participation were favorable, although a few are unfavorable (increased workloads on staff).

Substantially more governments responded to the question about barriers to e-government (between three quarters and nearly 90 percent), and they identified several barriers, including: money, staff, technology, lack of demand, and issues around security, privacy and the digital divide. Clearly, these barriers could pose significant constraints on local governments' ability to development and support e-participation mechanisms.

Finally, it is clear that there is little active promotion by the governments and little grassroots or citizen demand for e-participation. Here, only one in five of the governments indicated that elected officials actively promote e-participation. Somewhat more (36.8 percent) said that appointed officials do so. And, less than 4.0 percent felt that citizens groups actively pushed e-participation. Regardless of other barriers, the clear lack of governmental and citizen support and demand for e-participation certainly help to explain its lack of development at the American grassroots. Absent such demand and support, it is likely that the further development of local e-participation will continue at a glacially slow pace in the U. S.

Appendix A: Tables

Table 1
Respondents

	No. of Municipalities/ Counties Surveyed	No. Responding	
		No.	%
Total	2,045	593	29.0
Population Group			
Over 1,000,000	33	11	33.3
500,000-1,000,000	66	16	24.2
250,000-499,999	111	43	38.7
100,000-249,999	339	113	33.3
50,000-99,999	561	153	27.3
25,000-49,999	935	257	27.5
Geographic Region			
Northeast	392	68	17.3
North-Central	509	153	30.1
South	649	203	31.3
West	495	169	34.1
Metro Status			
Central	775	236	30.5
Suburban	910	263	28.9
Independent	360	94	26.1
Form of Government			
Municipal Mayor-council	483	78	16.1
Council-manager	899	332	36.9
Other municipal	52	6	11.5
County Council-administrator (manager)	288	88	30.6
Council-elected executive	323	89	27.6

Table 2
Surveys of Residents for E-Services or E-participation

	No.	%
A. Did your government conduct any such surveys?		
Yes	122	20.8
No	465	79.2
Total	587	100.0
B. Focus of surveys?		
Online information & services	52	46.4
Online participation	3	2.7
Participation, information & Services	57	50.9
Total	112	100.0
C. Number of surveys conducted?		
1	59	50.0
2	30	25.4
3	16	13.6
4 or more	13	11.0
Total	118	100.0

Table 3
The Surveys

	No.	%
A. Types of surveys (n=122)		
Web survey	56	45.9
Telephone survey	44	36.1
Mail survey	38	31.1
Other	23	18.9
Note: The total is greater than 100% because governments may have conducted multiple surveys using different methods.		
B. Who conducted the surveys		
Local government staff	76	62.3
Professional polling organization	44	36.1
University survey research center	18	14.8
Volunteers	2	1.6
Think tank	1	0.8
Advocacy group	1	0.8
Other	5	4.1
Note: The total is greater than 100% because governments may have conducted multiple surveys using different methods.		
C. Was the survey scientific?		
Yes	56	49.6
No	57	50.4
Total	113	100.0
D. Plans for surveys (next 12 months)?		
No	458	83.3
Yes, information & services	38	6.9
Yes, participation	4	0.7
Yes, information, services & Participation	50	9.1
Total	550	100.0

Table 4
Planning for E-Participation

	No.	%
A. Did you government conduct formal planning for e-participation?		
Yes	88	22.4
No	304	77.6
Total	392	100.0
B. Type of planning?		
Planning for local e-government	52	59.1
Planning for local IT	46	52.3
Planning for e-participation only	15	17.0
Note: The total is greater than 100% because governments may have conducted multiple surveys using different methods.		
C. Did your government conduct cost-benefit analyses before implementing?		
Yes	16	4.0
No	577	96.0
Total	593	100.0

Table 5
Online E-Participation Activities

	Undertaken within the last 12 months		Plans to undertake within the next 12 months	
	No.	**%**	**No.**	**%**
Web surveys	139	23.4	62	10.5
Formal public hearings	59	9.9	35	5.9
Informal public meeting	47	7.9	24	4.0
Straw polls	45	7.6	21	3.5
Public consultations	37	6.2	21	3.5
Non-narrated discussion forum	35	5.9	24	4.0
Narrated discussion forum	29	4.9	28	4.7
Voting	18	3.0	11	1.9
Citizen petitions	13	2.2	9	1.5
Referenda	13	2.2	10	1.7
Chat rooms	6	1.0	10	1.7
Other (only 8 = e-participation; 36 = e-services or information)	44	7.4		

Table 6
Impact Analyses

	No.	%
A. Did your government conduct any impact or effectiveness analyses?		
Yes	12	3.2
No	362	96.8
Total	374	100.0
B. Did your government shut down or modify an e-participation project as a result of these analyses?		
Yes	2	16.7
No	10	83.3
Total	12	100.0

Table 7
E-Participation Impacts

	Increased		No Difference		Decreased		Total	
	No.	**%**	**No.**	**%**	**No.**	**%**	**No**	**%**
Quantity of citizen participation	125	64.8	68	35.2	0	0.0	193	100.0
Quantity of info for Decision making	121	61.4	76	38.6	0	0.0	197	100.0
Workload on tech personnel	111	56.6	79	40.3	6	3.1	196	100.0
Quality of info for Decision making	105	53.8	89	45.6	1	0.5	195	100.0
Quality of citizen participation	91	47.4	99	51.6	2	0.3	192	100.0
Workload on line personnel	72	36.7	94	48.0	30	15.3	196	100.0
	Improved		**No Change**		**Deteriorated**		**Total**	
Relationship between citizens & governmental administration	110	50.0	108	49.1	2	0.9	220	100.0
Relationship between citizens & local officials	104	46.8	116	52.3	2	0.9	222	100.0

Table 8
Barriers to E-Participation

	Yes		No		Total	
	No.	**%**	**No.**	**%**	**No.**	**%**
Lack of funding	394	74.9	132	25.1	526	100.0
Lack of technology staff	322	62.2	196	37.8	518	100.0
Need to upgrade technology	312	60.7	202	39.3	514	100.0
Lack of citizen demand	306	59.5	208	40.5	514	100.0
Lack of demand by elected Officials	296	58.0	214	42.0	510	100.0
Security issues	265	54.4	222	45.6	487	100.0
Concern about digital divide	225	46.9	255	53.1	480	100.0
Privacy issues	207	43.5	269	56.5	476	100.0
Lack of technology expertise	206	41.4	292	58.6	498	100.0
Concern about unrepresentative Groups	146	31.3	321	68.7	467	100.0
Few participate	135	30.9	302	69.1	437	100.0
Lack of support by elected Officials	129	26.8	352	73.2	481	100.0

Table 9
Who Promotes E-Participation?

	Little or no		Some		A lot		Total	
	No.	**%**	**No.**	**%**	**No.**	**%**	**No**	**%**
Do elected officials actively promote?	281	48.8	163	28.3	132	22.9	576	100.0
Do appointed officials actively promote?	196	34.3	165	28.9	210	36.8	571	100.0
Do citizen groups actively push?	463	80.5	90	15.7	22	3.9	575	100.0

Appendix B: Survey Instrument

International City/County ICMA Management Association

777 North Capitol Street, NE
Suite 500
Washington, DC 20002-4201
http://icma.org

E-participation/E-democracy Survey May 2006

Dear Local Government Official,

This survey is part of an international project to understand local electronic participation and electronic democracy in the United States and Western Europe. The results of this survey and its European counterpart will be presented at two upcoming international conferences on local e-democracy (Budapest, July 2006, and Baltimore, August, 2006). These conferences will be attended by both academics and local officials from around the world (http://www.edemocracysymposium.org). Help us make this endeavor a success by completing and returning this survey no later than **Friday May 26, 2006**.

On behalf of myself and the other researchers engaged in this project, let me thank you in advance for taking the time to complete this short questionnaire. The results of the overall study will be available on my website on or about July 20, 2006 (www.umbc.edu/mipar).

Donald F. Norris, Director
Maryland Institute for Policy Analysis and Research
Professor of Public Policy
University of Maryland, Baltimore County
Baltimore, Maryland 21250

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1. Does your local government have a website? ☐ 1. Yes ☐ 2. No

If your local government DOES NOT HAVE a website, PLEASE DO NOT COMPLETE the rest of this questionnaire. Instead, please return it as is to ICMA in the enclosed envelope.

If your local government DOES HAVE a website, PLEASE COMPLETE this questionnaire and then mail it to ICMA in the enclosed envelope.

***Electronic participation or electronic democracy* is defined as the use of electronic means, principally although not solely local government web sites and the Internet, to promote and enhance citizen engagement with and participation in governmental activities, programs and decision-making.**

2. Within the past three (3) years, has your local government surveyed of residents to determine what types of online information, services, or participation they want available on the local government website? ☐ 1. Yes ☐ 2. No

2A. If *yes,* what was the focus of the survey? *(Check only one.)*

☐ a. Online information and services
☐ b. Online participation
☐ c. Online information, services, and participation

2B. If *Yes,* how many surveys did your local government conduct in the past 3 years? *(Check only one.)*

☐ a. 1 ☐ b. 2 ☐ c. 3 ☐ d. 4 ☐ e. 5 or more

2C. What method or methods did your local government use to conduct the survey(s)? (C*heck all that apply if multiple methods were conducted.)*

☐ a. We conducted a survey on our web site
☐ b. We conducted a telephone survey
☐ c. We conducted a mail survey
☐ d. Other (Please specify:_____)

2D. Who conducted the survey(s)? *(Check all that apply if multiple methods were used.)*

☐ a. Local government staff
☐ b. Professional polling organization
☐ c. University or college survey or research organization
☐ d. Think tank
☐ e. Volunteers
☐ f. Advocacy group
☐ g. Other (Please specify:_____)

2E. Would you say that this/these survey(s) were *"scientific,"* like those that might be conducted by university survey research centers or professional polling organizations? Or were they informal or non-scientific surveys conducted by non-survey professionals?

☐ a. Scientific survey ☐ b. Non-scientific survey

2F. Are the results of your survey(s) available to other local governments, citizens, researchers?

☐ 1. Yes (Whom may we contact for a copy:
_____)
☐ 2. No

3. Does your local government have *concrete plans* to survey residents within the next 12 months to determine what types of online information, services, or participation they want? *(Check only one.)*

☐ a. Yes, we plan to conduct a survey about online information and services
☐ b. Yes, we plan to conduct a survey about online participation
☐ c. Yes, we plan to conduct a survey about online information, services and participation
☐ d. No, we have no concrete plans to conduct a survey

4. Please indicate whether your local government has done any of the following electronically *(e.g., via your website or otherwise via the Internet)* within the past 12 months and whether it has any *concrete plans* for doing any of them electronically within the next 12 months.

Activities	No, not done in past 12 months	Yes, done in past 12 months	Frequency (# times) if done in past 12 months. Circle #.	Concrete plans to do in next 12 months
a. *Narrated or guided* discussion forums (e.g., about important local issues)	☐	☐	1 2 3 4 5+	☐
b. *Non- narrated or guided* discussion forums (e.g., about important local issues)	☐	☐	1 2 3 4 5+	☐
c. Chat rooms	☐	☐	1 2 3 4 5+	☐
d. Public consultations	☐	☐	1 2 3 4 5+	☐
e. Straw polls	☐	☐	1 2 3 4 5+	☐
f. Web surveys	☐	☐	1 2 3 4 5+	☐
g. Formal public hearings	☐	☐	1 2 3 4 5+	☐
h. Informal public meetings	☐	☐	1 2 3 4 5+	☐
i. Citizen petitions	☐	☐	1 2 3 4 5+	☐
j. Referenda	☐	☐	1 2 3 4 5+	☐
k. Voting for local elected officials	☐	☐	1 2 3 4 5+	☐
l. Other (Please specify_____)	☐	☐	1 2 3 4 5+	☐
m. Other (Please specify_____)	☐	☐	1 2 3 4 5+	☐

If YES to any of these activities (4a-4m), go to questions 5 through 9.
If NO to all, go to question 10, and <u>do not</u> answer questions 5 through 9.

5. Has your local government conducted *formal planning* for e-participation projects or efforts? ☐
1. Yes ☐ 2. No

5A. If *yes*, were these *formal planning* activities solely about e-participation or did they involve other aspects of information technology (IT) or electronic government? *(Check all applicable.)*

☐ 1. Planning for e-participation only
☐ 2. As part of planning for local government IT
☐ 3. As part of planning for local government e-government

6. Has your local government conducted *formal cost benefit analyses* (or other formal analyses, e.g., ROI) of e-participation projects before undertaking them? ☐ 1. Yes ☐ 2. No

6A. If *yes*, are copies of these analyses available to other governments, citizens, researchers?

☐ 1. Yes (Whom may we contact for copies:
_____)
☐ 2. No

7. Has your local government conducted *formal impact or effectiveness analyses* of e-participation projects after undertaking them?

☐ 1. Yes ☐ 2. No

7A. If *Yes*, are copies of these analyses available to other governments, citizens, researchers?

☐ 1. Yes (Whom may we contact for copies:
_____)
☐ 2. No

7B. If *yes*, have any e-participation projects been substantially modified or shut down as a result of any of these analyses?

☐ a. Yes, substantially modified (how many? _____)
☐ b. Yes, shut down (how many? _____)
☐ c. No, none have been modified or shut down .

Answer questions 8 and 9 ONLY of you checked "Yes" to one or more of the choices in question 4 about e-participation projects or activities.

8. *As a result of e-participation,* has your local government experienced any of the following impacts?

Impact	Increased	No difference	Decreased
a. Workload or time demands on local government technology personnel	☐	☐	☐
b. Workload or time demands on local government line and staff personnel	☐	☐	☐
c. Quantity of information available to local officials for decision-making	☐	☐	☐
d. Quality of information available to local officials for decision-making	☐	☐	☐
e. Quantity of citizen participation	☐	☐	☐
f. Quality of citizen participation	☐	☐	☐

9. Some of the literature about e-participation says that it will radically transform the relationship between citizens and governments. Have you observed either of the following due to e-participation in your local government?

	Improved	No change	Deteriorated
a. Due to e-participation, the relationship between citizens and *local government officials* has:	☐	☐	☐
b. Due to e-participation, the relationship between citizens and *the local government administration* has:	☐	☐	☐

10. Some local governments are responsible for voter registration within their jurisdictions. For others, voter registration occurs through another level of government (e.g., county). Is your local government responsible for voter registration?

☐ 1. Yes ☐ 2. No

10A. If *Yes*, which office in your local government conducts voter registration?

☐ a. city/county clerk
☐ b. city/county election office or board
☐ c. other (Please specify:_____)

10B. Does your local government offer *online* voter registration? ☐ 1. Yes ☐ 2. No

10C. If *yes,* does your local government also offer a voter registration option that is *not* online? ☐ 1. Yes ☐ 2. No

10D. If your local government offers an online voter registration option, which of the following online options are available in your local government? *(Check all applicable.)*

☐ a. A downloadable registration form that can be printed and mailed in.
☐ b. A web form that can be completed online.

10E. Are any of the following online services are available to registered voters in your local government? *(Check all applicable.)*

☐ a. They can view registration information
☐ b. They can change registration information
☐ c. They can look up polling place locations
☐ d. They can map the polling place location
☐ e. They can view sample ballots
☐ f. None of these services are available

10F. Does your local government have *concrete plans* to permit online voter registration for the next election after 2006?

☐ a. Yes, and we will also retain the option of manual registration
☐ b. Yes, and we will permit only online registration
☐ c. No, No concrete plans

11. Which, if any, of the following barriers to providing e-participation and e-democracy has your local government encountered?

Barriers	Yes	No
a. Need to upgrade technology infrastructure	☐	☐
b. Lack of technology expertise	☐	☐
c. Lack of technology staff	☐	☐

d. Lack of funding	☐	☐
e. Lack of demand by citizens	☐	☐
f. Lack of demand by elected officials	☐	☐
g. Lack of support from elected officials	☐	☐
h. When we have provided opportunities or mechanisms for e-participation, few citizens have participated	☐	☐
i. Issues around privacy	☐	☐
j. Issues around security	☐	☐
k. Concerns that unrepresentative groups would dominate e-participation channels	☐	☐
l. Concerns that the digital divide would prevent participation by some citizens	☐	☐
m. Other (specify_____)	☐	☐
n. Other (specify_____)	☐	☐

The next two questions ask you to estimate the amount of demand for e-democracy within your local government. Please answer these questions as objectively as possible so that we can gain a realistic understanding of whether such demand exists.

12. Do elected and top appointed officials in your local government actively promote or give attention to e-participation or e-democracy? *Please use the following 1 to 5 scale to indicate the extent to which they do or do not. Circle the appropriate number.*

	Don't promote, give little or no attention				**Actively promote, give great attention**
a. elected officials	1	2	3	4	5
b. top appointed officials	1	2	3	4	5

13. Are citizen grass-roots groups or organizations actively pushing for e-participation or e-government opportunities within your local government? *Please use the following 1 to 5 scale to indicate whether there is any grassroots demand for e-democracy. Circle the appropriate number.*

None				**Significant**
1	2	3	4	5

Please provide the following information in case we need to contact you for follow up.

Name _____ Telephone number (_____)_____
Title _____ E-mail _____

Return to: Evelina Moulder, Dir. of Survey Research, ICMA, 777 North Capitol St., NE, Suite 500, Washington, DC 20002-4201.

PART III: THE CITIZEN'S PERSPECTIVE AND OTHER SPECIAL ISSUES

Chapter VIII

E-Participation and e-Governance from the Perspective of Citizens in the Central and Eastern European Region

Chuck Hirt and Mate Varga

The Central and Eastern Europe region provides an interesting place to consider the issues related to e-governance and e-participation. The region is an area in considerable transition and a mixture of near extremes including the eight countries admitted to the EU that have rather rapidly converted from a socialist country and economy to becoming capitalistic and democratic. On the other extreme are countries like Belorussia and its neighbor Russia that are strongly resisting democratic and certainly participative reforms. Within countries such as Slovakia there are considerable extremes as well as there are several small towns that are very interested and open to develop increased and meaningful participation including e-governance approaches.

Much of the material being published related to e-governance and e-participation describes the situation in which western established democratic countries are struggling with participation. The situation is the CEE region has some similarities but also many differences from established democracies. There are fundamental problems about participation but they originate from quite different places and thus require a number of different solutions.

The CEE region trails significantly behind western countries in terms of e-related issues.

Context for the CEE region

Historical aspect: The region "woke up" only in the very end of the 1980's. It was only twenty years ago that most in the region had to wait five years get telephone service hooked up or to be able to buy a car. There was little communication and mobility outside the region. Elderly people in the region find themselves unable to accommodate to the too-quick technical and lifestyle changes. The younger generation has been able to accommodate very well with the technical challenges but in general, they have lost a sense of social sensitivity. There are a number of those who are not able to deal with all of the technological changes brought about by computers, telephones and technology in general.

The national governments generally support the usage of technical developments but primarily for connectivity and not necessarily for citizen participation. There has been a much greater reliance on "experts" than on citizens. The fact that citizens are "experts" on their own neighborhoods has not been realized as yet. Since citizen participation is likely to increase transparency opportunities for corruption are reduced. Even in countries where NGO's helped to provide a change of government, like occurred in Slovakia in 1998, the connection between improved ICT, governance and transparency is not realized. The situation with local governments is not much better. There are a growing number of exceptions but generally the situation in local urban areas is not of open participation. There are a number of smaller towns and rural areas that are more interested and open to new technologies but lack of resource availability limits their endeavors. There are several projects which have helped to create community centers and computer/internet training programs to ensure that minority participation is ensured.

It starts with information

For e-governance and e-participation, the starting point is not technology, money or training but the political will to include and involve citizens in decision making. The engagement of citizens in public discourse is not growing as rapidly in the CEE region as in other more developed democracies. There are continued signs of improvement but they remain all too limited.

One model for citizen participation that has been used for several decades is the "ladder of participation" which has appeared in several different forms but generally suggests that the minimal starting point for participation is simply providing information. There are additional steps of consultation, deciding together, acting together and then government supporting citizen initiated activities.

The city of Banska Bystrica in Slovakia is a good example of citizen involvement. A new urban plan was prepared for a rather large and significant space in the city with one National Museum two parks. The plan was prepared without consultation with citizens. An initial decision was made by the City to utilize a minimum legally required level of information to citizens so the project with three variants was posted in City Hall on the first floor for thirty days. Citizens could write their comments regarding the variants but there was no information provided about where to send their comments. Before the end of the thirty days, several city council members raised this issue at the regular meeting of City Council in April. A resolution was presented and approved to extend this period for an additional thirty days with an additional requirement that a public hearing was to be held during this time.

The date of the public meeting was finally set and there was some, but very limited information provided about the event. A newly formed citizen's initiative became very active in this issue and began informing citizens about the plans and the opportunity to attend the public hearing. The week prior to the public hearing, a number of fliers were posted on entrances to buildings and around local businesses informing people about the event. Over three hundred citizens came to express their opinion on the project.

One example of citizen –local government interaction is in a small town here that requested the Center for Community Organizing to assist them in a project to involve young people in public issues. They have begun identifying issues based on conducting surveys taken in each of the schools. While preparing the project the group is outlining a project of e-participation which would simulcast meetings of City Council via the internet. Citizens would be invited and encouraged to write their comments on issues as they are being discussed live. This serves as an indication that there signs of with "islands of interest" in e-participation activities. As citizens become aware of these new ways of managing cities and being able to influence decision, the desire and demand for changes will increasingly grow.

Participation in EU funded projects, where a new EU member countries are partnering with established EU partners, is also helping to bring about needed changes in the CEE region. The Center for Community Organizing (CCO) has been participating in a two year project dealing with issues of large housing estates. One of the major contributions of CCO's involvement was to document the involvement of citizens in the various partner projects. There were a number of interesting results from this study. One of which was that the level of participation of citizens was significantly higher in the western EU countries. All partners from western countries had a number of examples of significant levels of participation. The CEE region partners had only a couple of examples and they were clearly at the minimal level of involvement. But another interesting finding was that involvement in the EU project itself was cause for at least two of the CEE region cities to

decide to begin involving citizens in the project. These kinds of projects need to be continued with an increased emphasis fro the EU directly on participation.

What about the citizens?

The other side of e-participation is the interest and capacity of citizens themselves to participate. This is still a challenge in the CEE region. Part of the issue is the lack of citizen structures to allow them to participate. However, citizens are learning to use the new technology and are making headway in using these tools. In Hungary recently, the Hungarian Association for Community Development successfully worked in several village with citizens to teach them how to better utilize the internet as part of becoming engaged citizens.

Exchanges with other EU countries have also influenced the motivation for citizens to become more involved in the use of new technology to increase effective participation. This has occurred at least twice alone in Banska Bystrica in this past year. In January, a group of five citizens traveled along with me to visit several groups in England. When we met with the e-planning staff from the Office of the Deputy Prime Minister in London, they were amazed at what could be done. On one hand, they referred to it as "science fiction for Slovakia". On the other hand, they have begun to tell the stories of their experiences to others and are now fighting harder for changes in our city.

There was also a chance to visit this past year with the impressive project operating in the Marghera section of Venice where the city has made a significant investment in e-participation. They have trained thousands of citizens how to use the internet. They are connecting this effort to participation in the budgeting process and have now launched a new effort that has created citizen groups in each part of the city who in turn have received a wireless computer connection and training on how to use the equipment in order to allow them to have regular access to all the city officials.

Basic questions

The conference is attempting to address several questions regarding e-governance and e-participation.

What should constitute e-governance and e-participation?
We would see this as a commitment to a broad but appropriate inclusion of citizens into governance issues utilizing the technological tools available to support this effort. The local level of governance is most critical to this as this is the place where most citizens come in contact with governmental issues. Fundamental to this being actualized is a belief and desire to have citizens involved. The tools will support and follow.

What should be the objectives of e-government and e-participation in the service of the citizen?
Quite simply, that technological tools and strategies continue to be developed and implemented which help to improve the involvement of citizens in governance. If we continue to see increased levels of participation and tools to support this, the objectives are being met.

Is one conceptual model of "how to" for e-government indeed feasible or desirable?
One conceptual model does not seem feasible or desirable. There should be a common standard which needs to be used to measure progress for all countries. But the backgrounds and realities in various parts of the world are different. One example would be that in developed western countries, the emphasis on national activity makes considerable sense and has made a significant difference in countries like England. But in the CEE region, it might make more sense to emphasize the local level at this point than the national level.

How can we measure e-government and e-participation?
Measurement tools that are being used at this point seem quite good and particularly the indicators of inclusion. What at least was not clear was issue of use at the local level as opposed to the readiness and use at a national level. This seems to be a very critical issue, at least in terms of the CEE area.

What does all this mean?

There is a growing awareness of attention to the topic of e-governance and e-participation within the CEE region. There is some recognition of this issue at a national governmental level as the UN Global E-government Readiness Report 2005 reflects. Progress is being made in the CEE region. Estonia is undoubtedly the leading country in the region as they have managed to make considerable investment into high technology and it cuts across all sectors of the country.

But in fact, this issue has rarely ever reaches citizens themselves. The fact that some national services are available on-line has not reached many people and will have limited impact as they are more concerned with services locally. However, citizens are intuitively learning about these issues though their own life experience and are beginning to utilize tools such as e-mail groups, websites and blogs in the public area.

There are of course a number of real obstacles for this to occur. The first of which is the basic access to computers and internet connection. A growing number of people have access at their work but the use for public area activity is prohibited or certainly limited. There are a number of internet cafes available and increasingly schools are able to offer a computer and internet connection. But the usage is still quite limited.

Mobile phones are increasingly offering an available option for customers and the technological capacity is constantly increasing.

What are critically missing in most areas of the region are community centers with available capacity for access to computers and internet. Along with this is the need for training for many, especially the elderly and minorities that are so often left behind in these strategies.

Finance is of course another critical factor inhibiting progress in this area. Funding will be needed to broaden the number of computers, internet connections, provide the training and to create the public spaces for the thousands without the ability to finance their own. However, the primary obstacle to making this happen is the vision and will to make it occur.

The CEE Citizens Network was formed in 2000 as an attempt to bring together the leading NGO's in the region who were attempting to improve citizen participation in their countries. We now have members from seventeen countries. The mission of the Network is to promote citizen participation in Central and Eastern Europe and provide opportunities for grassroots initiatives to learn and exchange experiences and ideas. We carry this mission out through a number of activities including Citizen Participation Week, an annual training event, an e-newsletter and an every other year conference.

The issue of e-participation has recently come more clearly to the attention of our Network and we have decided to become more directly involved as we believe that it will serve as a critical capacity in the near future. We know that new forms of democracy will continue to emerge in the digital era. E-participation will serve as an important tool in helping us to accomplish our mission throughout the region. There is limited use of technology within the Network itself, we are far behind the public and private sector in many ways. There was clear realization that if our member organizations are far behind, citizen groups themselves must be nearly left out of the conversation entirely at this point.

Thus a new group has been formed to develop a strategy for how to move forward with this issue and to prepare a pilot project for the Network.

Our long term objective in this work is to ensure that citizens are engaged and prepared to be able to utilize the emerging technological tools which will help promote participation. As citizens continue to press for increased participation, they need to be prepared to enter into the public area. The CEE Citizens Network would set as an ideal to ensure that citizens are provided training in technology that provides:

- Development of attitude – to provide knowledge to citizens which is linked to the reality of the public discourse, to make this as useful and simple as possible and to give them the skills to season the change.
- Knowledge – make this easy to use, affordable (if not for free) and provide variety.
- Culture – not just entertainment and access to games but also provides invention, innovation, education and change.
- Contents – appropriate, motivating and useful and lets the users contribute and develop as well.
- Real chances for participation – they must experience that it means something, it can help and make a difference and that it is for me! And by me! It is important that people are able to express what they need and also offers appropriate opportunities.
- Encouragement – give reflections and real feedback

This is certainly an ambitious goal for the Network and we are just beginning. But we strongly believe passionately in the value of and need for significant citizen participation in our countries. We know that new technologies can assist this effort and applaud the United Nations and others involved in this issue for giving this attention and support to this important work.

Chapter IX

Access to Web for All: The European Internet Accessibility Project

Mikael Snaprud and Agata Sawicka

The most recent UN report on e-government readiness[1] and the Minister conference in Riga on e-Inclusion[2] both underline the strategic shift of focus towards a more including information society. eInclusion is now increasingly referred to as a way of creating a competitive edge rather than a social obligation. The eEurope 2002 Action Plan[3] and a number of national governments have already adopted the Web Content Accessibility Guidelines 1.0 (WCAG 1.0) from the World Wide Web Consortium (W3C) as the guidelines for shaping national public content.[4] To monitor progress in this area, many European countries carry out web accessibility benchmarking, for example Norge.no[5] in Norway, or Overheid.nl[6] in Holland. Still, different countries have different benchmarking methods and perform the assessments with different frequency. Even if the evaluations are based on the same guidelines, they are often carried out in different ways in practice. This is preventing international comparisons and systematic monitoring of the web accessibility the basic requirement for a democratic development of Information Society.

A tool enabling frequent and automatic evaluations at a low cost could allow policy makers to monitor the development more closely, identify good practices, allow for regional comparisons and assessment of the impact of policy measures.

The European Internet Accessibility Observatory[7] is a project designed to provide a prototype of such tool, namely an automatic large scale web evaluation service producing data on the accessibility status and development focusing on public content. The final version of the prototype Observatory will publish monthly updated measurements from 10.000 web sites. The results will be available online from a data warehouse to support flexible analysis, provide a basis for policy-making, research and actions to improve the accessibility to Internet content.

The project was launched in September 2004 and has a duration of three years. The EIAO project is carried out in co-operation and partnership with industry, Open Source developers and users. It brings together the following institutions from across Europe: Agder University College, Norway (Co-ordinating partner); Vista Utredning AS, Norway; FTB-Volmarstein, Germany; Manchester Metropolitan University, UK; Aalborg University, Denmark; Nettkroken AS, Norway; Intermedium AS, Norway; University of Tromsø, Norway (withdrew from the project 12.05); FBL, Italy; Technical University of Warsaw, Poland.

1 UN Global E-government Readiness Report 2005.
http://unpan1.un.org/intradoc/groups/public/documents/un/unpan021888.pdf
2 http://europa.eu.int/information_society/events/ict_riga_2006/index_en.htm
3 http://europa.eu.int/information_society/eeurope/2002/action_plan/pdf/actionplan_en.pdf
4 http://www.w3.org/WAI/Policy/
5 http://www.norge.no/kvalitet/kvalitet2005/sok.asp
6 http://www.webrichtlijnen.overheid.nl/monitor/
7 The project is co-funded by the European Commission DG Information Society and Media, under the contract IST-004526.

The Web Content Accessibility Guidelines, developed by W3C have been adopted for public content by many national governments. Based on those guidelines three projects including 23 partners in a cluster[8] have developed the Unified Web Evaluation Methodology (UWEM). The objective of UWEM is to provide means for ensuring that large scale monitoring and local evaluation are compatible and coherent among themselves and with the Web Content Accessibility Guidelines from W3C. While small scale, local evaluations can by performed manually, large scale evaluations require support of automated tools. UWEM should also support certification of web sites.

This paper will outline the properties and perspectives of large scale benchmarking based on the experience from the first release of the European Internet Accessibility Observatory. First, the basic design of the Observatory is presented emphasizing the role of the applied Open Source philosophy. Following we discuss briefly the nature of the benchmarking results. Finally, we comment on how the Observatory may provide a starting point for governments who want to take the lead towards development of an inclusive Information Society.

1. EIAO: How does it work?

1.1. Overview of the EIAO architecture

The general architecture of the Observatory is presented in Figure 1. An Internet Crawler is the main engine of the Observatory. It collects data on accessibility of public web sites.[9] The analysis of the downloaded data is carried out by Web Accessibility Metrics (WAMs). The metrics are based on the WCAG 1.0 guidelines (with the possibility of migrating to WCAG 2.0 when appropriate). The result of the evaluation is subsequently stored in a Data Warehouse. An online access to data will be provided through the EIAO web site (www.eiao.net/observatory).

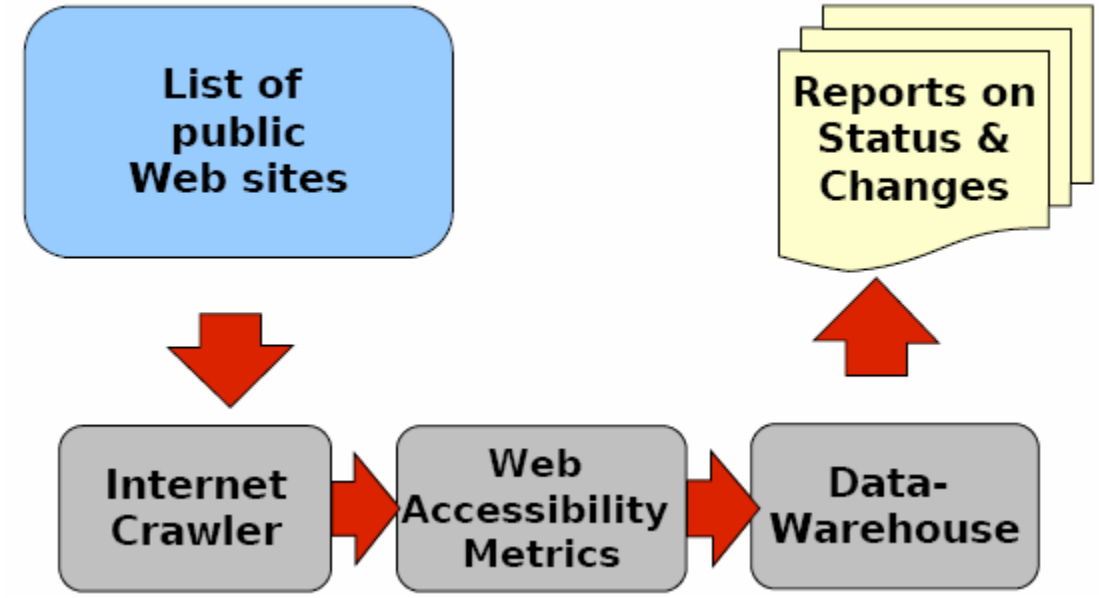


Figure 1 Main elements of the observatory

8 The EIAO project is carried out as part of the Web Accessibility Benchmarking cluster together with the projects Support-EAM and BenToWeb. See also http://www.wabcluster.org/

9 The first public release of the Observatory (due in January 2007) will collect data from 10.000 public European web sites.

1.2. Building-in sustainability: Open source and the EIAO development

The project is organised and conducted using an Open Source philosophy.[10] This has implications for both activities related directly to software development and other aspects of the project.
All software developed in the project is released under an Open Source license.[11] This does not only make our software available to others (allowing for free reuse, research, improvement and direct involvement in the development process), but allow us to adopt existing Open Source components. In that way, both the lead time and costs of the project are reduced significantly. Furthermore, the project may easily be carried out further by other developers, ensuring its sustainability.
Another advantage of the Open Source licensing is that it simplifies IPR issues. This is especially important for the project with multiple partner organizations involved. The Open Source licensing facilitates collaboration, allowing the project partners to use their resources on development and research rather than on IPR discussions.

Finally, the Open Source approach guarantees software transparency. This is especially important in our case where it is essential that the measurements are perceived as credible. Opening the software to external inspections allows others to independently verify our work by replicating the measurements and validating the metrics. Such verification is crucial for validity of any measurement program. User involvement in development of metrics is another measure taken to address credibility of the results delivered by the Observatory.

1.3. Everyone can contribute: User involvement in the EIAO development

Users are involved in the Observatory development in two ways: Firstly, users are involved in the user testing conducted as a part of the project. The testing is done not only to evaluate the usability and accessibility of the online EIAO web site, but also to investigate the reliability of our metrics. A set of web sites is assessed independently by our automatic WAMs and by the users. Comparing the results, we are able to determine whether the results of the automatic assessments are consistent with the actual users' evaluations. Secondly, we will actively seek to collect feedback from the Observatory end users policy-makers, governmental agencies, disability groups, etc. Figure 2 provides a schematic illustration for how the user feedback will be gathered. Such feedback is essential for adjusting the Observatory so it collects the most relevant data and presents them in the most useful way. It indicates how the WAMs are to be improved by comparing user experience with results from the automatic evaluation. In the following section we discuss in some more detail what data the Observatory may provide.

10 See techp.org for details.
11 The project aims to provide all developed software under the GNU General Public License (GPL). The publications of the project will be provided under the Creative Commons Attribution ShareAlike license. For a plug-in interface part of the software, the LGPL license or GPL with an exception is considered. which will allow the use of plug-ins released under proprietary licenses.

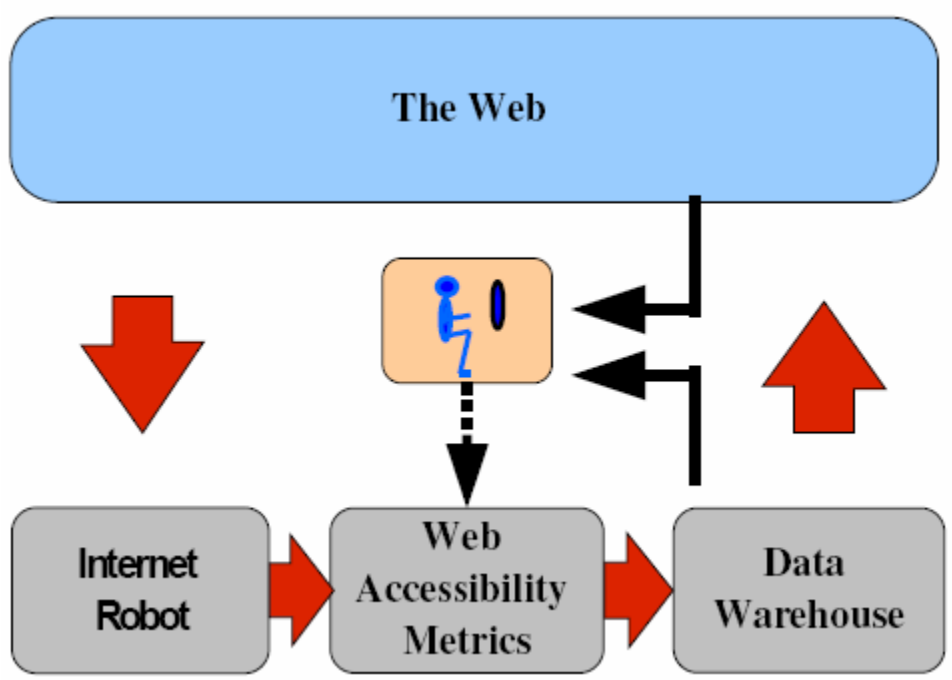


Figure 2 Updating WAMs with the user feedback

2. Web accessibility data delivered by EIAO

2.1. EIAO and Web Content Accessibility Guidelines 1.0 (WCAG 1.0) from the World Wide Web Consortium (W3C)

The main purpose of the Observatory is to deliver the latest accessibility status of some of the main public web sites in Europe. As described in the previous sections, evaluations are carried out through WAMs. These WAMs test certain checkpoints of the WAI WCAG 1.0.

It is important to note that, there are several aspects of WCAG that need to be tested manually by experts (e.g., there is no straightforward way to analyse a textual description of an image to confirm that the text is actually describing the image content). Although in the future the Observatory will also include results of manual tests, it is currently limited to the results from automatic testing. Some might argue that this is a serious limitation of the observatory, as only human testing may really provide reliable accessibility evaluations. To ensure that our automatic results are as relevant as possible we are conducting user testing where we manually evaluate the sites which were assessed automatically earlier. By comparing the user and automatic evaluations we may fine tune our algorithms. Initial results indicate that these algorithms reflect the accessibility status quite well.

2.2. EIAO benchmarking: What data can I get from EIAO?

Despite the limited coverage of WCAG 1.0, the first Observatory release will provide data that should constitute a valuable input to web accessibility policy making. There are three basic reports available: regional, sector, and single web site, each providing data on the current accessibility status of the region, sector or single web site, respectively, and the change in the status observed since the last evaluation.

Figure 3 provides an illustration of a sample EU countries report.[12] The main report for each country shows a status and change scorecard indicating the country's current accessibility situation. Upon clicking on the *Show details* link (provided in the last column of the main report), a detailed test results table is displayed below the main result table. In the mock-up report in Figure 4 this is illustrated for Cyprus. The detailed test results table provides scores on all WCAG tests that were conducted for web resources of the particular country.

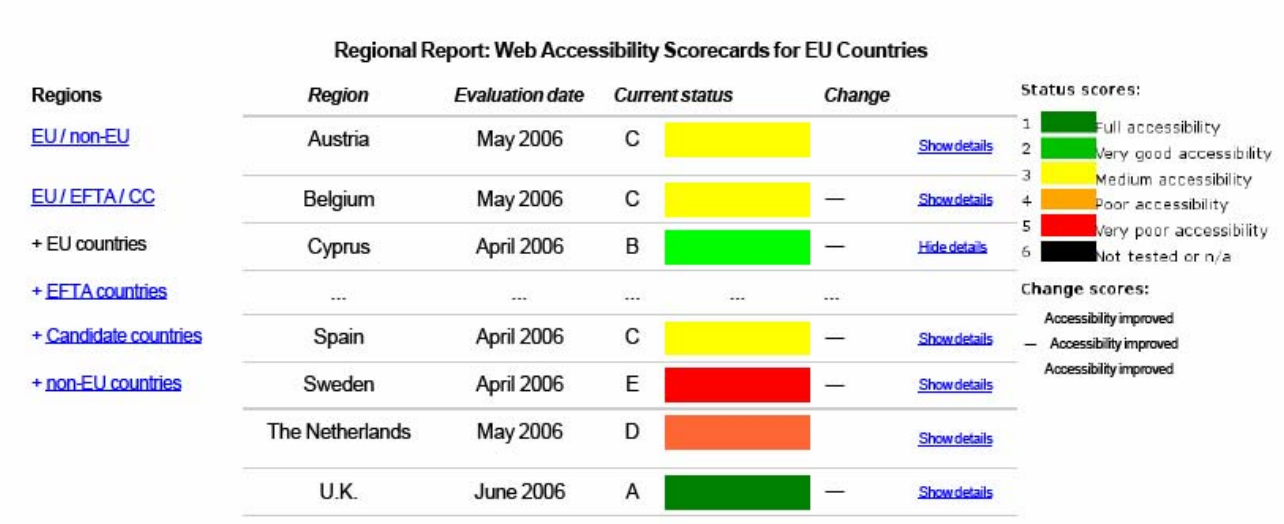


Figure 3 **EIAO sample tabular report for some countries (NB! Data presented in the reports are not based on the actual measurements, but are given only for illustrative purposes.)**

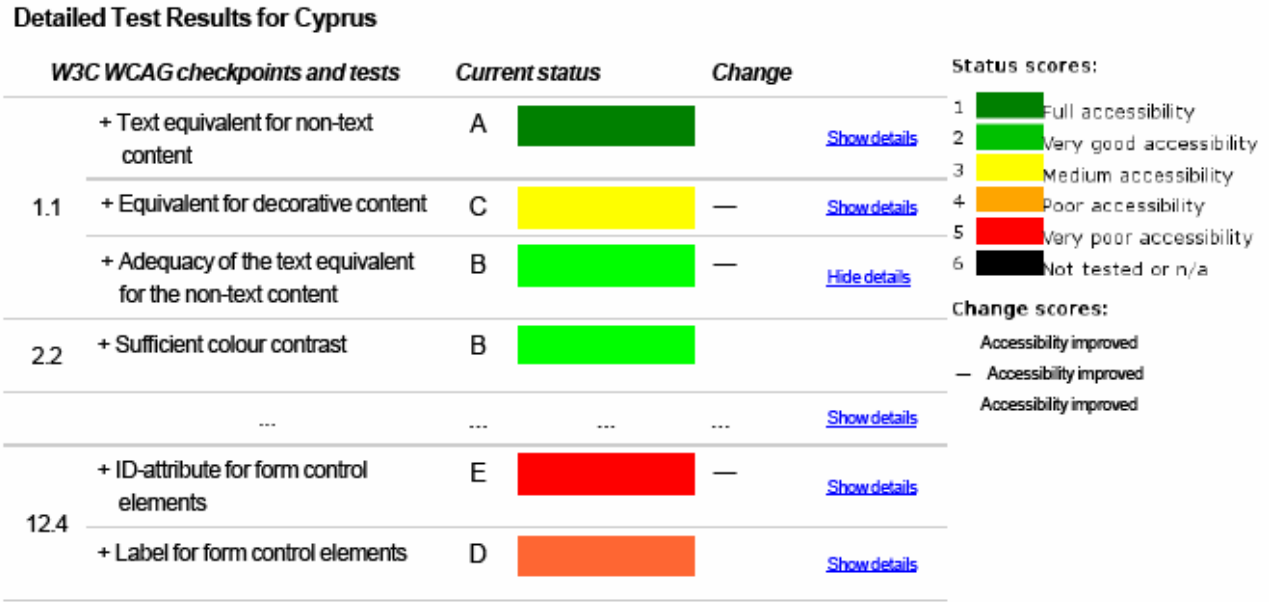


Figure 4 EIAO sample report with test results from an individual country (NB! Data presented in the reports are not based on the actual measurements, but are given only for illustrative purposes.)

12 The EIAO assessments algorithms are currently still in the process of development. Therefore we based the illustration on fake data.

Scorecards – based on letter and colour codes for accessibility scores, and symbol codes for change scores – are used to deliver accessibility reports that are easy to interpret and that communicate the accessibility situation instantaneously. In the future releases of the Observatory, we will also offer to view the regional accessibility results as maps. Figure 5 illustrates an example of such web accessibility map. Here, each country is coloured with the colour corresponding to its current web accessibility status. Additionally, the letter code for the status score and the symbol for the change are provided.

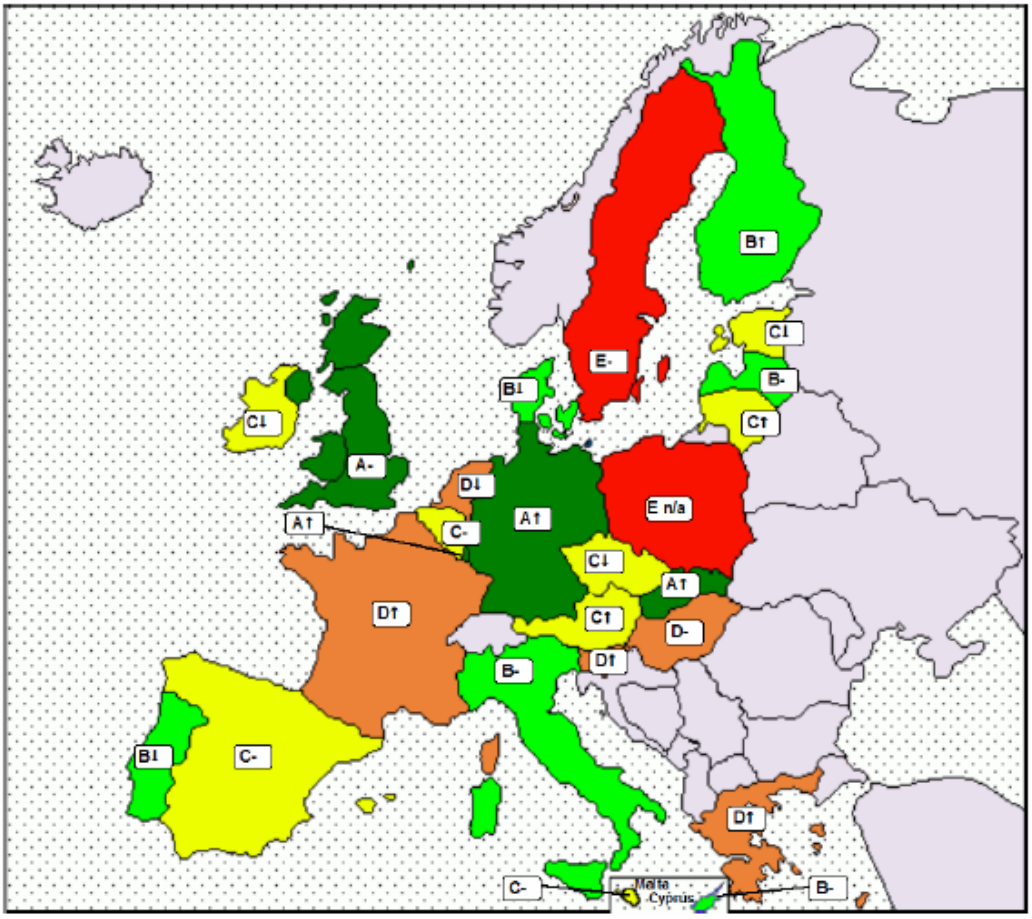


Figure 5 EIAO sample map report from EU countries (NB! Data presented in the reports are not based on the actual measurements, but are given only for illustrative purposes.)

The reports described thus far provide general overview of the web accessibility situation. However, they may be used to obtain data for more elaborate analyses. For example, by generating reports for several web sites, we may compare their performance on various WCAG tests. In the future releases, we plan to enhance the reporting capacity and allow the users to custom define the reports. In that way, one will be able to generate multi-criteria reports showing for example performance of all EU countries' web sites on only the selected WCAG test(s), or performance of the country's web sites with respect to the needs of

various disability groups.[13] Other extensions will involve providing numerical data regarding the number of detected barriers. Based on these data, one can obtain several indicators that may be especially useful for policy making. For instance, the number of barriers detected per checkpoint (helping to identify the checkpoints that require greatest attention) or the relative number of web site's elements that presented a barrier to the elements that were barrier free (helping to assess the relative accessibility of the site). The quantitative data will also provide better input for more in-depth comparative analyses allowing to identify the relative strengths and weaknesses of various sites.
The following section discusses in more detail how the results generated by the Observatory may contribute to web accessibility policy making.

3. EIAO a tool for web accessibility policy making

Despite the adoption of WCAG 1.0 from W3C in the *e*Europe Action Plan[14] 6 years ago, there are no established mechanisms for monitoring and supporting the guidelines actual implementation. The results presented by the Observatory could deliver a convenient tool to support both of these activities. By providing up-to-date data on web accessibility, the Observatory may not only help the policy makers to overview the current status, but also provide a useful tool for stimulating development and improvement of web accessibility. As indicated in the recent Out-Law.com[15] article, that legal requirements are currently not likely to be introduced in Europe. Despite that, it is argued that web accessibility will increase as a result of peer pressure. Experiences from the thus-far benchmarking activity of the Norge.no, where 700 web sites are assessed manually or semi-automatically on annual bases[16], support this claim. It has been observed that the benchmarking has a quite significant effect. Norge.no organised a contest to award prizes to the best sites. The contest and evaluation was very well covered by the press, and caused a number of web site owners to contact Norge.no with questions about how to improve their sites. The more precise effect of this series of surveys, however, is difficult to assess since the indicators has been changed from one evaluation to the next. Given the larger scale of data, and a stable set of measurement indicators, designed for trend analysis, the Observatory benchmarking has a real potential to multiply the effect the manual benchmarking.

In the previous section we provided a sample of benchmarks that may be generated based on the data gathered within the Observatory. As indicated such benchmarks may become an important driver for raising the awareness about web accessibility and fuelling the improvements. Besides this important role, the benchmarks may be useful in many more specific situations. They may be used to deliver input to the ongoing monitoring activities, to reveal weaknesses of other used benchmarking methods, to identify individual web sites that perform best or worst or checkpoints that need special attention, etc. The precise application will depend on the particular needs of the agency using the Observatory. It is therefore important that public bodies and relevant organizations use the opportunity to shape the Observatory's output. We encourage all public bodies involved in web accessibility policy making to contact us and provide their feedback regarding the type of data that would be most useful for them.

13 For each disability group (blind, visually impaired, physically disabled, hardness of hearing, deaf) different barriers make the site inaccessible. By aggregating the results of the WCAG tests that address these aspects, we can assess accessibility of the particular site or group of sites for each disability group.
14 http://europa.eu.int/information_society/eeurope/2002/action_plan/pdf/actionplan_en.pdf
15 http://www.out-law.com/page-7005
16 For more details see Aslaksen, F., F. Fardal, M.H. Snaprud (2006), *The Role of Benchmarking in Concerted Actions to Increase Accessibility*, ICCHP, Linz, Austria, July2006, proceedings, pp 258-262.

In many cases the national responsibility for accessibility is dispersed among several different public bodies who are not efficiently organised for raising awareness or fuelling change. Yet, they are responsible for creation of a coordinated and sustainable improvement of web accessibility. A targeted discussion facilitated by the data delivered by the Observatory can serve as a unifying task among those public bodies.

The first accessibility case based on the EIAO project is run in Norway. It has initiated a collaboration among the Norwegian Post and Telecommunications authority, Norge.no, and the Directorate for health- and social affairs. The work in this group has thus far focused on reviews of the EIAO data warehouse, the Observatory user interface, and elaborating ideas on how the data can be presented in the national context to support improvement and to examine how the already established national web evaluation activities can benefit from the EIAO data.[17] We would be happy to establish a cooperation with governmental bodies of other countries to discuss their particular needs with respect to web accessibility data so that we can design the Observatory outputs that fit the existing needs as closely as possible.

4. EIAO – invitation to get involved

In the paper we presented the main features of the European Internet Accessibility Observatory – a tool designed to support web accessibility policy making. Describing the basic EIAO design, we commented on how the Open Source philosophy benefits the project. We believe that this development path is very promising especially in software projects within the public domain. Open Source approach does not only allow public procurement to choose more freely among different vendors, but also supports inclusion and transparency – important aspects of a democratic development of the information society.

One of the key advantages of the Observatory is its capacity to provide a wealth of web accessibility data. These data may be used to monitor the performance over time or compare it with performance of others. Such data are available because of the systematic measurement mechanism embedded in the Observatory. We believe the Observatory could be extended to monitor other aspects of public web resources as well. Figure 6 illustrates the possible Observatory extensions. Data on aspects like content quality, usability or efficiency and effectiveness may provide further input into e-government policy making.

17 For more details see Haakon Aspelund (2005) *The National Accessibility Case in Norway, NAC-NO*, Paper presented at the AAATE 2005 conference in Lille, France

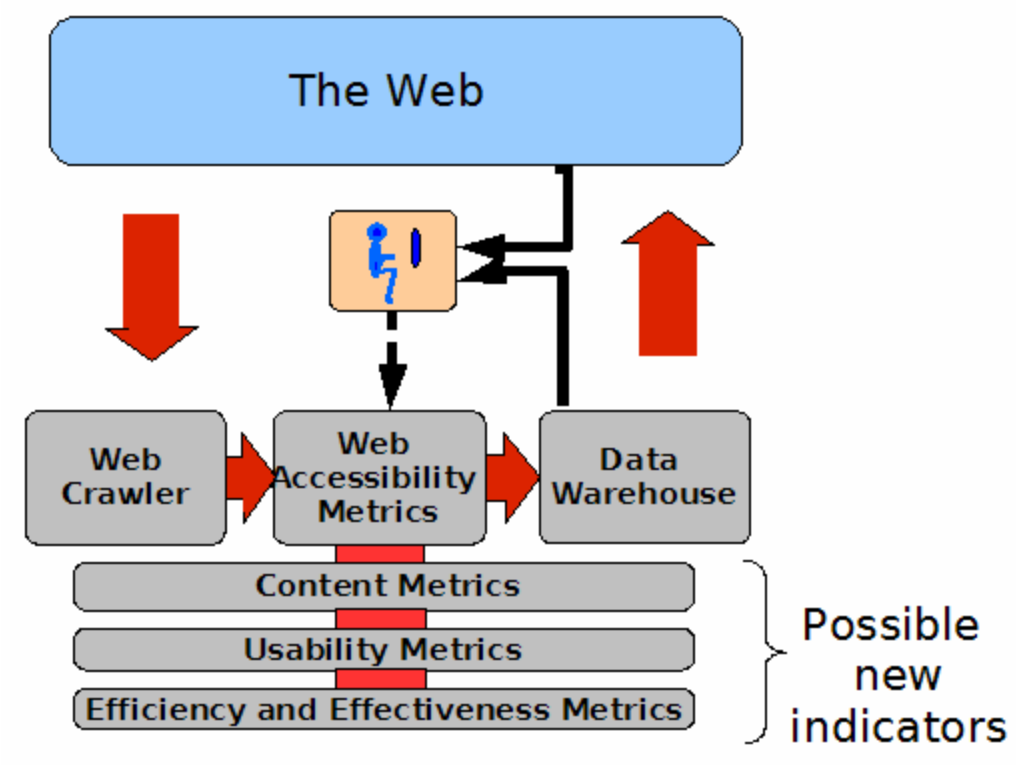


Figure 6 EIAO: possible extensions

For the EIAO to be successful and produce most value, it is important that the Observatory content and functionality closely matches the needs of its end users – policy makers, various public bodies, national agencies or organisations of people with disabilities. We encourage those interested to contact us and establish a mutually beneficial cooperation.

Chapter X

IT4ALL: Working On-Line to Promote the Opening-Up of Institutions

Rut Martinez-Munoz

The former Director General of UNESCO, Federico Mayor Zaragoza, recently declared that the XXI century will be the century of citizens, of us; a century "in which people will stop complying with decisions which do not emanate from a truly democratic system at a local and worldwide level". The sentence accurately summarizes the need for Democracy to strengthen its basic principles on a daily basis.

In the cyberspace decade, in the years of the explosion of the Internet and the advance of the information society, Mayor Zaragoza's statement has only one possible interpretation. The institutions receiving the representatives elected by the citizens cannot hold onto their work procedures or relationship mechanisms in the same parameters that were efficient twenty years ago.

The IT4ALL Network and its area of knowledge on e-Democracy are the result of this conviction and of the certainty that on-line cooperation, unlimited by space or time barriers, is essential for improvement in this field and to do so at a faster rate. This web is concerned with the collection and communication of the knowledge gained by institutions from all over the world on how to apply the new technologies to improve services offered to citizens. One of the areas of knowledge on which this work is focused is dedicated to putting forward a theoretical model for greater transparency and participation in the decision making processes via the electronic channel. The tool enables any user to provide knowledge on the subject and offers a strategy to open-up the institutions and their decisions to citizens, diagnostic mechanisms on the effectiveness of the measures applied and a "customized", flexible improvement procedure based on the user's selection of good practices, which are documented by participants in this cooperation process.

2.- **The origin of the electronic democracy group in IT4ALL-Regions.**

The setting in motion of this cooperation tool, in the electronic democracy field, was initiated at the heart of CALRE, the conference which brings together the regional parliaments of Europe. The plenary held by this organization in Calabria (Italy) in 2003 entrusted the Basque Parliament with the setting in motion of a working group aimed at cooperating in the applications of the ICTs to parliamentary work and their transparency. The mission advised the members of the group to use the collaborative methodology which UNITAR was creating at that time through the training programme for Local Authorities. This programme established a series of CIFAL centres throughout the world, one of which, and more specifically, the one dedicated to new technologies, was located in Bilbao, the economic capital of the Basque Country. This was, in conjunction with the path followed by The Basque Parliament in this field, the reason for entrusting this institution with the coordination of the working group. In 2005, Bilbao hosted the Summit of Local Authorities prior to the summit in Tunis. CIFAL has acted as an agent to the summit throughout the world, revitalizing and stimulating the interest of Local Authorities in the event.

2.1 *Composition:*

To develop the assigned task, the Basque Parliament formed a working group comprising of the parliaments of the British kingdoms of Scotland and Wales, of the Azores in Portugal, the Italian region of Umbria, the legislative members of Flanders, Brussels capital and that of the French speaking community of Belgium together with those of Andalusia and the Community of Madrid (Spain). Similarly, a technical secretary was provided offering the project scientific solvency as well as a technological partner, responsible for the entire preparation of the web tool around which the collaboration process revolved. For the first task, the Computing Faculty of the University of Mondragon was selected, which is linked to the leading industrial group of the Basque Country and is unique for its use of the cooperative as a partnership formula for its companies. In the technological field, the collaborating partner is Tecnalia, an industrial corporation made up of the Department of Industry of the Basque Government and more than 200 companies to promote innovation, research and development. (R&D&I)

2.2 *Work Programme*:

The group developed its work through face-to-face meetings, which took place in Bilbao, Arnhem, Milan, Madrid, The Azores and Brussels and on-line exchange dynamics. The objectives of the group were:

- To establish a theoretical model on the concept of e-Democracy; and
- Define its exact scope as a complement to the e-Government concept.

Understand and apply the IT4ALL cooperation methodology to the CALRE assignment. This task included:

- The preparation of five context indicators related to electronic democracy and thirty-five specific indicators expressing the knowledge of transparency and participation collected by the working group in this format. These indicators were grouped into themed families to facilitate their comprehension, use and usefulness for users of the web.

- Collaboration with Tecnalia in the preparation of the necessary programming so that the responses to the indicators provided by users enable a diagnosis to be carried out into the use of the new technologies in their field to improve transparency and participation.

- The preparation of a manual to identify good practices developed by users and homogenize the information introduced in the cooperation tool.

- The preparation of general recommendations which serve as a basic guide to prepare application strategies of the ICTs on this subject.

- The compilation of a range of documents, bibliography and digital resources related to e-democracy as theoretical support for users of the tool.

- The preparation of a specific training manual on electronic democracy aimed at the training courses offered by the CIFAL Bilbao centre throughout the world on the promotion of new technologies.

3. To set the cooperation web tool in motion and present it from the presidency of the working group, to the plenary of CALRE held in Barcelona in October 2005.

4. To design and implement a personalized communication campaign aimed at capturing users for the tool. Its use is totally free of charge for the user. The CALRE network has initially been used for this purpose and events, meetings, seminars and meetings have been identified, whose participants may find the contents of the tool interesting.

The working group is currently immersed in the implementation of the last of the aforementioned objectives. Contacts with all types of institutions and users have led to the initiation of a review process of the graphic design of the web tool to promote its use.

3.- **Functioning:**

The IT4ALL-Regions web presents the knowledge which has been collected and organized on how to apply the new technologies to promote transparency and participation of the representative institutions in an area of self-diagnosis and another aimed at Benchmarking. It is an on-line cooperation tool since any user may access these two improvement areas and offer good practices and suggestions of any kind to improve and enrich the contents. In this way, the tool is updated with the contributions of users throughout the world.

The contributions originate from institutions of diverse competition levels and heterogeneous political systems. This enables the user to find a vast array of experiences in the good practices repository and select those which are best adapted to the user's political situation, level of technological development or general situation of economic and technological development in the region of the world where the user is located.

The user should carry out four actions in order to take advantage of the contents of the IT4ALL-Regions cooperation tool in the field of electronic democracy:

Access the diagnosis area and fill in two context indicator forms. First of all, general socio-economic details about the region or local authority being diagnosed are requested. In the second phase, the user inputs specific data about the represented institution, its competition level and budget and its level of technological development. This information is automatically considered by the program and allows the comparisons made by the tool to be homogeneous.

Fill in the specific indicators in the electronic democracy knowledge area. These are presented in the form of a synthetic survey grouped by families. The in-built logic organizes both the results of the diagnosis offered to the user and the good practices repository.

Activate the diagnosis. The programming of the tool allows the user to compare its own situation in the application of new technologies with the average of users that have introduced their information and with the maximum values registered for each family of indicators. The diagnosis is private. Each user may only access its own diagnosis. The values used in comparisons are the result of statistical averages and never identify the values obtained by other users.

Access the good practices repository and select those that may be used to improve determined areas of action. The good practices are described in a homogeneous format and identify the person responsible for them in the institution in which they were developed in order to encourage bilateral contact.

The user may also:

Incorporate good practices in the library that is set up to provide experiences or programmes which have been useful in the user's institution.

Participate in exchange events, seminars, forums and other types of meetings which are communicated through the tool and in which the area of knowledge is considered in greater depth.

4.- **The e-Democracy model in IT4ALL.**

The IT4ALL tool presents a guideline to build a strategy for the application of new technologies to improve transparency in the decision making processes of public institutions and encourage citizen participation in these processes.

To devise this strategy, an evolutionary model is put forward, which recommends passing through a series of stages in order to allow total feedback between citizens and their representatives in the institutions. The phases in this process are:

- Inform: Make all of the documents used in the decision making processes available to citizens in real time.

- Towards knowledge: Organize presentations of these materials. Initiate the transformation of the "raw" information presented into knowledge.

- Pro activity: Put forward means of communicating the information which allow the user to define its own interests, assign an individual profile and receive the information of interest or of importance without having to search for it.

- Qualified participation through knowledge: Encourage participation, particularly of the public concerned or interested in specific debates. In this way, material with greater added value is obtained.

- Visible and certified participation: Make citizen participation visible as well as the outcome of this participation in the decision making process in question. Promote the irrefutable identification of the participants as a mechanism to increase their representative value.

- Multi-channelling: Demonstrate the interaction options, initially supported on the Internet, in all kinds of communication channels to bridge the digital divide.

- Civic Awareness: Promote civic awareness and citizen interest in participating in the decision making processes at the same time.

These seven principles make up the group of indicators described in the aforementioned section and enable development strategies to be devised in accordance with the needs, interests and priorities of users. The political commitment with the opening-up and subsequent budgetary review involved in the implementation of these principles are the conditions that catalyze and determine the success of the entire project. An evolution which requires both organizational and corporate culture changes in the institutions and at times legal modifications, whose measurement is also an object of attention in the list of indicators.

5.- **The IT4ALL model and the World Summit on the Information Society:**

The features offered by this cooperation tool, its cooperative and decentralized nature (everybody can provide and receive knowledge) and its digital nature (without space-time barriers) makes IT4ALL-Regions an appropriate instrument to cooperate with the promotion objectives of ICTs at a local and regional level as defined at the World Summit on the Information Society, which culminated in Tunis in November 2005.

Under the idea of "act locally, think globally" one of the lines of action considered at the summit is the application of the XXI local agendas model to promote the information society. In the forthcoming months and with the support of cross border organizations and regional and local institutions, e-local agendas (Digital Local Agendas) will emerge, aimed at supporting development programmes of the information society arising from the levels of institutional action closest to citizens and the alliances these form with all types of civic agents. Within this framework, the establishment of general strategies which provide consistency to each local action will be particularly important to the success of initiatives considered and to determine financing options. IT4ALL is presented within this framework as an effective assistant to help local institutions draw up its strategies and to measure the results of associated programmes.

The IT4ALL cooperation tool is open to users at a regional and local level all over the world.

Chapter XI E-Government Readiness in the Arab Countries [1]

Defined in a more general sense. E-government is the use of Information and Communications Technologies (ICT) to promote more efficient and effective government, facilitate more accessible government services, and allow greater public access to information in order to make the government more accountable to citizens.

Also, E-government might involve delivering public services via the Internet, telephone, wireless devices or other communications systems.

There is no doubt that governments around the world are embracing electronic government. In every region of the globe—from developing countries to industrialized ones—national and local governments are putting critical information online, automating once cumbersome processes and interacting electronically with their citizens.

But as any new and sophisticated project, the E-government had to overcome many challenges and obstacles and most important build the trust in a service marked by many as vulnerable.

The main challenges that should be addressed are the digital divide (within the country itself most of the times), the language barrier (Arabic contents and Arabic Domain Names), the literacy rates (see table 1), hardware and software prices, limited connectivity, awareness, in addition to telecommunications infrastructure.

To establish e-government programs we need to have a national vision and planning accompanied with more commitment and collaboration to carry out such programs.

The challenges facing both governments and citizens in their quest towards development, inclusion and empowerment.

The Resistance to change and Internet usage in addition to the public Trust in online transactions in general could be also part of the challenges. Some governmental procedures need long steps, how will it be online?

[1] Paper prepared by Charles Shaban, Talal Abu-Ghazaleh Organization (TAGOrg).

Table 1

Algeria	69.9
Bahrain	86.5
Egypt	71.4
Iran, Islamic Republic of	77.0
Iraq	74.1
Jordan	89.9
Kuwait	93.3
Lebanon	…
Libyan Arab Jamahiriya	…
Morocco	52.3
Oman	81.4
Palestine	92.4
Qatar	89.0
Saudi Arabia	79.4
Syrian Arab Republic	79.6
Tunisia	74.3
United Arab Emirates	…

Adult (15+) Literacy Rates in some Arab Countries (Source: UNESCO)

Examples of specialized systems that apply e-government programs affiliate to some ministries and authorities in the Arab countries. Some of these systems are E-Payments in the telecommunications sector and E-Tendering in Jordan, Human Resources Management System (HRMS) and E-Stamps in the United Arab Emirates as well as Document Management and Archiving System and E-Procurement in Lebanon.

Statistics from the UN Global E-Government Readiness Report 2005:

- None of the Arab countries either in Western Asia or North Africa reached 0.6
- Only two above 0.5: UAE (0.5718) & Bahrain (0.5282)
- Still some good efforts in some countries
- Egypt: "*The Government now delivers*"
- Qatar: "*Government services made easier*"
- Although Africa average was 0.2642 but the African Arab Countries average is: 0.2978

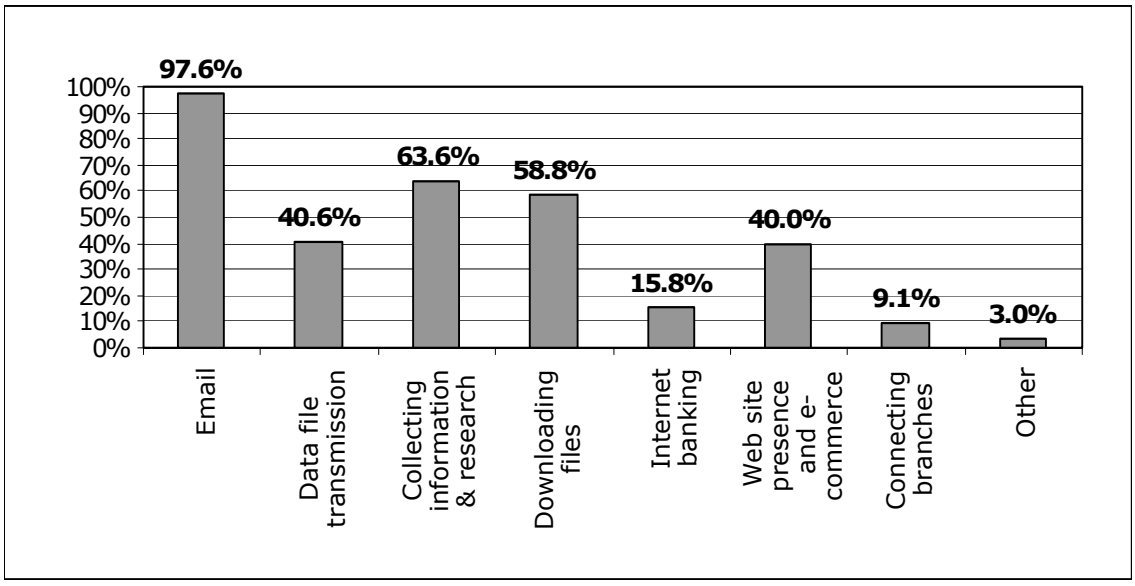
Table 2. E-Government Readiness index

Country	**Index**
UAE	0.5718
Bahrain	0.5282
Qatar	0.4895
Jordan	0.4639
Lebanon	0.4560
Kuwait	0.4431

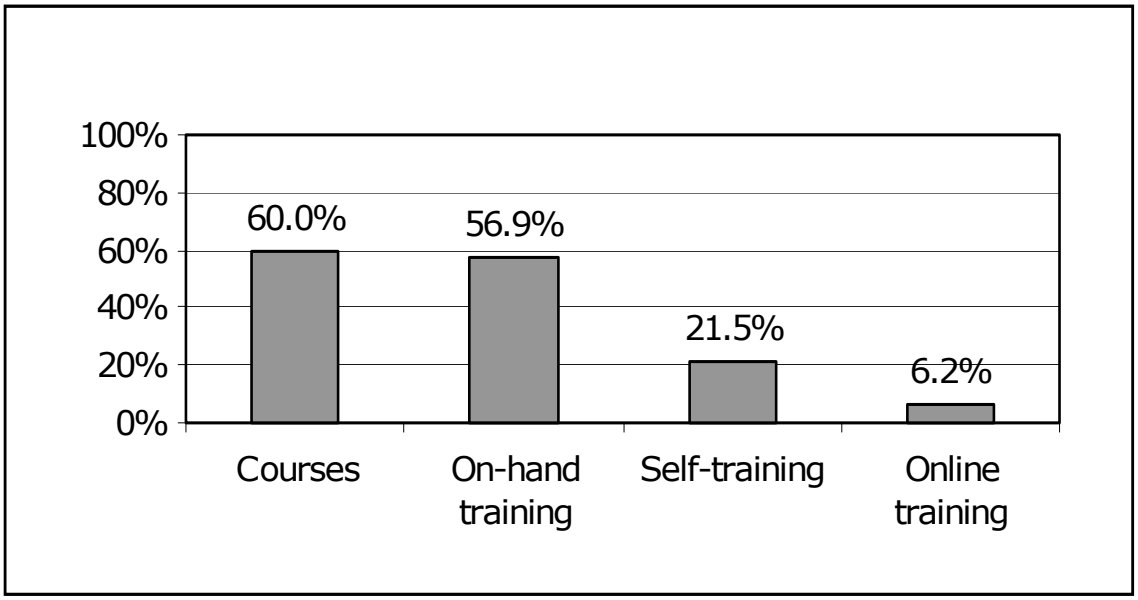
- Saudi Arabia 0.4105
- Oman 0.3405
- Iraq 0.3334
- Syria 0.2871
- Yemen 0.2125
- Egypt 0.3793
- Tunisia 0.3310
- Algeria 0.3242
- Morocco 0.2774
- Djibouti 0.2381
- Sudan 0.2370

Taking the Internet Usage in the Jordanian small and medium-size enterprises (SME) as a case study (Table Three), and regarding Security of online transactions and payment issues, 21.9% of the respondents to a recent study said they do not trust the electronic environment, 27.1% said the electronic signature is not important and 72.4% said that they are not aware of Jordanian Electronic Transactions Law.

Table 3. Case study: Jordanian SMEs
Internet Usage in SME – Jordan



IT training – Jordan



Middle East Internet Usage and Population Statistics						
Arab Countries	**Population (2006 Est.)**	**Usage, in Dec/2000**	**Internet Usage, Latest Data**	**% Population (Penetration)**	**(%) of M.E.**	**Use Growth (2000-2006)**
Bahrain	723,039	40,000	**152,700**	21.1 %	0.8 %	281.8 %
Iraq	26,628,187	12,500	**36,000**	0.1 %	0.2 %	188.0 %
Jordan	5,282,558	127,300	**629,500**	11.9 %	3.3 %	394.5 %
Kuwait	2,630,775	150,000	**700,000**	26.6 %	3.7 %	366.7 %
Lebanon	4,509,678	300,000	**700,000**	15.5 %	3.7 %	133.3 %
Oman	2,424,422	90,000	**245,000**	10.1 %	1.3 %	172.2 %
Palestine	3,259,363	35,000	**243,000**	7.5 %	1.3 %	594.3 %
Qatar	795,585	30,000	**165,000**	20.7 %	0.9 %	450.0 %
Saudi Arabia	23,595,634	200,000	**2,540,000**	10.8 %	13.3 %	1,170.0 %
Syria	19,046,520	30,000	**800,000**	4.2 %	4.2 %	2,566.7 %
United Arab Emirates	3,870,936	735,000	**1,397,200**	36.1 %	7.3 %	90.1 %
Yemen	20,764,630	15,000	**220,000**	1.1 %	1.2 %	1,366.7 %

Source: Miniwatts Marketing Group updated Sept. 18, 2006

Meanwhile, several countries have already introduced some e-government applications while other countries are still in the process.

* The United Arab Emirates have implemented the following applications:

- Human Resources Management System (HRMS): Provides a tool for planning and managing employee related activities
- Financial Management Information System: Comprehensive financial systems for the Federal government agencies
- E-Stamps: The e-Dirham payment tool devised by the Ministry of Finance and Industry in order to facilitate collection of revenues and provide secure payment method.
- E-Tender: Electronic tendering system used by the government
- Other specialized systems related to some Ministries and authorities

* Bahrain presented the Financial and Human resources systems in 30 ministries and governmental department.

* Document Management and Archiving System, Business Automation and E-Procurement (with Italian Government assistance) are the implemented applications in Lebanon.

* Implemented Applications in Jordan
    - Financial, purchasing and inventory systems in different governmental agencies
    - E-Payments in the telecommunications sector
    - E-Tendering
    - Wideband network in 18 Ministries (will be the infrastructure of the e-Government services)

* Implemented Applications Kuwait
    - Financial and HR systems (in government educational universities too)

* Implemented Applications Egypt
    - ERP in 6 ministries
    - Archiving systems in 6 ministries
    - Workflow in more than 28 governmental agencies

* In progress Applications Oman
    - Disaster Recovery system
    - E-Tendering
    - E-payment Gateway
    - Technology Park
    - CRM (Oman Municipality)

The above programs to succeed there should be a leadership support and advocacy for e-Government, clear goals and specific performance targets.

Willingness and ability to change, knowledge sharing, starting small and growing quickly and developing acceptable privacy and security safeguards are also needed to achieve good e-government application.

Although some Arab countries are investing huge amount of money on restructuring their electronic infrastructure such as Saudi Arabia; others are still far away and depend on receiving aid from developed countries.

Saudi Arabia investment in E-government has topped SAR 3 billion recently which will lay the foundations for the beginning of a comprehensive implementation of e-Government.

And there is no doubt that Dubai E-government has played a pioneering role in driving the E-governance initiative in the region and through its comprehensive web portal, citizens, residents, visitors and business enterprises can access more than 2,000 electronic services, including payment of traffic fines, payment of Municipality fees, applying for visas for friends and relatives, renewing health cards, company registration, among others

Meanwhile while others are still struggling with culture and tradition, some countries has already shortened the distance between them and the developed world believing in the future generation of E-life.

References

- *UN Global E-Government Readiness Report 2005*
- *Arab Countries e-Government Programs report by SavvyTek 2006*
- *Arab Advisors Group reports*
- *Forums and Seminars we participated in, related to the topic*
- *Talal Abu-Ghazaleh Information Technologies International (TAGITI) studies*

Annex 1

FINAL AGENDA

E-PARTICIPATION AND E-GOVERNMENT: Understanding the Present and Creating the Future 27 – 28 July 2006, Budapest, Hungary

Workshop organized by the United Nations Department of Economic and Social Affairs (UNDESA) in cooperation with the Office of the Deputy Prime Minister, United Kingdom

DAY 1	
09:00 – 10:15	***PLENARY SESSION*** **Chairman: Gabor Bodi, *Head of the Prime Minister's Office, Hungary*** • **Guido Bertucci, *Director, Division for Public Administration and Development Management (DPADM), United Nations Department for Economic and Social Affairs (UNDESA)*** • **TBA, *European Commissioner*** • **Paul DeGregorio, *Chair of the US Electoral Assistance Commission (EAC)*** • **Angela Smith, *MP for Local e-Government at the Department for Communities and Local Government, United Kingdom*** Local Governance and the need to engage
10:15 – 10:30 10:30 – 11:00	***SESSION I: E-GOVERNMENT AND E-PARTICIPATION: AN OVERVIEW*** **Moderator: Haiyan Qian, Chief, Knowledge Management Branch, Division for Public Administration and Development Management (DPADM), UNDESA** • **Guido Bertucci, Director, *DPADM, UNDESA*** • **Seema Hafeez, *Economic Affairs Officer, DPADM, UNDESA***

11:00 – 11:15	**COFFEE BREAK**
	SESSION II: E-GOVERNMENT CONCEPTS AND APPROACHES
11:15 – 11:45	• **Dr. Richard Heeks, *Institute For Development Policy and Management, University of Manchester, United Kingdom***
11:45 – 12:15	• **Jon Brakebill and Philip von Haehling, *Customer Relationship Management, Accenture, USA***
12:15 – 12:25	• **Discussant: Roberto Martinez**
12:25 – 13:00	**Open discussion**
13:00 – 14:00	**LUNCH BREAK**
	SESSION III: E-PARTICIPATION CONCEPTS AND APPROACHES
14:00 – 14:30	• **Lawrence Pratchett, *Director, Local Governance Research Unit, De Montfort University, Leicester, United Kingdom***
14:30 – 15:00	• **Donald Norris, *Maryland Institute for Policy Analysis and Research, University of Maryland, USA***
15:00 – 15:30	• **Jeremy Millard, *Danish Technological Institute, Denmark***
15:30 – 15:40	• **Discussant: Jeremy Millard**
15:40 – 16:00	**Open discussion**
16:00 – 16:15	**COFFEE BREAK**
	SESSION IV: THE CITIZEN'S PERSPECTIVE AND OTHER SPECIAL ISSUES
16:15 – 16:45	• **Chuck Hirt, *Director, CEE Citizens Network, Slovakia and* Mate Varga, *Director, Association for Community Development, Hungary***
16:45 – 17:15	• **Mikael Snaprud, *European Internet Accessibility Observatory Project, Agder University College, Information and Communication Technology, Norway***
17:15 – 17:25	• **Discussant: Jon Brakebill**
17:25 – 17:45	**Open discussion**

DAY TWO	
	SESSION V: COUNTRY BEST PRACTICES AND LESSONS LEARNED
09:00 – 09:15	• **Rut Martinez-Munoz,** ***European Affairs Adviser, Basque Parliament, Spain***
09:15 – 09:30	• **Roberto Martinez** ***(Former Government of Mexico official), Director General, Intel, Mexico***
09:30 – 09:45	• **Wilma Deetlefs,** ***SADC National Media Coordinator, Government of Namibia***
09:45 – 10:00	• **Charles Sha'ban,** ***Executive Director, Intellectual Property, Talal Abu Ghazaleh Information Technologies International (TAGITI), Jordan***
10:00 – 10:15	• **Park Je-Guk,** ***Director for e-Government, Ministry of Government Administration and Home Affairs (MOGAHA), Republic of Korea***
10:15 – 10:30	• **Discussant: Richard Heeks**
10:30 – 11:15	**Open discussion**
11:15 – 11:30	**COFFEE BREAK**
	SESSION VI : E-GOVERNMENT AND E-PARTICIPATION: THE WAY FORWARD
11:30 – 12:00	**Discussant: Gregory Curtin**
12:00 – 12:15	**Closing remarks: Haiyan Qian**

Annex 2

PROVISIONAL LIST OF PARTICIPANTS

UN Expert Group Meeting on E-Participation And E-Government
Budapest, Hungary

26 - 28 July 2006

No.	Name	Status	Organization/Company	Country/Address
1	**Richard Heeks**	confirmed	Institute For Development Policy & Management, University of Manchester	Manchester United Kingdom
2	**Roberto Martinez** Government Relations Director	confirmed	Intel	Mexico City Mexico
3	**Charles Shaban** Intellectual Property Executive Director	confirmed	CISA, Talal Abu-Ghazaleh Information Technology International	Amman Jordan
4	**Ms. Wilma Deetlefs** SADC National Media Coordinator	confirmed	Ministry of Information and Broadcasting	Private Bag 13344 Windhoek, Namibia
5	**Elizabeth Fife**	confirmed	Center for Telecom Management University of Southern California	Los Angeles California USA
6	**Kim Andreasson**	confirmed	Civic Resource Group	Los Angeles California 90017 USA
7	**Gregory Curtin** Director	confirmed	Civic Resource Group	Los Angeles California 90017 USA
8	**Lawrence Pratchett** Director	confirmed	Local Governance Research Unit De Montfort University	Leicester, United Kingdom
9	**Jon Brakebill** Global Programme Director	confirmed	Government Operating Group Customer Relationship Management Accenture	Minneapolis Minnesota USA

19	**Nketsi Makhera** Director	confirmed	Ministry of Communications and Technology	Lesotho
20	**John Viner** UNV Specialist in Governance	confirmed	UNDP Lesotho	Lesotho
21	**Park Je-Guk** Director for e-Government	confirmed	Ministry of Government Administration and Home Affairs (MOGAHA)	Seoul Korea
22	**Fernando Andrade** Mayor	confirmed	Mayor of Miraflores	Miraflores Peru
23	**Jacqueline Wilson** Permanent Secretary	confirmed	Ministry of Public Administration and Information	Trinidad & Tobago
24	**Mate Varga** Director	confirmed	Civil College Foundation Hungarian Association for Community Development	Budapest Hungary
25	**Guido Bertucci** Director	Confirmed	Division for Public Administration and Development Management (DPADM), DESA United Nations	New York USA
26	**Haiyan Qian** Chief	confirmed	Knowledge Management Branch Department of Economic & Social Affairs United Nations	New York USA
27	**Seema Hafeez**	confirmed	Knowledge Management Branch Department of Economic & Social Affairs United Nations	New York USA
28	**Nahleen Ahmed**	confirmed	Knowledge Management Branch Department of Economic & Social Affairs United Nations	New York USA
18	**Najat Rochdi** Regional Adviser for the Arab States	confirmed	UNDP Egypt	Cairo Egypt