Breaking Barriers to eGovernment

Overcoming obstacles to improving European public services

Modinis study
Contract no. 29172

From Barriers to Benefits: Efficiency and Effectiveness of eGovernment

Fourth workshop report

Deliverable WP3 W.4
Submitted 14/12/2006

oiioiioii
oiioiioii
oiioiioii

1.   Introduction

The project, Breaking Barriers to eGovernment: overcoming obstacles to improving European public services, held its fourth workshop on the 22nd of November 2006 at the IST 2006 conference, Helsinki, Finland.

The workshop provided the opportunity to bring together researchers and practitioners who are exploring ways to overcome barriers to eGovernment. Ten presenters spoke at the workshop providing viewpoints both from academia and practice on addressing obstacles to eGovernment progress and how the potential of eGovernment could be realised.

In total, 41 people attended the event from academia, industry and government from, Australia, Belgium, Czech Republic, Finland, Germany, Greece, Hungary, Ireland, Israel, Italy, Malaysia, Netherlands, Norway, Portugal, Slovenia, Spain Sweden and the UK.

The sessions were as follows:

- **Welcome, Introductions and Overview** Dr Rebecca Eynon, Oxford Internet Institute (OII), University of Oxford, UK
- **Efficiency: Implementing the eGovernment Action Plan** Dr Trond-Arne Undheim, eGovernment Unit, European Commission
- **Segmenting Citizens: Group Based Approaches to eGovernment** Professor Helen Margetts, Oxford Internet Institute (OII), University of Oxford, UK
- **Organisational Change for Citizen-centric eGovernment** Professor Michael Blakemore, IDRA Ltd and Emeritus Professor of Geography, University of Durham, UK
- **eGovernment and LSGs in Europe** Professor Yair Sharan and Dr Tal Soffer, ICTAF at Tel Aviv University, Israel
- **eGovernment for SMEs: Benefits and Barriers** Dr Rita Wardenier, Free University of Brussels, Belgium
- **The UNDERSTAND Project: Inter-regional Comparison** John Shaddock, Local Government Yorkshire and Humber, UK
- **e-PRODAT: The Integration of Privacy in eGovernment** Emilio Aced-Félez, Head of the Inspection Unit, Data Protection Agency of Madrid, Spain
- **Knowledge Cities** Dr Edna Pasher, CEO, Edna Pasher PhD & Associates, Israel
- **The Security Barriers to eGovernment** Dr Alexandre Caldas, Director, Management Centre for the Electronic Government Network, Portugal
- **PICTURE: How to Develop a Successful ICT Investment Strategy** Soumi Papadopoulou, Managing Consultant, PLANET S.A., Greece
- **Close of Workshop** Professor Helen Margetts, Oxford Internet Institute (OII), University of Oxford, UK

Further details about each presentation are provided in the section below. PowerPoint slides of all sessions can be accessed via the Breaking Barriers project website http://www.egovbarriers.org

2.   Presentations

Welcome, Introductions and Overview

Rebecca Eynon welcomed all participants and speakers to the workshop. She gave a brief overview of the Breaking Barriers project - a European Commission project that seeks to identify and remove barriers to eGovernment in Europe - and summarised the workshop schedule.

Presentation 1   Efficiency: Implementing the eGovernment Action Plan

Trond Undheim discussed the importance of overcoming the barriers to eGovernment in order to increase the efficiency and effectiveness of Government. Efficiency and Effectiveness is a priority area in the i2010 eGovernment Action Plan and is maturing rapidly among member states and in the overall IT and policy communities. As evidence in this area grows it is important that these findings and experiences are shared between practitioners. One example of how this can be achieved is via the EC facilitated eGovernment Good Practice Framework (GPF) (http://www.e-gov-goodpractice.eu/) - a key initiative to help share good practice. An important new development in this is area is that the current GPF will merge with the IDABC eGov Observatory (http://ec.europa.eu/idabc/egovo) in March 2007 and become the Good Practice Exchange (GPE). In addition to eGovernment the GPE will facilitate sharing of good practice in the areas of eInclusion and eHealth. As part of this initiative 18 workshops will be held to enhance exchange of good practice off-line. Trond asked those who may be interested in participating in the GPE and attending the workshops to contact him directly.

Presentation 2   Segmenting Citizens: Group Based Approaches to eGovernment

Helen Margetts argued that Government should 'segment citizens' in order to encourage increased uptake and use of eGovernment. The internet allows great potential for group-targeting of citizens; eCommerce enables firms to 'know their customers and treat them differently'. Yet eGovernment lags behind eCommerce in this respect. Utilizing findings from a recent survey by the Breaking Barriers project (http://www.egovbarriers.org/?view=survey) and data from the 2005 Oxford Internet Survey (http://www.oii.ox.ac.uk/research/project.cfm?id=8), Helen demonstrated a more nuanced version of digital divides and digital choices in the UK. The population can be divided into four groups of Internet and eGovernment use: 1) avid internet users, who view the internet as a first port of call for any

internet interactions and are already using eGovernment; 2) less enthusiastic internet users who could be persuaded to interact online with government; 3) non users who are likely to find an intermediary if they needed to use eGovernment and 4) adamant non users of the internet. Helen then suggested different strategies that should be utilised by Government to increase uptake and use of eGovernment by these four groups. For example, for existing eGovernment users governments could use online usage statistics to re-design government websites to make them easier and more convenient to use. For non users who could find an intermediary the identity of the intermediaries (e.g. carers, advice bureau, friends and / or family) could be ascertained and then targeted appropriately. Such strategies may provide a potential solution to digital divides and current choices by citizens that impede eGovernment uptake. For more details of the Breaking Barriers project please see the project website at http://www.egovbarriers.org.

Presentation 3   Organisational change for citizen-centric eGovernment

Michael Blakemore introduced an EU funded project, Organisational Change for Citizen-Centric eGovernment, which is exploring the linkages between the three components in the project title. Michael discussed some of the key issues that are currently being addressed in the project as a result of the production of an initial series of 'think papers' and the discussion at the first project workshop, 'Achieving the organisational change and technological innovation needed for citizen-centric government and public services,' held in Warsaw in November 2006.

One theme was the extent to which it is valuable for the public sector to learn from the private sector and vice versa. Michael discussed a number of considerations, such as the need for models of organisational change that are suitable for the public sector, the importance of recognising that business innovation also fails, and that there are differences in the flexibility of cost models for innovation in public and private spheres. A second set of related questions focused on the extent to which citizen centric can be viewed as equivalent to customer centric and the importance and complexity of understanding citizens' needs. He suggested, for example, that there is a need to think far more innovatively about the ways in which citizen needs can be understood and provided for. Cross-matching of citizen data with commercial data can generate new insights into citizen needs and preferences, and could be a fruitful way to developing improved citizen centric services and assist in cost allocation for multi service delivery. Further details about the project discussed by Michael, including the think papers and workshop findings, can be downloaded from the project website at http://www.ccegov.eu/.

Presentation 4   eGovernment and LSGs in Europe

Yair Sharan presented a brief overview of the ELOST project, led by the Interdisciplinary Center for Technological Analysis and Forcasting (ICTAF). The focus of the ELOST project is to increase the number of citizens from Low Socio-Economic Groups (LSGs) who can use eGovernment services via appropriate changes in policy. He noted that in Israel, the majority of people owned a mobile phone and policy changes had meant that more people could and did use their phones to access eGovernment services. Over the two years of the ELOST project it was intended that a greater understanding of the demands and needs of LSGs could lead to further policy changes to increase participation in eGovernment by these groups. The methodology of the project includes: internet surveys with decision makers and eGovernment experts, focus groups with LSGs and reviews of the policies and the status of e-services, and tools for LSGs in Europe.

Yair went on to present some of the preliminary findings of the ELOST expert survey that was conducted in November 2006. Those surveyed predicted that in 2020 around 50% of people from LSGs would routinely use eGovernment services, which is a significant increase from the current proportion of 25%. The respondents also thought that interactive TV would have the greatest impact on increasing uptake and usage of eGovernment services by LSGs, followed by high-speed broadband communications and advanced mobile wireless networks. In terms of technology related barriers to the use of eGovernment by LSGs the most significant were unfriendly interfaces and limited access channels for communication.

Yair then provided a summary of some of the preliminary insights from all the research completed to date. Key findings include that there is a strong correlation between usage and Socio Economic Status. LSGs have much lower usage due to technology barriers, a lack of specific priority by policy makers and few incentives. Yair noted that there is a need for more education and training for people from LSGs and advanced infrastructure and solutions specifically aimed at this section of society.

Further findings and cases related to usage of eGovernment by LSGs can be accessed via the e4 expert exchange system at http://www.egovernment-exchange.eu/ in addition to the project website at http://www.elost.org.

Presentation 5   eGovernment for SMEs: Benefits and Barriers

Rita Wardenier's presentation focused on the benefits and barriers of eGovernment for small and medium-sized companies (SMEs) as identified from a study of 178 interviewees who had a range of eGovernment experience in

Belgium. The survey sample comprised of 92 managers of SMEs, 49 representatives from multinational companies producing computer tools for small businesses, 26 experts from the intermediary sector and 11 leaders of eGovernment coordinating bodies at the national and regional level. The main benefits of eGovernment from the perspective of SMEs included: faster response times, the ability to trace the progress of a particular file / request, the potential for a one stop shop for registering a new company, and the immediate identification of the company by a company number. However, the research also revealed a number of barriers including: costs of investing and maintaining technological infrastructure, difficulties in interoperability between business and government software, poorly designed forms where data had to be re-entered each time a request from government was made, and an emphasis on systems and processes designed to meet government needs as opposed to meeting the needs of SMEs. Rita stressed that several small burdens can add up to cause significant burdens for SMEs and there was a need for greater cooperation between government and SMEs when designing and implementing eGovernment services. She concluded by outlining some potential solutions, including the introduction of pre-populated forms and the use of open source software.

Presentation 6   The UNDERSTAND Project: Inter-regional Comparison

John Shaddock presented some of the results of the UNDERSTAND project which has developed a methodology and indicators for benchmarking regional Information Society deployment. Focusing on survey data from 2004 and 2005 that focused on four domains: Infrastructure, Citizens, eBusiness and eGovernment, John discussed the potential benefits of eGovernment and barriers to eGovernment adoption from the perspective of the 1021 municipalities interviewed in the 7 regions involved in the study.

From the survey data, there were three key eGovernment barriers detected by municipalities for ICT usage: the costs of ICT expenditure, the lack of ICT qualified staff in public administrations combined with a lack of training opportunities and the lack of an updated ICT strategy. A second key finding was the importance of the size of the municipality. The proportion of eGovernment services offering online payments, full electronic case handling and submitting personal data was positively related to the size of the municipality and a similar relationship was apparent when exploring the integration of eGovernment with other public agencies (e.g. sharing service delivery information and / or sharing access to databases).

John concluded by noting that from the municipalities' point of view adoption of technologies would encourage public sector reform and shared services could be a useful step in this process. He stressed that the public sector makes up 45% of the regional economy and efficient and effective eGovernment is an important component in creating innovative and competitive regions. The UNDERSTAND

team would welcome input from anyone who is interested in participating in the next round of the UNDERSTAND surveys. For more details please see the project website available at http://www.understand-eu.net.

Presentation 7   e-PRODAT: The Integration of Privacy in eGovernment

Data Protection can be viewed as a potential obstacle that can impede eGovernment progress. Emilio Aced-Félez provided an overview of e-PRODAT, a European funded project led by the Data Protection Agency of Madrid that aims to overcome barriers to eGovernment that may arise due to data protection issues. The study promotes the exchange of knowledge and experiences among European public bodies concerning the protection of personal data used by Governments and Public Administrations for the provision of eGovernment public services. A particular focus of the project is to identify best practices in this area and disseminate these findings via the European eGovernment Data Protection Observatory. The best practice cases available on the online observatory are written in an accessible way and describe a specific achievement a public authority has made concerning data protection and eGovernment. The best practice cases examine how the institution has complied with data protection laws in a cost effective way and improved eGovernment services. Such a database provides others with details of how this can be achieved using a 'bottom up process' where contributions come from the main actors themselves. Ongoing activities by the Data Protection Agency of Madrid include the upcoming 3rd edition of the Prize to Data Protection Best Practices in European public services which will be awarded in December 2006, and a new online review (dataprotectionreview.eu) that will exchange information and experiences about data protection world-wide. The e-PRODAT project will end in January 2007 and the observatory and a range of other outputs, such as reports and recommendations, are available on the project website at http://www.eprodat.org.

Presentation 8   Knowledge Cities

Edna Pasher's presentation focused on knowledge cities. A knowledge city is a city / town which encourages regeneration and innovation through knowledge sharing made possible by continuous interaction supported by ICT. A knowledge city involves many components including people, institutions, technical infrastructure and values. An integral part of a knowledge city is to encourage ongoing knowledge creation and sharing via interaction with citizens. ICTs support such discussions, and can facilitate dialogue between citizens and government particularly at the local level. ICTs are also valuable in increasing the transparency of government interactions, which can in turn contribute to a knowledge sharing culture and trust between businesses, citizens and governments. Examples of knowledge cities include Calgary in Canada and Delft in the Netherlands. Further information about knowledge cities can be found in

Edna's paper published in the Journal of Knowledge Management entitled, Innovation engines for knowledge cities: an innovation ecology perspective. Edna concluded by announcing a key upcoming event, the Knowledge Cities Summit that will be held in Mexico from the 18th – 20th of October 2007. A selection of the best papers from the event will be published in a special issue of the Journal of Knowledge Management on knowledge based development. Further details are available at http://globalkbdweek.mty.itesm.mx/.

Presentation 9   The Security Barriers to eGovernment

Alexandre Caldas' presentation focused on the security barriers to eGovernment. As director of CEGER he was speaking from his experiences of contributing to the development and implementation of the National Public Key Infrastructure in Portugal and other projects such as the Citizen Card and the Electronic Passport. Alexandre argued that the effectiveness and overall success of eGovernment services is critically dependent upon the security assurance and policies at national and international levels. Yet security can be viewed as a key facilitator or a barrier to eGovernment. For example, security measures can enhance trust in Government services by citizens and businesses, yet overzealous security measures could place excessive and costly burdens on users. Alexandre traced the 'S curve' co-evolution of technology and government from provision of on-line information towards more recent developments that incorporate advanced transactional services which have greater security implications. Using the analogy of building a house he discussed how security was a complex area – issues such as legal frameworks, certificate and security policies, security of infrastructures, confidentiality and authenticity all interrelate. Alexandre discussed the main components involved in developing the National Public Key Infrastructure in Portugal: people, the institutions, the legislation and technology. He noted that resolving security obstacles to eGovernment were not a technological problem; technical aspects can be resolved in a short space of time (4-5 months). The significant factors in overcoming security barriers to eGovernment are the importance of having senior levels of government on board, management of cultural change and legal issues.

Presentation 10   PICTURE: How to Develop a Successful ICT Investment Strategy

Soumi Papadopoulou provided an overview of the PICTURE project, outlining the project objectives and the work completed to date. PICTURE is a web–based tool that supports successful ICT investment strategies for European Public Administrations. It enables an efficient measurement of ICT impact on the overall process landscape of Public Administrations and provides key information for the development of a sound ICT investment strategy. Such a tool assists in overcoming potential barriers to eGovernment progress that arise from difficulties

with justifying large ICT investments to political leaders and citizens and problems developing a clear ICT strategy. In addition to contributing to the efficiency and quality of eGovernment PICTURE contributes to exchange of good practice as it can facilitate collection and consolidation of processes across European Public Administrations. Soumi explained the 3 main stages of PICTURE: 1) Modelling - public administration staff modelling all core administrational processes using pre-defined building blocks; 2) Measurement – CIOs measuring the impact of ICT components on the process landscape; and 3) Analysis – public administration decision makers analysing the results and deriving appropriate ICT investment decisions. The project began in 2006 and will be completed in 2009. More details can be found at http://www.picture-eu.org/.

Close of Workshop

Helen Margetts thanked everyone for participating in the event and the presenters for their interesting discussions and insights; and brought the workshop to a close.

3.   Key issues

From the presentations and the resulting discussion a number of key issues emerged:

Understanding the motivations and needs of eGovernment users
There is a need for government to better understand the needs of citizens and businesses in order to provide eGovernment services that reduce burdens and meet user needs. The use of ICTs can help to assist with this process (e.g. by collecting website usage statistics and collating disparate bodies of information about users from public and private spheres). A more nuanced understanding of the citizen or business user is an important contributing factor to overcoming barriers to eGovernment.

Importance of sharing knowledge and good practice
This theme arose throughout the workshop where a number of different websites, designed to share good practice, were mentioned. Writing such practice in an honest, accessible and usable way that is of value to others who may operate in quite different contexts is challenging yet important for overcoming impediments to eGovernment progression. Such sharing can also be facilitated by other benchmarking initiatives (e.g. PICTURE).

The importance of measuring the impact of eGovernment
It is important to know how and the extent to which eGovernment is enhancing the efficiency and effectiveness of Government; and the pros and cons of such

moves. Such an evidence base may help to overcome existing barriers, such as a lack of political support for eGovernment and inadequate eGovernment development and implementation strategies.

There is no "technical fix" to eGovernment progression
Many of the presenters and participants stressed the complexity of overcoming barriers to eGovernment – it is not just about changes in technology. There are numerous and inter-related economic, institutional, cultural and legal factors that need to be considered.

Local and regional levels of eGovernment have unique needs and priorities
The regional level in debates around overcoming obstacles that impede eGovernment progress needs to be considered. Currently there are often policy deficits at the local and regional level that need to be addressed. In addition to the UNDERSTAND project that helped regions to learn more about themselves and other regions, further valuable studies mentioned by participants included the study on interoperability at local and regional level funded under the eEurope 2005 MODINIS programme (http://www.egov-iop.ifib.de/) and Intelcities (http://www.intelcitiesproject.com).

4.   Conclusion

The workshop was a valuable event for the Breaking Barriers project, raising the profile of the study, enhancing collaborations between the project team and eGovernment experts and encouraging more open and frank debate about the barriers to eGovernment. Comments, project findings and issues raised at the workshop will inform further development of the research both in terms of identifying barriers to eGovernment and exploring solutions to overcome them.

Prepared by:

Rebecca Eynon
Oxford Internet Institute
University of Oxford
1 St Giles
Oxford OX1 3JS

eGovernment