

A FRAMEWORK FOR INCREASING PARTICIPATION IN E-GOVERNMENT

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Abstract - *The Internet potentially provides government with great opportunities for delivering services, encouraging democracy and promoting economic vitality. E-government is regarded with such importance that the UK Prime Minister has set various targets that ensure all UK citizens have access to the Internet by 2005 (www.e.envoy.gov.uk). However, with these opportunities come many problems. This paper will concentrate on the problem of a lack of public participation in e-government and in particular the exclusion of certain groups of society from using technology, known as 'the digital divide'. This paper will then suggest a framework for involving the public in e-government services. Three different examples of e-government services will be assessed to see how they compare against the framework and finally some conclusions are drawn as to how this framework can help bridge the digital divide.*

Keywords: **INCREASING PARTICIPATION IN E-GOVERNMENT**

1. Introduction

E-government is defined by Burns & Robins (2003) [1] as 'governments' efforts to provide citizens with the information and services they need, using a range of information and communication technologies.' Teicher, Hughes & Dow (2002) [15] describe e-government as 'the application of information and communication technology to the organisation and operation of government.' According to McCartney (2000) [7], E-government has three guiding principles:

- to build services around an increased choice for the citizen
- to make government and the services it provides more accessible
- to ensure social inclusion by making use of information more effectively

In the next section we explore the importance of e-government, particularly its relevance to the UK government, the digital divide and the UK governments' attempts to address the digital divide.

In the remainder of the paper we propose and detail a framework for increasing participation. Finally we evaluate this proposal for three areas of citizenship.

2. e-government: the context

2.1 Why is e-government important?

The development of e-government is seen as important for a number of reasons and these can benefit both the general public and the government.

On the local government site,

www.localgov.gov.uk, e-government is described as being at the heart of the drive to modernise government and it can achieve this by helping transform services, renew local democracy and promote economic vitality.

According to the National Strategy for Local e-Government (www.localgov.gov.uk), transforming services means making services more accessible, more convenient, more responsive and more cost effective. A Strategic framework for Public Services in the Information Age (Cabinet Office, April 2000 [2]), describes how services can become more accessible through the use of new channels such as PCs, digital TV and mobile phones. It also states that more niche and individual services can be provided through database driven technology. This type of service provision would benefit minority groups, those with special needs and those with individual preferences by providing a more tailored service. (Kearns 2001[6]). An example of putting services online is the health service. The goal of the online health service is to allow the patient full access to his health records electronically, and provide self diagnosis tools on the National Health service (NHS) website. Teicher, Hughes & Dow (2002) [15] believe that e-government can utilise Internet based technologies to transact the business of government. e-government has the potential to offer services 24 hours a day, 7 days a week and provides the opportunity for the public to obtain these services without visiting a governmental office. This could potentially reduce costs for the government due to technology acting as an intermediary.

By renewing local democracy, the National Strategy for Local e-government states that councils can become more open, more accountable and better able to lead their communities. e-government can enhance the opportunities for citizens to debate with government and each other, and to access their political representatives. Within the government portal www.ukonline.gov.uk, there is such a space provided for citizen-to-government and citizen-to-citizen interaction. Here is a gateway to government consultation, a platform to allow public discussion of policy issues, to offer political and civic information and to create space for e-democracy. Government-to-citizen relationships have been enhanced by technology in other countries as well. The Danish minister of education holds an online discussion once a week and the European Union offers occasional open multilingual chats with commissioners. In Finland and Canada, the governments have created virtual workspaces in the form of online working groups, with virtual libraries and archives for citizens to engage with government in policy making. (OECD 2001 [9]).

By promoting economic vitality, the National Strategy for Local e-government (www.localgov.gov.uk) argues that a modern communications infrastructure, a skilled workforce and the active promotion of e-business can help local councils and regions promote employment in their region and the employability of their citizens.

With regard to improving communication between government and citizen, a study on the impact of ICT around the world has shown that several governments reported that its use has led to much increased levels of feedback from citizens, for example in Japan and Spain. (OECD 2001 [9]) Norway and Switzerland also reported that contact with citizens became faster and less formal.

2.2 What is the UK Government's E-Strategy?

The government vision was outlined in the UK online campaign, launched by the Prime Minister in September 2000 and posted on the website of the Office of the e-envoy: www.e.envoy.gov.uk. The initiative aimed to ensure that everyone who wanted it would have Internet access by 2005 and that all governmental services would be delivered electronically by the same date. The initiative aimed to benefit two different groups, those with current access to the Internet and those with no access. For those with no current access to the Internet, a range of initiatives has been employed to encourage involvement and participation in e-government. These initiatives will be discussed and assessed as to how successful they have been, but firstly this paper will look at the problem of

some sections of society being excluded from using and contributing to e-government.

2.3 The problem of the 'Digital Divide'

The term digital divide refers to the exclusion of certain sections of society from accessing and interacting with technology, and this can be caused by a variety of reasons. Figures from OFTEL (2001) [12] show that one third of the UK population continues to show little or no interest in the Internet and this one third is made up predominantly of the poor, the elderly and other disadvantaged groups. This lack of involvement with new technology could mean that these groups become further disadvantaged when more services are available online and this could then deepen and reinforce existing, non-digital inequalities throughout society (Kearns 2001 [6]). In addition, sections of society who do not have access to technology may be excluded from decision-making processes and therefore their voice may not be heard. Teicher, Hughes & Dow (2002) [15] argue that if services are going to be provided over the internet alone, it is imperative that provision is made to ensure access by those who cannot afford the technology, those who cannot use the technology because of disability or lack of expertise and those who are not literate in the official language of the country in which they reside. The digital divide is not just seen as a problem from a social point of view. The PAT 15 Report (PAT 2000 [13]): Closing the Digital Divide, argues that a digital divide is unproductive from a business perspective. The report states that competitiveness depends on the skills and creativity of the whole workforce and if sections of society do not have access to information, this would not only be unfair but be inefficient as well. Economic competitiveness and social inclusion go together. The question of why there is a digital divide must be addressed in order to find a solution. Dial up access in the UK to the Internet is cheaper than almost anywhere else in the world so just a cost consideration is unlikely to be the only reason. The belief by sections of the public that the Internet has no relevance to their life and the fear of the misuse of private and personal data are other possible reasons (Kearns 2001 [6]). The digital divide also exists between those living in rural parts of the country and those in the city. Rural councils can be disadvantaged in their efforts to provide services on the Internet through poor technological infrastructure, and this problem has been specifically highlighted through the strategy to make broadband services available across the UK. The government has made it clear that it is the responsibility of the private sector to improve the framework to expand web access. However, as the private sector is primarily interested in profit, all focus on improving broadband is tuned towards densely populated urban areas. In addition, due to technological limitations, (ADSL is only available

to households within 5.5 kilometres of the telephone exchange) even some people who live in urban areas are unable to connect to high-speed access. Without a firm and well-funded infrastructure, e-government has a limited base to develop from. There is little point in educating the public about broadband and e-government services if large numbers of people do not have access to them. (Sankey 2003 [14])

2.4 What is the Government doing to address the problems of the digital divide?

In order to counter the problems of the digital divide, the government gave funding to create a number of UK Online Centres. Over 1200 were launched in March 2001 and there are presently some 6000 operating across England. (www.e-envoy.gov.uk). The UK Online Centres provide access points for the Internet and training in ICT is provided. The groups that are targeted to make use of these centres are those with a basic skills need, lone parents, people with disabilities, the elderly and the unemployed. (OeE 2001a [10]). In addition, there are initiatives to increase the number of public libraries that offer Internet access and provide trained support staff to help with queries. Over £35 million has been invested to create a networked one-stop shop for government services at Post Offices. In order to increase home use of the Internet, tax breaks for employers who provide PCs and the Internet for employees for home use have been introduced. Also there have been initiatives to provide free or very low cost connectivity to the Internet for poorer areas of the community. An example of this is the Wired Up Community Scheme 2001. This was a £10 million DfES programme to put technology into some of the most deprived areas of the country. The aim was to see how individual access to the Internet could transform opportunities for these people through using new ways of educational, leisure and employment related services online. There were a variety of approaches used to achieve this, including the installation of 2000 recycled PCs in homes in Kensington, Liverpool and the connection together using PCs, satellite dishes and high speed ADSL lines of 1200 homes in Alston, Cumbria. Free courses for the unemployed in ICT training programmes have also been provided with the aim to increase the employment prospects of those attending (Kearns 2001 [6]).

However, despite these positive initiatives, there is not yet any clear evidence that use of the Internet, especially in the groups identified as suffering due to the digital divide has increased. In addition, according to a study by Mitchell (2001) [8], the process of e-government is not being used and

exploited to its full potential. In a breakdown of government, commercial and educational activity over a six-month period on various websites, figures suggest that government websites have significantly lower levels of usage than the others. The following section outlines some amendments and improvements to government strategy that could be made in order to achieve greater participation and involvement in e-government. The improvements are specifically related to encouraging those groups who are currently under represented, this is then supplemented by a proposal framework to increase participation, which is then subject to an evaluation in three arenas.

3. A Proposed Framework for increased participation

3.1 Improvements to the Governments strategy to bridge the Digital Divide

In his paper 'Progressive politics in the digital age', Kearns (2001) [6] argues for a number of ways in which public involvement in e-government could be increased. Kearns argues that more emphasis should be placed on local content, and the public should be encouraged to generate content of their own to ignite more interest. Local groups could even be funded to create their own materials. Interactive tools should be developed to provide learning opportunities on the Internet, aimed at under represented groups in society. The government should support more local and community network content and provide social software and training. Therefore, the skills of the users would be improved along with their understanding and levels of participation. More money should be invested in the roll out of broadband. Broadband is the term used to describe a wide range of technologies that allow high-speed, always-on access to the Internet. It is stated in UK Online (www.e-envoy.gov.uk) that broadband is essential to improve future national competitiveness and bring new services to businesses and consumers. (OeE 2001b [11]). However, the mission statement of the Canadian equivalent, The New National Dream: Networking the Nation for Broadband Access, has a very different emphasis. Here the vision stresses the social benefits broadband can deliver: 'Using broadband to help bridge the economic and social gaps that currently separate Canadian citizens is more than a policy imperative, it is a new national dream.' (Canadian National Broadband Taskforce 2001 [3]) This document also says that broadband is vital for improving the nation's health care, for making new learning opportunities available and important for economic infrastructure. Therefore as well as providing infrastructure for business growth, broadband can offer an infrastructure for tackling

the digital divide. Investment in educational and health appliances could be used to promote life long learning which in turn could counter illiteracy in poor areas and provide fast health consultation. Broadband could help rural communities overcome some of the disadvantages they have compared to urban areas by providing services and information online in a fast and always connected environment. Hutton (2002) [5] argues for the importance of government investment in technological infrastructure. ‘There is little public interest in the public ownership of a steel company. But this is not true in the building and sustaining of a national network – like rail or even broadband cable – where there are no immediate profits to be made and even long-run trading losses to be borne, but where the public interest demands that the network be universal in its reach, first class in its quality and equitable in the way it treats its users, who definitely constitute the entire population. A national rail network must offer every citizen the ability to travel and a national broadband network must offer every user the same opportunity to be ‘wired’. The privatisation and fragmentation of British Rail and the inability to build a broadband cable network through private initiative both reveal the same truth. The character of some forms of enterprise requires public engagement, public direction and even public ownership.’

3.2 A Framework for involving the public in E-Government

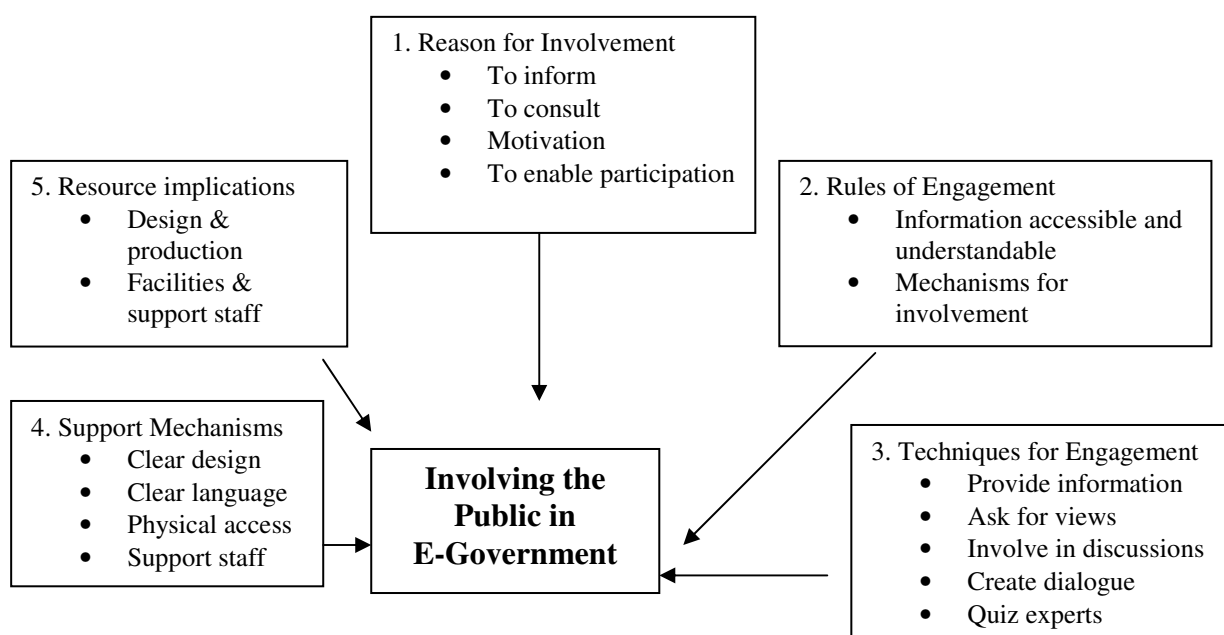
Public involvement is crucial to the success of e-government and all sections of society must be evenly represented for e-government to be considered as democratic and fair. Initiatives and

strategies have been suggested by the government and from outside sources for increasing participation and bridging the digital divide. However, this paper will go further and suggest a framework for involving the public in the process of e-government. This is adapted from a framework for engaging the public proposed by Elrick, Boyes and McCormick (2002) [4]. In that framework, the benefit of using a set of criteria was to enable decision-makers to identify the most important elements for consideration when engaging the public about managing radioactive waste. For the purpose of this paper, the framework has been adapted to concentrate on identifying what criteria could increase the usability of online government services and therefore potentially improve participation levels from the public. The framework addresses the following questions and argues that the more criteria that are met, the greater the involvement from the public is likely to be:

- Why should the public get involved?
- How is involvement permitted between government and citizen?
- What techniques of involvement are available for the public to use?
- What support facilities are provided?
- Does the service represent good value?

The paper will then analyse three online government services, and assess how many of the criteria within the framework have been incorporated into the online resource. Suggestions of further ways in which the public can be involved in these three services will then be proposed.

Framework for involving the public in E-Government.



Source: Adapted from Elrick, Boyes and McCormick (2002)

3.3 Case Studies for Evaluation

The National Health Service: Self Help Toolkit

(www.nhsdirect.nhs.uk)

The self-help toolkit offered on the NHS website is a guide for the public to find out what may be causing their symptoms, and this is achieved through a series of multiple-choice questions. The site then offers advice as to what to do next, including what medicines could be bought and what other people or organisations could be of help. This service can potentially benefit the government and the NHS by reducing the number of routine queries handled by doctors. This would result in improved response time for more serious matters and a reduction in staff labour costs. This service can also benefit the public. Obtaining information via this method can be more convenient by removing the task of booking an appointment and waiting in the surgery. It could also give the public a sense of empowerment in having more control over their own healthcare. However, the success of the initiative relies on the involvement of the public. The paper will review how well the service meets the criteria included in the framework.

Reason for Involvement

When attempting to involve the public in any areas of e-government, the question of why they are being involved must be addressed. For the NHS, this section of the framework is very clearly achieved. The NHS website succeeds in informing the public of topical issues regarding healthcare, and provides information on local services and facilities. This is in addition to the primary motivation of providing information about the user's ailment. There is also an online glossary of conditions. Participation is enabled through the self-help questionnaire.

Rules of Engagement

The next set of criteria that must be included is determining what the implications of the involvement are. The information on the self-help section of the NHS website is easily accessible and understandable. The mechanism for involvement is achieved through a question and answer format. Feedback is very important for increasing participation in e-government initiatives. For online services that inform, consult, involve and enable participation, the public need to be given clear and prompt feedback to questions or complaints they may have, or to obtain information as to how processes or policies have been influenced through their involvement. The NHS website provides a feedback option but this is only concerned with comments about the site. Although this general self-help tool is available, more specific diagnosis of health queries is not a service that is provided.

Techniques of Involvement

In order to increase participation, the purpose of involving the public with e-government must be made clear. The NHS website employs various techniques to involve the public. The site provides a large amount of information regarding common ailments and common cures. Dialogue is created between the user and the NHS, but this is only through a very structured question and answer section. For this reason, there are limited opportunities to quiz an expert, in this case a doctor.

There is an online enquiry service but this can only provide information about named health conditions. The public cannot contact doctors or nurses by email for more personalised queries, diagnoses, advice or counselling. The number for the telephone service of NHS Direct or a message directing the user to visit his local GP is provided for this purpose. A potential improvement to increase the level of participation for this service would be to incorporate more techniques of involvement that would allow for direct engagement with a member of staff. In addition, there is no facility to involve the public in discussions. This could be an open forum environment where members of the public could discuss health matters or suggest successful remedies to problems they have experienced.

Support Mechanisms

The correct support mechanisms must be identified to ensure any involvement initiative is a success. The NHS website does have a clear design and is easy to navigate. The use of a human body key to focus on the area of the health problem is used along with an index at the side of the screen. The language used is very clear; however there does not appear to be any provision for the information to be displayed in a range of community languages. Ensuring that the public have appropriate physical access to the resource is very important when discussing the NHS website. Even if there is full disability access to all online centres and they are easily accessible, if the patient was too ill to visit an online centre access must be possible in the home.

Resource implications

The most appropriate method of involvement must be considered and then the relevant resources should be identified. The self-help toolkit on the NHS website will potentially relieve pressures of time for GPs and money for the NHS.

3.3.1 The Department of Work and Pensions (www.dwp.gov.uk)

The Department of Work and Pensions recently produced a Green Paper outlining the reform of pensions. This particular government online resource allows discussion of the paper, with the benefits for government and citizen being that feedback gained could enhance the policy.

Although the number of people wishing to become involved in policy discussions is likely to be a lot more limited than those visiting an NHS resource, the greater the participation levels the greater the potential success of the initiative.

Reason for Involvement

The Department of Work and Pensions (DWP) specifies very clear reasons for involvement. The online resource informs the public of current issues by providing links to reports that can be downloaded from the website. The service also aims to involve the public and enable participation through an online discussion of issues raised in the recent Green Paper.

Rules of Involvement

The mechanism for involvement is a discussion forum and the site lists specific topics that should be debated. The forum lasts for a specified amount of time and once finished, independent moderators will prepare a summary of the comments that were published. The DWP will then take these comments into account when deciding the future direction of pensions law and policy. There is no immediate feedback given and no assurances that individual comments will be included in this summary.

Techniques of Involvement

The DWP succeeds in providing a number of techniques of involvement. Information is provided in the form of plain text or downloadable reports. Views and opinions on the policy document are positively encouraged along with discussions between citizens.

Support Mechanisms

The DWP resource has a clear design and information is easy to find. There are links to enable the viewer to find the nearest local Pensions office and the homepage can be translated into Welsh. An improvement to the support mechanisms would be to expand the translation options to cover more community languages. The site does however offer the translation of department leaflets into an extensive range of languages including Arabic and Urdu. Support staff are employed to check the content and the validity of posted messages to ensure that the participation is constructive and rewarding.

Resource implications

Time and money saving is not as important to this process of e-government as with the NHS online. The major benefit here to the DWP is to look at organisational changes and how the interaction of the public to policy making will benefit both government and citizen.

3.3.2 Government Information Website on the Conflict in Iraq (www.open.gov.uk)

This is an online resource for explaining the government's policy regarding the conflict with Iraq. The benefits of this service to the government are to explain the current policy and the government vision to the public. This is a good opportunity for the government as the website provides direct access to the voters and information and facts and figures can be presented in exactly the way the government wants and without any interpretation by the media. However, the public could only consider this information resource valuable if they are confident that the information is not biased and heavily spun.

The only reason for involvement on this website is to inform the public of the latest policy information and the background to the conflict. The resource does not attempt to involve the public in discussion regarding the policy documents presented on the site or enable any participation. Only the technique to provide information is utilised on this government resource. However, participation and involvement could be encouraged more if other techniques were incorporated. Online discussion forums and interactive tools that allow the public to have the say could lead to more involvement as the public might feel more empowered and have the ability to influence, agree and criticise.

4. Conclusion

There is huge potential for e-government and this potential can be realised if more sophisticated forms of involvement can be incorporated into online governmental services. The traditional role of government as the provider of services and the public as the consumer can be revised. If more active, interactive and participatory techniques are used, citizens will feel more empowered to take charge of the services they use and influence policies that affect them. E-government can put people in more control of their lives as well as providing services that can be easily accessed and delivered providing good value for both the state and the citizen. Services can be tailored to the individual and support mechanisms can ensure that no area of society is excluded. If this can be achieved, the digital divide can be reduced, as the Internet and online government services will have more relevance to the lives of the public.

When new online government services are being developed, or current online services modified, the use of the framework proposed in this paper would aid the process greatly. The framework will break the whole process down and can act as a checklist for the developer, to ensure there are effective methods of participation included in the service. The framework can also act as a basis for exploring innovative new ways in which public involvement can be encouraged through different techniques and mechanisms.

However, it is very difficult to make full participation a reality. The main problem in tackling the digital divide is that there is insufficient technological infrastructure in place to do so. Unless there is extensive public investment in technological infrastructure, and very strong political commitment and public support, the full potential of e-government cannot be realised. It is a much harder task to increase involvement of those sections of society who do not currently use the Internet than to increase involvement for those that have.

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