

Workshop Report

Breaking Barriers to e-Government: Overcoming Obstacles to European Public Services

www.egovbarriers.org

1. Introduction

The project, *Breaking Barriers to E-government: overcoming obstacles to improving European public services* held its first workshop on 17th June, 2005 as part of the 5th European Conference on e-Government in Antwerp, Belgium (see <http://www.academicconferences.org/eceg2005/eceg2005-home.htm>).

The workshop provided an overview of the project and focused on some of the barriers to e-government that are being explored as part of the research. Representatives from each partner institution introduced key issues that can constrain e-government growth, and outlined the research designed to address them. Feedback from the audience on the selection of the barriers, and on good cases that might address each barrier was an important part of each session. The sessions were as follows:

- "Breaking barriers to e-government" Professor Bill Dutton and Dr Rebecca Eynon, Oxford Internet Institute, University of Oxford, Oxford, UK
- "Legal barriers relating to public administration transparency" Florence de Villenfagne, CRID (Research Centre for Computer and Law), University of Namur, Namur, Belgium
- "Legal barriers to electronic government in the field of liability law, intellectual property rights, electronic signatures and electronic commerce", Dr Sjaak Nouwt, Tilburg Institute for Law, Technology, and Society, University of Tilburg, Tilburg, Netherlands
- "Organisational culture as a barrier to e-government" Professor Helen Margetts and Dr Rebecca Eynon, Oxford Internet Institute, University of Oxford, Oxford, UK
- "Interactive session: using a wiki to overcome barriers to e-government" Research team.

Each of the sessions was chaired by Graham Walker from Gov3. Further details about each presentation is provided in the section below.

In total, over 60 people attended the event from academia and government from a number of countries including America, Netherlands, UK, Belgium, Switzerland, Spain, Bulgaria, Italy, New Zealand, Ireland and France.

2. Presentations

The workshop was introduced by Nick Batey, from the e-government unit at the European Commission. Nick provided the overall context for the project, discussing the aims of the e-government unit and the MODINIS programme.

Session 1 Breaking barriers to e-government

First, Rebecca Eynon provided an overview of the project, outlining aims, objectives and methodology. The research team have chosen a number of issues which are – or could become – barriers to e-government, as follows:

Legal Barriers (10)

- Privacy;
- Identification and authentication;
- Liability;
- Intellectual property rights;
- Public administration transparency;
- Relationships between public administrations, citizens and other ICT actors;

- Re-use of public sector information;
- Administrative law;
- E-procurement;
- E-commerce;

Organisational Barriers (3)

- Organisational culture;
- Co-ordination;
- Channel rivalry.

Definitions for each barrier have been developed and are available for comment on the project web site at <http://www.egovbarriers.org>. Each research partner is now taking 2-4 barriers forward, refining the definition, analyzing links with other barriers, evaluating existing studies in the area and cataloguing appropriate examples.

Second, Bill Dutton made a presentation entitled 'Continuity and Change: A Perspective from an Earlier Decade', outlining the history of e-government from the 1980s. An important breakpoint was in the mid-1980s when government could use technology to connect people via networks (although the technology was quite rudimentary). A second breakthrough came after the mid-1990s with the introduction of the internet and the birth of e-government. The presentation drew comparisons with a policy research paper written by Dutton and his colleagues in 1994, 'Electronic Service Delivery: Themes and Issues in the Public Sector'¹. The 1994 paper identified four different categories of services that enabled the government to connect with people in the process of service-delivery - narrowcasting, transactions, information retrieval and remote communication - and five drivers of Electronic Service Delivery - technological opportunities, improving services and efficiency, political climate supporting risk taking, champions and sponsors, and market forces. The paper had concluded that the public sector in Europe was not making effective use of ICTs, despite the fact that in the 1960s government was ahead of the commercial sector. Many of the barriers identified in 1994 could be applied to e-government today: functional boundaries, fragmentation, agency 'barons'; risk adverse bureaucratic cultures undermining champions; over-centralization, diminishing local innovation; limited financial resources; fears of staff cuts, job reorganization, geographic redistribution (perceived as hidden objectives); citizen concerns (privacy, customer v. citizen); record of past IT failures in the public sector; and difficulties of scaling up from pilots. One aim of this study must be to help the European Commission finally overcome these barriers to e-government.

Feedback

Three main topics arose for discussion. First, participants asked about the study itself: what the European Commission intended to do with the study, how the case studies would be selected and how the current study could ensure that the barriers identified in the 1994 report that are still problematic could be overcome by the research. Second, discussion arose over the term "barrier". That is, the implication of a "barrier" is that if one removes the barrier all will be fine; yet barriers cannot always be removed and there are positive aspects to some of the barriers identified. For example, privacy is essentially a 'good' thing, to be protected – likewise, it is not possible to 'overcome' organisational culture which will always exist. Third, the point was made that government has traditionally been a 'one to many' concept; the 'many to many' characteristic of virtual communication is to some extent new to government and may act as a barrier to e-government.

¹ Dutton, W., Taylor, J., Bellamy, C., Raab, C. and Peltu, M. (1994) Electronic Service Delivery: Themes and Issues in the Public Sector.' Policy Research Paper No. 28, Uxbridge, UK: Programme on Information and Communication Technologies, Economic and Social Research Council.

The research team acknowledged that the project needs to clarify a working definition of the term “barrier” as certainly all barriers are not always problematic. The project is about enabling progress as opposed to eradicating barriers – it is important that the project works against identification of the same barriers 10 years into the future. Careful identification of cases was seen as an important part of the project; and these would be selected on the basis that they could be used by others to progress e-government within their particular context. The results of the research will build on the existing e-government research programme at the European Commission and will influence national government activities where appropriate.

Session 2 Legal barriers relating to public administration transparency

Florence de Villenfagne presented a discussion of two important legal barriers to e-government: **public administration transparency** and **re-use of public sector information**.

First, **public administration transparency**, the question of ensuring access to public sector information, is an important issue at the European level. Each country organises access to its public information according to its own administrative regulation and practice. Six key issues can arise:

1. some European countries still only allow their national people to access their public information;
2. there can be big differences in prices both between and within countries;
3. competition issues related to the re-use of the information;
4. copyright issues can be seen both as a barrier and as a need as intellectual property rights have to be respected;
5. privacy / data protection issues that justify exceptions to access, which, similar to copyright, can also be viewed as a barrier and a need; and
6. exceptions to the right of access (e.g. due to secrecy, interests of the state, interests of third parties etc).

There are both potential problems and advantages of attempting European harmonisation on public administration transparency policy. Implementing clear information channels at European level explaining the different access regimes in the Member States – leaving the determination of the actual legal framework in the hands of the Member States themselves - may be the most appropriate way forward.

Second, the issue of **Re-use of public sector information** is related to public administration transparency. At present, there are legal barriers to the re-use of public sector information; yet some of these barriers are indispensable in democratic states and must remain. The research will identify the barriers that would necessitate an action at European level and those that should remain at national level. Five potential issues arise from the question of re-use of public sector information:

1. the European framework is based on the non-harmonised access regimes of the Member States;
2. the choice of allowing the re-use of information or not has remained within the Member States;
3. exceptions to re-use exist;
4. the determined pricing regime is rather vague; and
5. the intention of public services to use profit making prices.

Feedback

Workshop participants suggested cases or examples that may be of value to the study. One example could be trading funds such as the MET office or Ordinance survey. A second example could be the non-use of post codes in the Republic of Ireland. In this case the post office says postcodes are not needed but there is a great deal of commercial pressure to use them as they want postcodes to support their commercial marketing programmes. Citizens have expressed

concerns about how the information about their postcodes might be used by these private companies.

Session 3 Legal barriers to electronic government in the field of liability law, intellectual property rights, electronic signatures and electronic commerce.

Sjaak Nouwt presented an overview of four legal barriers to e-government: **Liability**, **Intellectual Property Rights**, **Electronic Signatures**, and **E-commerce**.

Liability was discussed at four main levels of e-government processes:

1. information delivery (e.g. liability for breaching IPR, privacy rights, confidentiality, defamation and incorrectness);
2. communication between public bodies and citizens or businesses / organisations;
3. transactions between partners (e.g. an application for a certain license reaches the government too late); and
4. interaction and participation, (e.g., an electronic vote could get lost due to a technical malfunction).

Another way to look at liability issues is to determine the extent to which governments are responsible for problems with infrastructure and/or content. Government, citizens, or private companies can be liable if the infrastructure and/or content go wrong. One possible solution for government is to exonerate liability but this can lead to a decrease in trust of government by citizens. However, governments which accepted all liability to increase citizens' trust would undertake a significant economic risk.

The second barrier discussed was **Intellectual Property Rights**. Government has a duty of care if someone owns intellectual property rights regarding the information they disseminate to the public. The same is true when governments request information from the public. Government also needs to protect information that has been brought into the public domain against private parties who, by giving the information some added value, could commercialise this information and thus pull it out of the public domain again.

For the third barrier, **Electronic Signatures**, a distinction must be made between 'electronic' and 'digital' signatures. The term 'electronic signature' is used with respect to all technologies, which replace hand-written signatures in an electronic environment. The term 'digital signature' refers to the advanced electronic signature, being a technological application, which uses asymmetric encryption to ensure the authenticity of electronic messages and the integrity of the contents of these messages. The presentation summarised the current legal framework and associated difficulties, and argued that it is necessary to further clarify the open norms laid down in the e-signatures directive; to review the possible need to make the directive more technology neutral; to examine how theory and practice can be better tuned; and whether the law can create solutions for the economical and technological barriers, given that in the current situation the costs do not outweigh the benefits of the digital signature.

The issue of **Electronic Commerce** is not viewed as a barrier to e-government but may be a special case that could provide solutions for e-government. There are elements of the e-commerce directive that may help to advance e-government in the EU. For example, e-commerce may stimulate entrepreneurship; e-government needs to be aware of competition both from the private sector (as some government services could be taken over by the private sector) and other member states (as citizens can access public sector information from anywhere they wish). Also, a lack of trust from customers is problematic for electronic commerce as without trust the company will lose customers. Similarly governments need to consider how they can create trust and awareness amongst citizens in order for them to make effective use of e-government services.

Feedback

Discussion highlighted the need to develop distinctions between barriers and areas (e.g. electronic signatures are a special case of authentication); and to explore further the positive and negative aspects of each barrier. A second theme was the barriers to e-government that could arise due to problems of keeping digital records and archives. For example, current legal regulation cannot be transferred straightforwardly to the on-line environment; the permanence of electronic media is problematic (e.g. a copy of information on CD only lasts 3 years); and audit trails etc are harder to maintain. For example, in the UK, there was no record of ministerial decision making when reviewing how the foot and mouth crisis was handled because many decisions were being made quickly by email. Thus, it was not clear where and how the decisions were being made and there was no audit trail for accountability. Indeed, the parliamentary account of the development of the fast train in Netherlands had similar difficulties, where again, records of the digital communication were not available.

Session 4 Organisational culture as a barrier to e-government

Web-based technologies - have created a new technological environment for both citizens and governments. Different institutions - with different organisational cultures - will vary in their cultural responses to the possibilities that these new technologies provide. Helen Margetts and Rebecca Eynon presented an approach to the study of organisational barriers to e-government based on the 'cultural theory' of the anthropologist Mary Douglas who has suggested that there are four cultural 'myths' which underpin institutional or group responses to certain environments. These myths 'provide the foundation for the essential "unity in diversity" of human experience' (Thompson et al, 1990: 25)². They were originally applied to eco-systems (see Thompson et al, 1990: 26-28) but were adapted by Margetts and Dunleavy (2002)³ to sum up different cultural attitudes to the new technological environment facilitated by web-based technologies. The current research is designed to build upon this previous work.

Each cultural type has a distinctive 'cultural myth' in their approach to technology; each myth has both advantages and disadvantages. The first myth, 'technology benign', tells us that the technological world is forgiving and trial and error are justified; managers following this view will have a laissez-faire approach to technology. The second, 'technology ephemeral' myth, is where the technological world is seen as a terrifyingly unforgiving place. In this case the managing institution treats technology with great care; resists technological innovations (particularly large-scale interrelated systems) and uses technology only in modest, decentralised ways. In the third, the 'technology perverse/tolerant' myth, technology is forgiving of most events; the managing institution must, therefore, regulate against unusual occurrences - neither the 'unbridled experimentation' nor 'tiptoe behaviour' of the other two myths is appropriate. Technological experts are vital for this task. In contrast to all the other three, the 'technology capricious' myth involves a fatalistic approach, with a view of a random world. Institutions with this view of technology do not really manage or learn: they just cope with erratic events, suffering the by-products of continual technological innovation. Identifying these myths within organisations could help organisations to develop strategies that 'shift' organisational cultures away from damaging technological myths and aid the improvement of e-government processes.

Feedback

In discussion workshop participants commented that the picture was far more complex than the four myths could describe. There was also some discussion as to whether the myths needed to be identified at the country or organisational level; and the extent to which the examples provided were perceived as accurate at these two different levels.

² Thompson, M., Ellis, R., and Wildavsky, A. (1990). *Cultural Theory* (Colorado:Westview Press).

³ Margetts, H. and Dunleavy, P. (2002) *Cultural Barriers to e-government*, Academic Article accompanying the National Audit Office report *Better Public Services Through e-government* (London: TSO) HC 704-III, Session 2001-2002 4th April 2002.

The research team acknowledged this complexity; and emphasised that the research will use the framework as a loose guide rather than seeing a culture within any organisation as a pure form. Clearly, there are competing cultures within any organisation. Also, while the country level is important and has an influence on the culture of an organisation the research will focus primarily on the organisational level. Overall, the framework is intended as a diagnostic tool that can be related to actions to facilitate change process, or change attitudes.

Session 5 Using a wiki to overcome barriers to e-government

In this session, the research team introduced workshop participants to the on-line inventory of e-government barriers on the project website at <http://www.egovbarriers.org>. The inventory lists the barriers currently being researched, provides definitions and discussion of each barrier, a summary of the work done so far and country examples, and invites visitors to the site to comment on the content, provide further examples etc.

Feedback

One area for discussion was whether the research team felt that e-government was a good thing - as implied in the emphasis on “overcoming barriers”. A further issue was how to encourage usage of e-government services by citizens, as for many government services the average citizen use it rarely (perhaps once a year, as for filing of income tax) and this can make it difficult to ‘domesticate’ e-government. Governments seeking to implement e-government strategies also have to be aware of the global economic and commercial pressures and become more sophisticated, for example, in the future we could have global driving licences. Participants also talked about the value of the “e” in e-government.

The research team discussed the pros and cons of e-government and agreed that, regardless of their viewpoints, it was important to consider the potential malign – as well as beneficial - consequences of e-government. The research team also noted that aspects such as incentivisation and structural issues for citizens were important for this project. For the majority of the research team the “e” was still very important.

The research team then brought the workshop to a close and thanked everyone for such a productive and interesting session.

3. Value to the project

The workshop was a very valuable event for the project, advertising the project more widely and drawing in an excellent range of participants in terms of geographical spread and intellectual approach. As a result of the workshop four individuals have joined our expert group and many others are visiting the website and joining up to receive the newsletter. The workshop has also informed thinking about the development of the research. It is vital that this piece of research helps the European Union to move beyond the barriers to e-government that have been present for over a decade. The research team needs to select good cases, to provide more sophisticated definitions of the terms “barrier” and illustrate the complexity of the barriers that have been selected. Further clarification is required on the research teams’ views on the positive and negative implications of “e-government” and there may need to be a greater emphasis on the citizen within the project. The numerous suggestions of examples and cases will be followed up by the most appropriate member of the research team.

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