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# The impact of information and communication technologies on the communication of parliamentary information in the United Kingdom

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## **Abstract**

This chapter discusses the role and effectiveness of UK parliamentary public information services in both servicing the needs of the general public for information about government and also in communicating positive messages about the work of government. The authors argue that there is tension between both roles in terms of service philosophy and that this tension may have resulted in neither function being adequately achieved. Research results suggest that present practice, particularly in terms of web service delivery, is failing to engage the public in the political process and that government must rethink strategies for attracting users to their websites.

#### Introduction and background to the research

This chapter describes the results of a pilot project, which was funded by the UK's Economic and Social Research Council (ESRC), and which was conducted in 2001. The main aim of the project was to investigate the impact of new technologies (in particular in the form of official parliamentary websites) on the communication of parliamentary information, both from the perspectives of those within parliament, and of the actual and potential users of parliamentary information.

The project was considered to be particularly relevant and timely for a variety of reasons. Firstly, the UK had just undergone some dramatic constitutional changes, with the devolution of certain powers from central government in Westminster to three new devolved bodies, the Scottish Parliament, the National Assembly for Wales, and the Northern Ireland Assembly. The project, therefore, took place during the formative period of these three new bodies, when all were in the process of developing and evolving their own public information services and their own methods of communicating with the public. The authors sought to explore the implementation of the public information services at a strategic and operational level.

Secondly, the project took place at a time when the concepts of Freedom of Information, and of openness and transparency in government, were high on the national political agenda. The UK's Freedom of Information Act had just received Royal Assent, the Scottish Parliament was about to pass its own Freedom of Information Act, and the Welsh Assembly had introduced a Code of Practice on Public Access to Information. In fact, a number of observers (see, for example, Frankel, 2002) have suggested that, with regard to openness and transparency, the Scottish Parliament and the Welsh Assembly have been consciously aiming for higher standards than those presently to be found in Westminster. Hypothetically, the new devolved bodies had the potential and, it appeared, the will to be models of openness, and the project sought evidence of this in their public information and communication activities, providing the opportunity to: 'put in place a new sort of democracy... an open, accessible Parliament; a Parliament where power is shared with the people; where people are encouraged to participate in the policy process which affects all our lives; an accountable visible Parliament...' (Consultative Steering Group on the Scottish Parliament, 1998).

There also continues to be much debate around e-government agendas. As the project was getting underway, the UK Government re-emphasized its commitment to what it called 'information age government', whereby all government services would be deliverable electronically by 2005 (Blair, 2000). The UK's Office of the e-Envoy had also just published a set of design guidelines (since revised, in 2002) for government websites, to try to improve their quality and consistency, and to increase their levels of use by providing further opportunities for interaction. As a result, the decision to examine specifically the application and impact of parliamentary websites was of obvious relevance. Given that the e-Envoy's guidelines also emphasize the importance of gathering data about users' needs and expectations with regard to official websites, research results may help to inform and improve service developments.

Discussion has also focused upon the perceived growth in political apathy amongst the UK public in recent years, which has been most evident in the very low voter turnouts at local, national and European elections (BBC, 1999; Gould, 2001; BBC, 2002a). There also appeared to be a growing belief that providing public access to government information in electronic form, and allowing the public to interact electronically with government, were important ways of encouraging people to participate in the democratic process, providing the researchers with another avenue for exploration.

The research also built upon previous work conducted by the project team (Marcella and Baxter, 1997, 2000), which examined the UK public's need for citizenship information, both in the context of Westminster and the European Union. It tested the extent to which the various legislatures' information strategies, manifest in the activities of their public information service, support the creation of an open, accessible government and encourage interest in and awareness of the institutions served.

## Aims and objectives

The aim of the project was to investigate the impact of new technology on the communication of parliamentary information from the perspectives of both those in government and of the users of the information.

The objectives of the project were:

- to develop a model of parliamentary information provision to the public in the United Kingdom
  in the context of a wider understanding of approaches globally
- 2. to explore, in particular, the actual benefits/drawbacks of technologically supported approaches for certain groups deemed to be in danger of exclusion
- 3. to develop and evaluate an interactive, electronic interview as a data collection tool employed as part of a pilot roadshow and to make recommendations for future application

## Methodology

The project consisted of two main stages. In the first stage, face-to-face interviews were conducted with representatives of the public information services at the traditional Westminster Parliament (at both the House of Commons Information Office and the House of Lords Information Office) and

also with representatives of the Scottish Parliament service in Edinburgh, and the Welsh Assembly service in Cardiff. Initially, the team had also hoped to conduct interviews at the Northern Ireland Assembly in Belfast, but due to the delays in the peace process (which has since led to the complete suspension of the Assembly), development of the Northern Ireland information service was not far advanced, and consequently only a brief telephone interview was conducted with service representatives. The interviews gathered information on the aims, objectives and strategies of these services, and on the information access and communication activities developed and applied by each. They also gathered information on the number and the nature of the inquiries being made, and on service staff's knowledge of the public's preferred methods of approaching and contacting the information services. Throughout all of the interviews, particular attention was paid to the use of information and communication technologies, as a mechanism for delivering service.

For the second stage of the project, a total of 15 parliamentary information roadshows were held throughout England, Scotland and Wales. These took place at organisations such as public libraries, community centers, sheltered accommodation for older people, and universities, where it was thought possible to engage with the general public close to their everyday lives and where the researchers anticipated access to 'excluded' groups might be maximized. By visiting such a wide range of organisations, it was hoped also that it would be possible to study members of the public who had little or no experience of using computers, as well as those people who used computers on a regular basis. These events were conceptualized as roadshows, because where possible the research was carried out in a specially equipped minibus. During these events, an innovative technique for data collection was introduced, an interactive, electronically-assisted interview. The researcher had available a laptop computer and mobile telephone equipment which allowed web access, and members of the public were interviewed as they explored various parliamentary websites. Overall, 79 individuals were interviewed during these roadshow events, although this represents a response rate of just 17% of the 466 people who were approached and asked to participate. The majority of those who refused to participate did so either because they were either too busy (44% of refusals) or because they simply were not interested in the political subject matter (48%). Although this low response rate may suggest methodological limitations, the authors would argue that this remains a cost effective mechanism for eliciting rich, extended and revealing data from groups in the community who are difficult to target by conventional means. The methodology also demonstrated a capacity to enable the capture of highly evaluative responses to new technologies, while exploring issues associated with political participation. Data were analyzed using transaction log analysis (Jansen, Spink and Saracevic, 2000) and verbal protocol analysis

techniques (see, for example, Blackshaw and Fischof, 1988; Ericsson and Simon, 1993; Nahl and Tenopir, 1996).

This chapter focuses on the results of the first stage of the research, identifying some of the more common approaches to information provision and to public communication, as well as some common problem areas. It draws primarily on the investigation of the UK Government's information policy as manifest in the public information services of Parliament and the devolved legislatures, relating these where appropriate to what has been learned about user information behavior in the second stage of the research.

## Results: the UK's parliamentary public information services

Each of the public information services emphasized a strategic priority to increase public awareness of and interest in the devolved body they served, including phrases in their mission such as:

'to promote a better understanding of the role and work of...'

'to increase the... public's knowledge of, and interest in...'

'the creation of a greater awareness of and respect for the work of...'

'to secure on-going growth in the awareness and interest in...'

There is also evidence in the devolved services' strategies of a commitment to government that is 'as open, accessible and participative as possible: (Consultative Steering Group on the Scottish Parliament, 1998).

The use of such rhetoric suggests a major focus on not just serving information need where such need arises but also on the promotion and communication of positive messages about the devolved assemblies to the general public. The services would appear, therefore, to adopt a dual model, whereby they not only seek to explore and serve the public interest in a neutral and unbiased way, but also to encourage and promote levels of positive interest in a highly partisan manner. The model may present challenges to conventional theories of information service and to the philosophy in particular of the public library services in the UK, who envision a role as objective, unbiased

providers of any information that the public might legitimately require with no expectation that they will promote any institution, ideology or creed. The dual model aspired to by the public information services would require measures not just of their capacity to serve public need but also of their performance in communicating an effective positive message about the devolved bodies they serve. Seaton (2002) also refers to the possible tension that this dual model may engender.

In order to develop services in the UK, the Interparliamentary Forum, acts as a forum for a twice-yearly gathering of staff from the Westminster Parliament and the three devolved bodies, enabling staff from all departments, not just the public information services, to meet and talk about issues of common interest and to share their expertise and experience. Through this Forum and a program of staff exchanges, the public information services have been able to compare experience and learn from others. However, there appears to be little if any consensus on best practice: the individual legislatures have each adopted slightly different approaches in developing certain aspects of their service. There are however some common trends, manifest across regions.

All services operate some form of public inquiry service, although unfortunately the number and the nature of the inquiries they receive are not always recorded systematically and there is, as a result, a lack of detailed evidence of the nature of demand. Broadly, however, these do indicate that most inquiries tend to relate either to elected members or to parliamentary business. There is also evidence that as, one might anticipate, inquiries tend to increase when the parliament or assembly is discussing high-profile topics that have captured media attention or the imagination of the public, such as foxhunting or the public health risks of mobile telephone masts.

The inquiries themselves tend to emanate from a wide variety of sectors, from the general public, the media, and the business and the educational communities. While most inquiries are still made by telephone, there has been a massive growth in the number of e-mail inquiries received, in particular since the public have had the opportunity to submit inquiries directly via the parliamentary websites. For example, in 2001, the House of Commons Information Office at the UK Parliament experienced a drop of 22% in the number of telephone inquiries, but an increase of 53% in the number of e-mail inquiries. All of the services acknowledge that if – as is likely – this growth in e-mail correspondence is to continue over the next few years, they will face a very significant management challenge. Respondents unanimously recognized that the process of answering an e-mail inquiry is more time-consuming than dealing with one by telephone; and while they do, where appropriate, try to apply standard e-mail responses, it has been found that the

majority of replies still require some form of individual tailoring to meet each enquirer's particular needs. This trend will impact significantly on resources in the future.

Equally, each respondent emphasized the extent to which inappropriate inquiries were received by the public information services. It can, therefore, be inferred that there is considerable public confusion about the structure, membership, roles and responsibilities of the UK Parliament and the new devolved bodies, as well as their respective executive bodies. A significant proportion of the public does not understand which body does what, and why. Clearly, this message is not being conveyed clearly and simply to the public and it might be hypothesized that the lack of clarity and perceived practical relevance of the institutions is impacting upon the public's level of awareness of and interest in government as a whole. The link with apathy might be further usefully explored. One way in which the services have tried to communicate the roles and responsibilities of their respective bodies to the general public, is through a publications program. Generally, these consist of booklets or pamphlets, which discuss particular topics and which are aimed at a very general audience. Increasingly, they are available in a variety of languages as well as a variety of formats, such as on audio tape and in large print for visually impaired people. The extent to which paper copies of these publications are distributed throughout the UK is still rather limited, but all of the publications are also available on the appropriate parliamentary website. However, there is little inherent public motivation to consult such descriptive material, with no perceived 'benefit' from greater understanding of parliamentary and legislative process.

The UK parliament and the three devolved bodies each have their own dedicated websites. While all four websites are regarded as providing an important information source for the general public, for the media and for other communities of interest, they are now also regarded as making an important contribution to these bodies' overall policies of openness and accessibility. The content of each site is in fact rather similar, providing access to a range of official publications such as Hansard (and its equivalents), minutes, annual reports, consultation papers, press releases, and information about their role and function as indicated above. It is also worth noting that the Scottish Parliament site is available in English and in Gaelic, while the Welsh Assembly site is available in English and in Welsh. Each also provides webcasting facilities which broadcast coverage of their proceedings over the Internet.

Through the roadshow interactive interviews, the authors had the opportunity to explore the public response to the parliamentary websites and to the kinds of information that was being made

available by the public information services. In many respects the public response appears to be fairly positive. Overall, out of the 79 people that were interviewed:

- 68 believed that the parliamentary website that they had looked at served a useful purpose;
- 71 had found it easy to use;
- 61 thought that the information on the website was very or quite interesting;
- 69 found the information easy to understand;
- however, only 43 felt that this sort of information was relevant to their own day-to-day lives;
- but again more positively, 61 felt that they might visit the website again in the future.

Although superficially positive in response, one cannot simply infer a high degree of satisfaction amongst the public with parliamentary websites. Only a small proportion (8 of 79) had previously sought to investigate the potential of the web to access information about the UK Parliament and even fewer (3 of 79) had specifically used a devolved body website. This would suggest that, although when exposed to such web materials users are impressed by their value, extent and potential as sources of information, the public as a whole is unlikely to engage proactively and without intervention in their exploration. This is highly significant in light of the vision of the power of the web to encourage engagement. It is also worth noting that the web materials were rated less positively in terms of the relevance of the material provided to the users' lives (43 of 79 respondents), while 36 indicated that it was irrelevant. We must also bear in mind the (48% of 387) people who had not been sufficiently interested in 'politics' to participate in the study: it might be anticipated that an even higher proportion of this group would have found the site content to be irrelevant.

It should also be noted that the Scottish Parliament website generally received the highest ratings, while the UK parliament website tended to be ranked rather poorly. In many ways, this was

unsurprising, because the UK Parliament site was at the time generally recognized as one that was very difficult to navigate, in particular for those with very little knowledge of parliamentary procedures and terminology. Indeed, while the research was being carried out, the UK Parliament was in the process of completely redesigning its website, and this was finally relaunched in the summer of 2003.

Of those who did participate in the research, many, especially older people and people who were using a computer for the first time, tended to require a good deal of explanation, guidance and assistance from the interviewer. It might, therefore, be argued that their responses would have been more negative if they had been given no support in examining these websites. Respondents also spent a great deal of their online time in navigation, frequently encountering difficulties, even with advice on hand, in locating the correct pages dealing with a topic.

Another significant strand of the public information service strategy is the provision of education services. Each provides a wide range of services to teachers and to young people, and most of these services are designed to tie in with local curricular developments. The services provided tend to be fairly similar: for example, each service organizes a visits program, where schools can visit the public gallery of the parliamentary building, can take part in workshop activities, and perhaps meet their local elected member. These sessions are very popular, with for example, in 2001, almost 6,000 pupils visiting the Scottish Parliament as part of their visits program. Each education service also organizes special events, such as pupil conferences and parliaments, 'Question Time' sessions and teacher training days. A range of educational resources, such as wall charts, activity sheets, revision notes, videos and interactive CD-ROMs are also produced. The public may access, on each parliamentary website, a series of educational pages (and in the case of the UK Parliament, its very own website), which contain information and resources aimed specifically at teachers and young people. However, it is significant that, during the roadshow events, a number of participants felt that the pages aimed at young people were actually far more informative than those aimed at the more general adult population, simply because they were more clearly and attractively presented.

At the regional level, the Scottish Parliament and the Welsh Assembly public information services also exploit the existing public library network as a tool for enabling communication with the general public. In Scotland, a network of 80 Partner Libraries has been established, to act as focal points for information about the Scottish Parliament. The Partner Libraries provide free access to

the Scottish Parliament website, with some hosting various additional events on behalf of the local Members of the Scottish Parliament (MSP). In Wales, there is a similar network of 41 Information Link libraries. So far, in Scotland at least, there is some anecdotal evidence to suggest that while the public's use of these libraries to obtain parliamentary information has been low, it is increasing consistently if slowly.

The Scottish Parliament and the Welsh Assembly also host their own visitor centers. At the time of this research, the Scottish Parliament visitor center had already been open for two years and was attracting around 35,000 visitors a year, while the Welsh Assembly visitor center was just about to open to the public. Each center has a similar exhibition which illustrates the development, the structure and the work of the Scottish Parliament and the Welsh Assembly respectively, and each one makes considerable use of multi-media and touch-screen technologies to get this information across. The public information services of the Scottish Parliament and the Welsh Assembly are also responsible for dealing with the distribution of tickets to those members of the public who want to attend in person meetings of the Parliament, or the Assembly, or their various committees. Indeed, in 2001, the Scottish Parliament service handled over 77,000 tickets. This is a completely different approach from the traditional and more cumbersome one taken by the UK Parliament at Westminster, where potential visitors must contact their local Member of Parliament, or a Peer in the House of Lords, in order to obtain tickets for the public galleries.

Finally, the public information services also undertake awareness raising or promotional activities for the regions served. While all are happy to receive official visitors from other organisations, the extent to which staff will travel to give talks or presentations to interested parties is rather limited. While staff from the UK Parliament services will give talks on the work of the Parliament, these do tend to be to London-based organisations only, because of limited time and staff resources. The Scottish Parliament service, on the other hand and somewhat contrarily, has placed a complete ban on talks and presentations, their justification being that they might not be able to cope with the anticipated demand; hence any talks given would, of necessity, be largely Edinburgh-based, with the result that that city might be conceived as receiving inequitable and 'better' service than the rest of the Scottish population. What the Scottish Parliament service does, however, undertake is to provide a presence, often in the shape of a small exhibition, at those parliamentary committee meetings which take place outside Edinburgh. Service managers hope eventually to expand this service, so that in the days prior to a committee meeting, the service might host events at local venues, such as schools, community centers and shopping centers. This is an approach that is also

being considered by the Welsh Assembly, which holds regional committee meetings throughout Wales. In fact, the Welsh Assembly currently does conduct some limited promotional work at various agricultural shows and cultural events throughout Wales, where they hold exhibitions, provide free copies of their publications and free access to their website. From the interviews, this is clearly an aspect of their activities which services would hope to expand upon, but where they are constrained by limited resources from developing deeper, wider and more meaningful involvement in regional communities.

#### **Conclusions**

While particular approaches to the delivery of public information service delivery have been adopted by two or more of the services studied, there is currently no real consensus on overall best practice. However, each public information service does appear to share a very similar overall vision, particularly in terms of the contribution that might be made to a more open, transparent and accessible style of government, and also in encouraging wider public interest in the democratic process, while performing their core function of responding to the demand for information by the public and specific stakeholder groups. In terms of electronic communication with the general public, all of the services are experiencing a rapid growth in the quantity of e-mail inquiries received. Bearing in mind that these inquiries generally require a time-consuming, individualized response, then this trend will have significant management implications as services come under even greater pressure in the future. Indeed, one might infer that, given the resource limitations encountered, attempts at regional community penetration will continue to become increasingly virtual, with even less focus on events and individual visits. However, at present, there remains an indeterminate and somewhat uneasy balance between the virtual and the actual.

Interestingly, results reveal that a very significant proportion of the public is confused by the number and variety of legislative and executive bodies which presently represent their interests in the UK, particularly in terms of their structure, their membership, and their roles and responsibilities. One might validly argue that this confusion will become even greater as the UK experiences further devolution of power to the proposed regional assemblies in England. Although it was beyond the scope of the present study to explore the implications of this level of public confusion, its existence argues the need for further research, in particular in light of increasing public apathy.

With regard to the four parliamentary websites, while they do share some similar features, there is again, as with general service, little evidence of any consistency in their structure or design. This may change as the e-Envoy's guidelines on best practice in website design become more widely adopted. Judging by the relatively low participation rate during the roadshow events and the responses of those who did undertake online explorations, the UK public has little interest in using or need to use parliamentary websites. This finding is supported by a recent survey by the IT consultants HEDRA (BBC, 2002b), who found that fewer than 3% of the UK population regularly use government websites of any kind. Equally, from the responses of many of those who did participate in the roadshows, the public feels that the content of parliamentary websites has little or no relevance to their own day-to-day lives. However, when they had actually used a parliamentary website with the support of a researcher, the vast majority of the roadshow participants found the information thus located interesting and felt that they would use a parliamentary website again, suggesting the potential of such interactive events in support of awareness raising initiatives.

From the study's results, the authors would argue that it is not enough for government to rely simply on making parliamentary information publicly available and accessible in an electronic form. If the public is to be encouraged to find, use and apply that information, then other methods of motivation and support are needed. It might be argued that a vehicle, such as the roadshow events, or some of the outreach work being conducted by the devolved assembly public information services is essential in providing the motivation, encouragement and support for the general public to access the parliamentary resources, if these are to have any chance of generating higher levels of public awareness and interest, establishing relevance and potentially even bringing about higher levels of participation in political activities. There is a need for a more active penetration of user communities where expert advisers can demonstrate the role and value of public information services in a pragmatic way for potential users. To an extent public libraries might appear to have taken on this role, in for example acting as Partner Libraries in Scotland; however, the public library ethos suggests that official websites will be seen as only one of a rich array of sources of potentially useful information for users and that there will be no emphasis by information professionals on applying these in a particularly positive way. Information professionals will seek to guide their users objectively to the highest quality information source to meet an individual's particular need, rather than highlighting and promoting individual organisations' sites for ideological reasons. Equally, only just over half of the UK public are in fact members of public

libraries, while there is evidence that many will not see public libraries as the most obvious source for information about government. In addition, from the present research, it can be concluded that the public are unlikely to view the devolved legislatures as places to which to turn as useful sources of information.

Other barriers to citizen use of official websites continue to be significant, in particular the evidence of continuing hesitation about adopting new information and communication technologies with confidence. Many of the participants in this research encountered real difficulties in navigating sites and even in simple operations such as manipulating the mouse.

The authors believe that parliamentary public information services are seeking to achieve two broad aims, in firstly reactively serving the needs of the general public for information about government, and secondly in proactively communicating positive messages to the public about the activities of government. They would argue that the tension between these two aims in terms of service philosophy may mean that neither is being effectively achieved. Future research might further explore managers' and policy makers' understanding of the two roles, clarifying variations in philosophy and the implications of each for the development of high standards in service delivery.

#### References

BBC (1999). UK turnout: apathy or ignorance? 14 June. Available at http://news.bbc.co.uk/1/hi/events/euros\_99/news/368908.stm (Accessed March 2004)

BBC (2002a). Postal voting boosts turnout. 7 May. Available at http://news.bbc.co.uk/1/hi/uk\_politics/1965521.stm (Accessed March 2004).

BBC (2002b). Official websites are 'online Domes'. 27 December Available at http://news.bbc.co.uk/1/hi/uk\_politics/2609073.stm (Accessed March 2004).

Blackshaw, L. and Fischhof, B. (1988). Decision making in online searching. *Journal of the American Society for Information Science*, 39, (6), 369-389.

Blair, T. (2000). Government to speed up introduction of online services. Press notice, 30 March. Available at: http://www.pm.gov.uk/output/Page2795.asp (Accessed March 2004)

Consultative Steering Group on the Scottish Parliament (1998). *Shaping Scotland's Parliament*. Available at http://www.scotland.gov.uk/library/documents-w5/rcsg-00.htm (Accessed March 2004)

Ericsson, K. A. and Simon, H. A. (1993). *Protocol analysis: verbal reports as data*. Cambridge, MA: MIT Press.

Frankel, M. (2002). Moving the ministerial mindset. Available at http://www.cfoi.org.uk/psmarticle050302.html (Accessed March 2004)

Gould, P. (2001). A strong case of election apathy. 5 June. Available at http://news.bbc.co.uk/vote2001/hi/english/features/newsid\_1371000/1371191.stm (Accessed March 2004).

Jansen, B. J., Spink, A. and Saracevic, T. (2000). Real life, real users and real need: a study and analysis of user queries on the web. *Information Processing and Management*, 36, (2), 207-227.

Marcella, R. and Baxter, G. (1997). European Union information: an investigation of need amongst public library users in 3 Scottish authorities. *Journal of Librarianship and Information Science*, 29(2), pp.69-75.

Marcella, R. and Baxter, G. (2000). Information need, information seeking behaviour and participation, with special reference to needs related to citizenship: results of a national survey. *Journal of Documentation*, 56(2), pp.136-160.

Nahl, D. and Tenopir, C. (1996). Affective and cognitive searching behaviour of novice end-users of a full-text database. *Journal of the American Society for Information Science*, 47(4), pp.276-286.

Office of the e-Envoy (2002). Guidelines for UK government websites: illustrated handbook for web management teams.

Available at http://www.e-envoy.gov.uk/Resources/WebHandbookIndex1/fs/en (Accessed March 2004).

Seaton (2002). Marketing the Scottish Parliament: whose line is it anyway? Unpublished paper presented at the Political Studies Association 52<sup>nd</sup> Annual Conference, University of Aberdeen, 19-21 September 2002.

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