Dialogue with Citizens – the Missing Link in Delivering e-Government?

Wendy OLPHERT
Research School of Informatics, Department of Information Science, Loughborough University
Loughborough LE11 3TU, UK

and

Leela DAMODARAN
Research School of Informatics, Department of Information Science, Loughborough University
Loughborough LE11 3TU, UK

ABSTRACT

Many governments and political bodies across the globe are exploring the potential benefits of ICT as a means of improving communication with citizens and stimulating participation and engagement in political and civic processes. This paper reviews progress to date in the UK towards delivering e-government at the local level, and concludes that that there is evidence of a lack of 'pull-through' of the ministerial concepts and vision in the current delivery of e-government. In order to achieve the important e-government goals of increasing citizen participation and improved speed and efficiency of the underlying processes, the authors argue that a participative approach to the design and delivery of e-government is required. A co-creation approach to design is proposed. This will enable a dialogue between the citizen and the local authority, and which will embody and support democratic processes which will facilitate the genuine co-creation of decisions.

Keywords: e-government; e-democracy; participative design; sociotechnical systems; co-creation

1. INTRODUCTION

Governments and political bodies across the globe are exploring the potential benefits of ICT for improving communication with citizens and stimulating participation and engagement in political and civic processes. The United Kingdom is no exception to this, indeed it was ranked 8th in the world in terms of maturity of its e-government initiatives, according to a recent survey [1]. The UK Government's strategy for e-Government is a central part of its agenda to reform and modernise all public services, and it has set itself the ambitious target of making all its services (at both national and local level) available online by the end of 2005.

The key benefits which are expected to be achieved as a result of the electronic delivery of services are:

- wider participation/reduced social exclusion;
- improvements in information sharing between services and agencies;
- greater variety, choice and convenience of access for customers;
- improved speed and efficiency of the processes which underpin services.

2. STRUCTURE AND FUNCTIONS OF UK GOVERNMENT

Government in the UK is undertaken by a complex mixture of central and local agencies. Administration for Scotland, Wales and Northern Ireland has been devolved to the regions. The main link between central government and local government in England is the Office of the Deputy Prime Minister (ODPM). Many of the public services required by citizens are delivered through a network of local authorities - it is estimated that around 80% of interaction between public service providers and the public is managed at the local or regional level, rather than at the national level. [2].

Local government is responsible for delivering a wide range of functions and services, including education, social services, environmental and waste disposal services, local planning and building regulation; highways and public transport, social housing, fire services, tourism and leisure. The powers and responsibilities of local authorities are laid down under various Acts of Parliament. Many of their duties are mandatory, although some are discretionary. The main functions of local government are run by either one or two levels of local council. Two tier government is provided by a mixture of county councils and district or borough councils. Single tier local councils, combining the functions of both county and district councils, serve the London boroughs and the largest metropolitan areas. Some local facilities (e.g. car parking, burial grounds, community centres, sports fields) are governed by very local, small councils (parish, town, or community). The councils, or local authorities, consist of elected councillors, who are paid an allowance. School teachers, the police, firefighters, and many other administrative, clerical and manual workers providing the services described above, are employed by the local authorities; about 2 million people are employed by local authorities across the UK. There are almost 400 local authorities of different sizes in England, together with around 10,000 town or parish councils.

3. LOCAL E-GOVERNMENT: PROGRESS TO DATE

Delivering effective e-government at the local level is therefore a critical component of the UK Government's e-government strategy. It is hoped that the change will breathe new life into local democracy and transform local services. The objectives and priorities for e-Government at the local level have been set out in a document issued by the ODPM, entitled *Defining e-government priority services and transformation outcomes in 2005 for local authorities in England* [3]. To monitor progress towards the goal of making all local government public services electronically accessible by 31/12/05, each local authority in England is required to record its plans and performance in a document entitled 'Implementing Electronic Government' (IEG). The information contained in the IEGs produced by local authorities, together with information contained by regular surveys such as those carried out by the Society of Information Technology Managers [4]. in the public sector, provides a clear

picture of the progress which is being made towards achieving local e-government.

The primary delivery method for e-government is the internet. Local e-Government is regarded as an integral part of the overall 'UK Online' programme to realise the benefits of the Internet for all citizens. However only approximately 50% of homes in the UK have a connection to the internet at present [5] and therefore a variety of other access mechanisms are being explored and developed. For example, interactive digital television (iDTV) is being promoted by the UK Government as a technology which offers the potential for easy public access to a wide range of Internet-based services through the television set in the home, without the need for a personal computer [6].

The most recent report by SOCITM [4], indicates that all of the local authorities in England and Wales now have an active website. This means that any citizen with access to the internet can now access some information about their own, or any other, local authority.

However having an active website does not by itself bring about all the benefits which the Government hopes to achieve with e-government. Research suggests that the primary benefits at present are only in terms of providing greater variety of access routes to information. The range of information which is available to the citizen via the website in many cases is no greater than is already available through other media (and in many cases considerably less). For the Better Connected 2004 study, [4] a team of reviewers examined all websites managed by 467 councils in the UK, against a structured questionnaire. The team classified the websites as 'promotional', 'content', 'content plus', or 'transactional'. The term 'transactional' refers to websites which are 'significantly interactive', and this attribute might be taken to be a necessary part of the requirement for e-government.
Using this classification, the websites were evaluated as follows:

- 56 (12%) local authorities have promotional sites
- 206 (45%) have content sites
- 177 (38%) have content plus sites
- 23 (5%) have transactional sites

Transactional sites are those which are significantly interactive, in other words which allow citizens to access services fully rather than simply obtain information about services and how to access them through other routes/media. For example, while 89% of councils provide information about planning issues through their websites, only 8% enable the user to view planning appeal information or application documents and drawings, and fewer than 10% enable the user to monitor the progress of an application electronically [7]. To fully meet the requirements of e-government, all sites should be offering transactional capability.

A second, and equally important requirement, is that sites should be fully accessible. Government requires that all its local and central department websites should conform to level AA of the International World Wide Web Consortium's Web Accessibility Initiative guidelines for accessibility [8]. However the SOCITM study [4] found that of 23 websites offering transactional capability, one alone achieved the level AAA standard for accessibility (i.e. the highest rating), none of the remaining sites achieved the level AA rating, and only three achieved a level A rating. The remaining 19 transactional websites were deemed not to meet the minimum accessibility criteria.

The regular SOCITM surveys indicate that progress is being made towards e-government in electronic service delivery at the local level, but that it is happening slowly and that there are still major obstacles to overcome in delivering accessible services. Meanwhile, usage levels are still low. While 80% of government transactions take place with local, not central government, only around one in 10 UK citizens have used online government services, compared with half of the Canadian population [1]..

4. PROGRESS TOWARDS E-DEMOCRACY

While some benefits may be visible in terms of increasing citizens' choice and convenience of access to services, it is not clear whether local e-government is having any impact in terms of e-democracy or increased citizen participation. In line with the national strategy for local e-government set out in www.localegov.gov.uk [9]., under the heading 'Renewing local democracy' points for action include the question – 'Are you using e-government to increase opportunities for more people to:

- Express their views and make decisions on services and plans?
- Debate issues of local importance with you - and with each other?

A small study has recently been carried out by the e-democracy study team of the British Computer Society's Socio-Technical Group [10] which compares the e-government initiatives of three different local authorities situated close to each other in the North West of England, as evidenced by the websites they provide.

Site A is a Metropolitan Borough Council and is one of the local authorities which offers a transactional website. Indeed this website has been redesigned as a result of public consultation, and complies with Level AAA accessibility – the highest standard. One change is that the website now seeks feedback from users, with an online feedback form. There is also a quick link which encourages people to become involved in consultation on local issues, e.g. through consultancy groups, or by taking part in on-line polls. Perhaps paradoxically, the main link under the heading 'Democracy' appears to be rather more informational than interactive, e.g. listing information on such areas as 'Best value plan', 'Community strategy, and 'Standards committee'. This application of the concept of 'democracy' on the website is not limited to this local authority. For example taking the website of a local authority geographically close to it, Site B has a website which also offers 'democracy' as an option, but again the information tends to be offered as content rather than as an invitation to take part in something approaching a democratic process.

More specifically, Site B's 'Democracy section contains information such as how to contact councillors, and council minutes. The website also has a paper 'Implementing Electronic Government 2002', which focuses very much on the efficiency and effectiveness of service delivery. One section of this does put electronic delivery into context: 'Services will be provided through a variety of access channels. The primary ones will be telephone via a Contact Centre, face to face via One-stop shops, and electronically via the internet and e-mail as well as through traditional methods such as letter and fax.' This paper also says 'The council has established a website as a major tool to promote democracy and increase accountability of the Council and its citizens.'

Site B's perspective on e-government is that it is 'about transforming business processes and providing better seamless services to all our citizens more effectively. It has strong links to 'Best Value.'' It sees the benefits of e-government as including (in list order):

- Access to the authority's services in the way users want to access them, and at times when users want to access them.
- Access to e-government and other information across the borough.
- Reduced social exclusion.
- Access to learning opportunities

In a list of 12 benefits, the only one which strongly implies e-democracy is fifth on the list:

- The ability to interact, more directly and easily, with members of the council.

In a section on 'renewing local democracy' Site B defines local democracy under 3 headings:

- 'democratic engagement and participation', which includes finding out what the council is doing, participating in local debate and planning, and electronic voting.
- 'supporting councillors', including that their access to e-mail, the internet, and comprehensive information.
- 'promoting social inclusion', to ensure the provision of new channels to those excluded from services in the past, and to make access easier for people with disabilities.

Another authority which is geographically close to Sites A and B is one which is rated in the category 'most improved' since the previous survey by the SOCITM 2004 report [4]. One of the key site areas on the home screen for Site C is 'Council and democracy', but, rather like the Site B, the pages tend to be informational, rather than transactional. The heading introduction says 'This section provides information about the council, councillors, elections and electoral services, e-Government, and associated information about (this local authority)'.

A search of websites from other local authorities using the keyword 'democracy' is revealing. Some sites, like Sites B and C described above, have sections on 'e-democracy which are descriptive or informational. A few sites do not specifically mention e-democracy, but do actually contain invitations to take part in the democratic process, e.g. an invitation to take part in consultation on how residents would like services delivered, and on the regeneration of a square.

While the SOCITM 2004 Report [4] refers to an increase from 10 transactional sites in 2003 to 23 in 2004, it is clear that 'transactional' does not necessarily include e-democratic processes of consultation. It is also clear that there are some sites which are not included in the transactional list, but which nevertheless do offer an element of consultation.

Interviews with a number of local government officers involved with implementing their local strategy (i.e. the IEG documents) showed that whilst there is recognition that the most prominent objectives of the IEG initiative are to improve customer service and that e-methods offer the potential to improve dialogue with citizens, e-democracy (generally expressed as e-voting) is viewed as less important than e-Government. Interviews revealed little evidence of electronic methods being used in current projects involving consulting and communicating with the public or in communicating and engaging with the local community. Additionally, although an important element of e-Government is perceived to involve consultation with citizens, interviewees reported very limited activity and lack of success where efforts had been made to consult with users about their requirements.

Such findings indicate a lack of 'pull-through' of the ministerial concepts and vision into the current delivery of e-government. In particular there is little evidence that the mechanisms for e-government which are being offered currently can, or do, achieve the important e-government goals of increasing citizen participation and improved speed and efficiency of the underlying processes.

In the strategy paper for e-government produced by the ODPM [9], two key concepts are clarified, e-citizenship, and e-democracy:

"By e-citizenship we refer to the drive to empower local populations, to give them the skills, confidence and opportunities they need to exploit the opportunities that e-enabled access to information and influence that local e-government should bring. By e-democracy we mean not only the capacity to vote electronically in local and national elections, but the use of the internet and related technologies to facilitate the engagement of citizens in consultation and community planning."

To deliver this requires the implementation not just of useful, usable and accessible technical systems (where there is clearly still considerable progress to be made), but of sociotechnical sub-systems, combining technology, organisational and communication processes which enable and encourage dialogue between the citizen and the local authority. Such mechanisms will facilitate the co-creation of decisions about local issues, with citizen engagement and participation in the process, rather than simple one-way transmission of information from the local authority to the citizen.

5. ENGAGING WITH CITIZENS

Government aspirations for e-government systems which lead to wider participation in the political process and reduced social inclusion cannot be achieved unless these goals become central to the design, delivery and implementation of e-government. It is now widely recognised that effective systems need to be based firmly on the requirements of their users and stakeholders e.g. as instantiated by the International Standard ISO 113407, Human-Centred Design, 1999 [11], and there are several well-documented examples of public systems in the UK which have failed precisely because they have not followed this principle e.g. [12]., [13]. Citizens are key stakeholders in systems for e-government, yet they appear to be having little input into their creation and development. One area where Government does recognise the need for stakeholder involvement is in evaluating the design of websites. The Government specifies e.g. [6] for example, that "users" (i.e. stakeholders - not just visitors to the site, but also to other stakeholders such as recipients of output from the system, including support staff, and those providing the local authority services) should be involved in the evaluation of websites. Some evaluation reports have included user reviews e.g.[1], although others such as the SOCITM 2004 report [4] have adopted a 'mystery shopper' approach to evaluation, where reviewers have role-played different types of stakeholder. Interviewees in the British Computer Society's Socio-Technical Group [10] commented on the unsuitability of performance measures required in the IEG form, believing that the use of surveys and related qualitative data collection

techniques to monitor customer satisfaction levels should be encouraged. Instead evaluation methods currently used focus on usage levels, such as the number of hits on a website. Even an annual survey conducted to assess satisfaction is described as asking 'whether customers have used the e-method', rather than for more qualitative data that may help improve the nature, breadth or quality of service provision, or help increase participation in the democratic process.

While local authorities have been consulted by Government about the development of e-government strategies and systems, there is little evidence of systematic or widespread participation of other stakeholders, particularly citizens. This again demonstrates the gap between Government aspirations for improving participation and social inclusion, and the activities which are actually taking place. To achieve greater social inclusion requires that those who are currently marginalized in society must be enabled to actively participate in the determination of both individual and life chances. In order to be able to influence the shape of future technologies, stakeholders need to be actively engaged in the identification and articulation of their goals, needs and aspirations, and in the evaluation and validation of alternative options. This means that techniques are needed which promote learning and understanding about potential choices and emerging opportunities, so that stakeholders can assess the 'impact' of designs at different levels e.g. for usability, usefulness, and satisfaction of their task and social goals.

A participative approach to the development and delivery of e-government can achieve the benefits both of shaping systems to meet the needs of stakeholders, and empowering the stakeholders to become more informed users/consumers of ICT products, systems and services. The following summarises the critical success factors for achieving these benefits:

- clarity of the role of stakeholders in the participative design process;
- engagement of citizens in (i) direct and active analysis of their objectives, aspirations and needs (ii) the validation of requirement specifications and (iii) testing of resultant design prototypes, simulations etc. ;
- participative activities which citizens perceive to be relevant and motivating;
- an engagement process which requires minimal learning of new concepts;
- an engagement process which promotes understanding about potential choices, emerging opportunities etc. ;
- an outcome which empowers the citizen to be a more informed user/consumer of ICT products, systems and services.

Finally, from a strategic perspective, effective stakeholder participation requires the integration of human-centred design principles in the formulation of public policy, planning strategy, commissioning of all ICT systems which will impact on the public at large, and the allocation of realistic resources explicitly to the process of stakeholder participation.

6. A CO-CREATION MODEL OF DESIGN FOR E-GOVERNMENT

It is estimated that approximately two thirds of local government services in the UK will be e-enabled by the end of 2004. If this is to result in genuine improvements in participation of citizens in the democratic process, and reduce social exclusion, rather than simply increase the one-way of

transmission of information between government and citizens, the authors argue that the principles of democracy need to inform the process of achieving e-democracy through e-government systems. Such principles need to be embedded into all local government processes, with clear relationships between services and initiatives and the e-government agenda. A co-creation approach to design is proposed. In such a model, key goals for e-government such as social inclusion must become an overt and central design goal' and all key stakeholders, including designers and citizens, voluntary and governmental agencies and business, share responsibility for achieving the objective. Such a model is illustrated in Figure 1 below:

Figure 1: A Co-Creation Model of Design for Social Inclusion
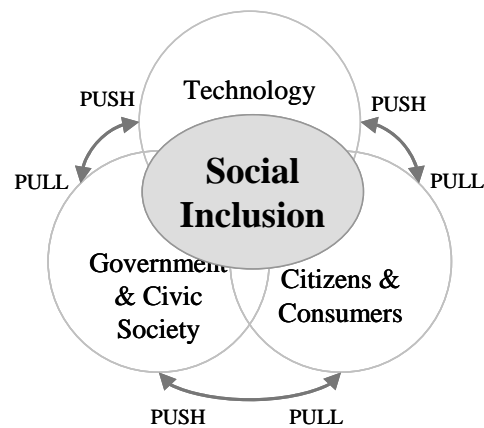
Notions of 'technology push' and 'user pull' are familiar concepts associated with diffusion patterns of innovation. e.g. [14]. In a co-creation model, these forces are harnessed to create and shape inclusive sociotechnical systems. As part of the technology push, the role of the design community will be to deliver systems, services and products that are well matched to the characteristics of citizens (as a result of developing and applying established and evolving human-centered inclusive design methods). The role of technology providers will be to develop more inclusive systems/ services/ products.. The citizen's role will be to be more demanding, informed and willing to 'co-create' the systems, products, services best-suited to their lives. Crucially, the role of national government will be to create an environment in which 'push' and 'pull' strategies are encouraged, for example by promoting and rewarding appropriate activities in society both in terms of technology design and civic participation.

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