TELE-DEMOCRACY AND THE NATIONAL ASSEMBLY OF WALES [CASE STUDY]

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ABSTRACT

This paper describes the case of the National Assembly of Wales and the relevance of information and communications technology (ICT) to supporting its internal and external democratic processes. We review a number of tele-democracy initiatives from around the world and develop a case study of tele-democracy as it impacts upon a recent attempt to introduce a form of devolved government in the UK. We consider the current manner in which ICT is being used by the National Assembly of Wales to conduct its internal processes. We also consider some of the ways in which the National Assembly makes use of ICT to enable its links with the Welsh population. We examine some of the problems experienced, and consider some of the possible ways in which tele-democracy may be encouraged within Wales in the future.

1.   INTRODUCTION

Over the last five years a significant degree of change has occurred in governmental structures and processes within the UK. A number of governmental powers previously residing with the Westminster Parliament have been devolved to a Scottish parliament, a Northern Ireland Assembly and a Welsh Assembly. Such changes have offered numerous opportunities for the application of tele-democracy.

In this paper we describe some of tele-democracy issues that have arisen in relation to the creation of the National Assembly of Wales. Our aims are as follows;

- to define the concept of tele-democracy, both in terms of its impact on internal governmental processes and in terms of its effects on the external delivery of democratic services,

- to review some of the tele-democracy initiatives worldwide,

- to describe the case of the recently created National Assembly of Wales, and how this body has engaged with the issues of tele-democracy.

The research for this paper was conducted over a twelve-month period during 1999 and 2000 and involved web searches, documentary analysis, and interviews with administrators and politicians at the National Assembly of Wales.

2.   TELE-DEMOCRACY

Political systems are made up of sets of activities and relationships concerned with power and its exercise. A polity is a political system centred on some geographical area. The central idea of a polity is a political system centred on the nation state.

The term *democracy* derives from the Greek words *demos*, 'the people', and *kratein*, 'to rule' (Mayer, 1999). So-called direct democracies are rare in the modern word. Direct democracy involves the members of some political grouping such as a nation state having direct involvement in the governmental process (Taylor and Burt, 1999). Most democracies are representative democracies in which members of a political grouping nominate representatives to govern. Representative democracy generally takes the form of some form of parliamentary democracy in the Western world.

The use of information and communication technology affects both the smooth operation and shape of modern polities. ICTs support political systems in the sense that they are relevant to the operation of the political system itself. Information is essential to the relationship between the citizen of some nation state and the government of that nation state. The following provide instances of various aspects of the use of ICT in democracy.

- ICT systems have the potential of making the work of government agencies much more visible to the population which it serves. Snellen (2001) argues that this informating capacity of technology (Zuboff, 1988) is critical to the effective functioning of modern representative democracies.

- The process of democratic representation relies on information for effective functioning. For instance, governmental representatives have to be voted into power at various times. Referenda, which are effectively large-scale surveys of opinion from a national population, may be held on various issues at various times. Also, government representatives will wish to communicate information to their constituencies on a periodic basis.

- Government demands financial support from the citizen and from the business organisation in the form of taxation. The assessment of levels of taxation and the effective collection of fiscal revenue relies heavily on large and complex information systems.

- Payment of monies and other forms of support are made to citizens by government agencies as part of welfare programmes. The effective identification of people in need and the timely payment of benefits to such people are heavily reliant on effective information systems.

- Pressure groups in democracies maintain information systems for effective operation. They may also use information systems to help organise forms of protest. Terrorist organisations also use media like the Internet to publicise their activities and organise terrorist action.

- The use-value of some types of information as a commodity for social control has caused concern amongst civil liberties groups in many countries. Modern information technology permits organisations to collate together information from various sources to form profiles of individuals or groups and hence to potentially monitor and control their behaviour.

Information technology and information systems are being used to re-engineer aspects of governmental processes and the relationship between government and the citizen. These initiatives are generally known as forms of tele-democracy. Generally, we use the term tele-democracy to refer to the way in which internal government communication and communication with the public is enabled through IT systems.

Tele-democracy can be defined in broad or narrow terms. In narrow terms, tele-democracy can be used to refer solely to the enabling of democratic processes between members of some political grouping and their governmental representatives. This we call *external* tele-democracy. In a sense, external tele-democracy can be seen as an attempt to introduce elements of direct democracy into situations of representative democracy (Ostr★m, 2001). On the other hand, tele-democracy can serve to refer to the way in which ICT can be used to improve internal governmental processes (sometimes referred to as electronic government). This we call *internal* tele-democracy and is defined by Elmagarmid and McIver (2001) as being '*the civil and political conduct of government, including service provision, using information and communication technologies*'. We use both connotations of the term in this paper and thus follow the broad definition of tele-democracy used in a recent collected issue of the *Communications of the ACM* on this subject (Gr★nlund, 2001).

2.1   Globalisation

The attempt to enable internal and external governmental processes by the use of ICT can be seen to be a global phenomenon. In Table 1 we cite a number of examples of tele-democracy initiatives from around the world. We classify these initiatives on the basis of whether they are primarily examples of internal or external tele-democracy, and also in terms of the major forms of ICT employed in each case. Most such examples are experiments or prototypes designed to prove the utility of using ICT for improving government processes. A limited number are fully developed working initiatives.

Tele-democracy Type	Internal	External
Technology		
Email	Denmark (Friis, 1997)	
Web site	Denmark (Friis, 1997)	Korea (Lee, 1999) Sweden (Lindholm and Ohlin, 1999) UK (Bainbridge and Dodderell, 1999)
Electronic forum/ Bulletin board	Denmark (Friis, 1997)	Korea (Lee, 1999) Spain (Maragall, 1999) Netherlands (Ytterstad *et al*, 1999) Denmark (Friis, 1997)
Video-conferencing	Denmark (Friis, 1997)	USA (Hage and Rich, 1999; Casaragelo and Cropf, 1999; Westen, 1999)
Multi-media kiosks		Portugal (Vidigal, 1999) Iceland (Magnussen, 1999) Sweden (Lindholm and Ohlin, 1999)

Table 1: Examples of Tele-democracy

Table 1 indicates that much of the material on tele-democracy concentrates on the area of external tele-democracy, particularly improving public access to government information. Other common examples relate to the provision of electronic fora for the public to debate political issues. Some examples, particularly in the US, relate to making the operations of local government more visible to its electorate.

The only published example of internal tele-democracy we have found outside of the UK has taken place in Denmark where an attempt was made to implement a paperless office environment for local government administration.

The background to these tele-democracy initiatives is one of increasing regionalism and federalism, particularly in the European context. On the other hand, there is clear evidence of disenchantment with the mechanisms of representative democracy in many countries. Governmental processes are seen to be cumbersome, bureaucratic and inefficient, and according to Taylor and Burt (2001), a high degree of citizen apathy has been experienced with the electoral process.

The attempts at both internal and external tele-democracy can be seen to be both a reflection of, and a response to these issues. Anttiroiko (2001) for instance, has recently argued that within the European Union, tele-democracy must be interpreted in terms of the context of attempts such as the European Information Society Project to improve ICT infrastructure and utilisation within this pan-national region.

3. THE NATIONAL ASSEMBLY OF WALES

Within the UK, the last decade has wirnessed a number of internal tele-democracy initiatives (known collectively as *electronic government*) established by the Westminster Parliament. The general aim of these initiatives has been primarily to make use of ICT in order to improve the efficiency of governmental processes. At the same time, a number of structural changes have taken place in the forms of UK government itself. Devolution of powers to the Scottish parliament and the Welsh and Northern Ireland Assemblies has introduced both problems and opportunities for tele-democracy within the UK. In this section we consider the case of the National Assembly for Wales, frequently referred to as the *Welsh Assembly*, and within Wales as the *National Assembly*.

3.1 The Creation and Structure of the Welsh Assembly

The British Labour Party put forward the idea for the National Assembly for Wales in July 1997 as part of their strategy for the devolution of British government. The people of Wales were given the chance to vote on these proposals in September 1997, and a marginal majority allowed the go-ahead to be given for the implementation of a National Assembly for Wales. The official transfer of responsibilities from the Westminster Parliament to the Assembly took place on 1st July 1999.

Although the declared role of the National Assembly is to develop and implement policy in relation to Wales, the people of Wales are still represented in the Parliament of Westminster by elected members of Parliament and the Secretary of State for Wales. Legislation that passes through Westminster still includes Wales.

The members of the National Assembly for Wales were elected using a form of proportional representation on the 6th May 1999 and are due for re-election every four years. Each member of each constituency within Wales was given two votes to elect Assembly members. The first of the two votes was used to elect a member to represent the constituency in the Assembly. An additional twenty Assembly members were elected through the use of the second constituency vote.

The National Assembly has the power to develop and implement policy in a range of areas such as agriculture, education and training, health, tourism and transport. The National Assembly is able to;

- fund, direct and make appointments to health service bodies in Wales and hold them to account,

- set the content of the National Curriculum for primary and secondary education in Wales,

- provide financial assistance to businesses in Wales,

- administer European structural funds,

- implement policy on care in the community,

- promote agri-environment schemes.

The First Secretary is a representative of the largest political party in the National Assembly. Currently that party is the Labour party that also holds a large majority in the House of Commons in Westminster. The First Secretary appoints an assembly cabinet from the leading party. Members of the cabinet are assigned roles from the list of assembly responsibilities.

The assembly has a committee structure divided both on regional lines and in terms of subject areas. Assembly members are nominated for service on committees in proportion to their share of the electoral vote. Assembly members also hold plenary meetings in which broader issues are discussed and the First Secretary is available for questioning.

3.2   ICT Infrastructure

The National Assembly currently has a temporary home at Crickhowell House in Cardiff Bay where the main debating chamber is located. The Assembly has another building in Cathays Park in Cardiff where many of the support offices are housed. A new building is planned for construction in the Cardiff Bay area to house both functions in the near future.

A substantial amount of technological support is provided within these two buildings allowing the National Assembly to promote elements of internal tele-democracy and some limited attempts at external tele-democracy. The National Assembly has particularly developed an ICT strategy in order to structure the development of electronic government in Wales.

All of the four main objectives of the ICT strategy listed below have tele-democracy implications;

- systems must support openness and inclusivity,

- systems must involve other parliamentary bodies, businesses, and citizens,

- systems must allow connections to a wide range of bodies in the UK and Europe,

- systems must harness the effective use of ICT.

There are many systems currently provided by the Assembly that are vital to its efficient and effective operation. These systems include:

- The Assembly Intranet. This facilitates electronic information exchange for members and support staff. The Intranet also allows member access to Chamber Web, which is the technological support provided for chamber proceedings within the Assembly.

- The Assembly Internet site. This is the main form of external contact. The proceedings in the chamber are digitally recorded and discussions in Welsh are simultaneously translated to the members. These proceedings are then published to the Internet site at a later date.

- Assembly Office Systems. General systems, including simple word-processing and spreadsheet software, are provided in the offices of the Assembly. E-mail facilities are also provided via the Government Secure Intranet (GSI). Office systems mainly run on Microsoft NT 4.0 platforms.

There are leased line connections between the computer networks in all of the Assembly main offices and to the office of the Secretary of State for Wales in Whitehall. There are approximately fifty servers in operation over the two Assembly sites with approximately three thousand users of all systems in total.

3.3   Internal Tele-Democracy

The debating chamber of the National Assembly is highly advanced compared to other government institutions (particularly within the UK) as far as ICT support is concerned.

Within the chamber, all Assembly members have access through a touch screen to a facility known as Chamber Web. The information provided through Chamber Web is kept to a minimum for security reasons. Only information that is required by Assembly members for the particular day in question is accessible at any time.

Information on Chamber Web is provided in both English and Welsh. The information includes;

- the plenary agenda,

- information on the bills that are up for discussion during the session,

- details of supporting papers and oral questions,

- information on each Assembly member and exactly what they are responsible for.

Assembly members gain access to each option on Chamber Web by touching the desired option on their screens.

In the case of Assembly members needing to be contacted during a plenary session, there is a facility in place that allows support staff to e-mail them directly using their seat number. Also, there is a facility provided to allow Assembly members to send e-mail messages via the GSI.

When a member wishes to speak on a particular issue in the Assembly chamber, they must raise their hand to the Presiding Officer. The Presiding Officer takes note of this and the member presses the button next to their microphone. A green light then comes on next to the microphone indicating that the member in question must wait to speak. When it is the members' turn to speak, their microphone is initialised from the control booth within the chamber and the light next to the microphone changes to red to indicate that the member is free to speak. This system ensures that no unnecessary noise is picked up during a plenary session.

Within the control booth is a person who provides simultaneous translation from Welsh to English when matters proceed in Welsh. Members can hear this translation by using the headphones that are available to them next to their computer screen.

Another facility is provided which allows the members to vote on a particular bill that may be up for discussion during a plenary session. This is made possible by the use of a swipe card. At the start of a session within the chamber, members are required to swipe their card in the slot next to their computer screen. The registering of this swipe is indicated by a green light. If the card is not registered, a red light appears. The registering of the swipe card indicates to the Presiding Officer that a particular member is present to vote. This process ensures that the correct numbers of votes are collected.

In order to vote on a particular issue or bill, members must press one of three buttons (+, 0, -) that are available on the pad next to their computer screen. If a member selects the plus sign option, they are agreeing to the voting topic in question and if they select the minus option they are disagreeing with the topic. The selection of the zero option means that a member wishes to abstain on the issue in question. Once a vote has been placed by a member, a light next to the chosen option confirms that the vote has been placed. Each member has fifteen seconds to place his or her vote once the voting system has been initialised. The overall results are displayed on a central screen after every member has voted.

There are three main committee rooms provided within the Assembly building at Cardiff Bay. Simultaneous translation is provided but the control booth is located in another room. The committee meetings that take place away from the chamber are not supported with such sophisticated technology as that used within the chamber. For example, there are no touch screens providing access to Chamber Web.

Each member is provided with a laptop computer that they may utilise to check their e-mails. Each member is also provided with a personal computer (PC) in their Assembly office, and at their constituency office or home. Two PCs are also provided for up to two support staff of each Assembly member.

3.4 External Tele-Democracy

The Assembly has its own web site, but the quality of this site is poor compared to the Intranet that is available within the Assembly. For instance, on the Internet site the Assembly member's names are provided in a straightforward list. On the Intranet, there is greater potential for user interaction, with an interactive map displaying information about the members being available. When the mouse is moved over a particular region, a photograph of the Assembly member for that region is displayed. This is also the case concerning the seating plan within the Assembly chamber. Other information that is available over the Intranet that is not available over the Internet is the voting history of Assembly members.

All information is supposed to be posted to the Intranet and some to the Internet. The Assembly members have support staff who are responsible for this function. The Assembly members have Content Managers for each area of business who control what information is displayed, and Content Authors who are responsible for converting this information from Microsoft Word format into HTML format. The information that is displayed is referred to within the Assembly as the '*Golden Nuggets*' i.e. the vital information.

The whole of plenary sessions are recorded and used to produce the proceedings information that is displayed on the Internet. An initial record of the proceedings is produced within twenty-four hours of the end of a plenary session. This twenty-four hour version presents the debates in the language in which they were spoken, together with an English translation of the Welsh language contributions. The record is replaced by a fully bilingual version within five working days. This fully bilingual version is the official record of the proceedings.

Each department in the two Assembly buildings has its own network directory. Each directory is only accessible by the employees of the particular department with which the directory is associated. The most important information is displayed within this directory, and acts as a means of providing an audit trail of information for Assembly operations.

3.5 Problems

The Assembly has experienced problems with its implementation of both internal and external tele-democracy. Some of these are listed below:

- There are currently problems within the Assembly trying to obtain common editorial standards for documents.

- There are problems keeping the information on the Internet and Intranet up to date. This is mainly because of the amount of information that is constantly flowing through the organisation and the fact that there are not enough employees to cope with the throughput.

- Information overload is a particular problem for the Assembly. Because substantial volumes of information is received by Assembly members and staff, there is no real way of keeping track of the important information.

- The extensive use of e-mail means that production of an audit trail is not always possible. This means that not all staff are able to view the information that is relevant to them.

- The Assembly experiences a number of problems with its internal processes. For instance, the Assembly currently guarantees a fifteen-day response time to enquiries that have been received from the public. In practice it can take up to thirty days to respond to such external enquiries.

3.6 Future Tele-Democracy at the National Assembly of Wales

The Assembly is currently attempting to improve internal communication through the use of an initiative known as MOTOBOP (Moving Towards Better Office Practices). This intention of this initiative is to analyse current procedures and make recommendations on how they can be improved. The Assembly also

has clear plans to further enhance ICT systems in order to meet some of its overall objectives in becoming internationally recognised as a leader in the effective use of ICT, and to have Wales recognised as an area and a country that is among the best in carrying out electronic business.

There are a number of ways in which tele-democracy may be improved at the Assembly:

- Much more of the information produced for use on the intranet could be made available over the internet to the electorate.

- Many of the design features of the Assembly intranet could be incorporated onto the assembly internet site to make it more user-friendly. For instance, the use of an interactive map and seating plan available on Chamber Web.

- Currently the Assembly has little in the way of an extranet. This could facilitate improvements in communication with other organisations both within and without Wales. A prime example here is the need to develop links with organisations such as the Welsh Development Agency (WDA).

- One of the ways that Assembly members could gain improved contact with their constituencies is through the proposed use of videoconferencing equipment. Communication could also be improved internally with Assembly members, especially the Cabinet with various members who work in unison being able to contact each other if they are not in the same building at the same time. There are also proposals to provide videoconferencing links with local authorities. This will also enhance the effectiveness of the Assembly by making communication easier

However the achievement of the Assembly ICT objectives is constrained by a number of factors:

- The ICT agenda at the Assembly is broad. There appears to be no clear deadline set for improvements and there seems to be little prioritisation of areas that might bring most benefits, e.g., document management.

- There is something of a skills shortage within the Assembly even though a good infrastructure is in place.

- There is information overload due to the ineffective use of e-mail. One individual recently had 400MB of e-mail residing on one of the servers in the Assembly.

- Translating all information into Welsh including complex tables and numerous statistics has implications in terms of future expenditure.

4. CONCLUSIONS

Current ICT initiatives within the National Assembly of Wales may be mainly classed as being a form of internal tele-democracy. Much work and expenditure has been undertaken on improving the operational performance of internal democratic processes, particularly the operation of the Assembly plenary sessions.

The Assembly has begun to implement some examples of external tele-democracy, particularly focused around the Assembly's internet site. For instance, policy in relation to e-business strategy within the region is currently published on the Assembly Web site and all interested parties are invited to comment on the proposed policy by posting to this site.

Elmagarmid and McIver (2001) define a number of levels of service provided by current internal and external tele-democracy systems;

- first level services provide one-way communication for displaying information about a given aspect of government,

- second level services provide two-way communication usually in the form of simple registration of comments,

- third level services facilitate complex transactions that may involve intra-governmental workflows

- fourth level services integrate a wide range of services across a whole government administration.

The Welsh Assembly, although being advanced in tele-democracy terms for a UK government administration, is no more than at the second level on this scale. This is what Watson and Mundy (2001) refer to as the initiation stage in the diffusion of ICTs into tele-democratic processes. Clearly, there is much potential for further external tele-democracy initiatives building upon the existing ICT infrastructure and re-engineering some key aspects of governmental processes in the region. Third and fourth level services will prove critical to fulfilling the Assembly's expressed ICT objectives.

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