

TOWARDS SUCCESSFUL EGOVERNMENT FACILITATION IN UK LOCAL AUTHORITIES

Zorlu, Senyuçel, Business Information Technology Group, Manchester Metropolitan
University Business School, UK
z.senyucel@mmu.ac.uk

Abstract

This research considers significant empirical perspectives relative to eGovernment agenda for modernisation and structural change, highlighting the critical need for mutually constitutive relationships between the IS Function providers (supplier of IS services) and IS Function users (service departments) in UK local authorities. The theoretical notion of 'duality of structure' is applied to analyse findings from both secondary and primary sources, including an extensive literature survey, document analysis and semi structured interviews with ten eGovernment managers, ten Heads of IS and ten IS Project Managers. A rich analysis is generated of apparent differences, hence lack of congruence, between user and providers in this respect. This is believed to provide valuable insights into the role of the various stakeholders involved. The paper argues for recognising the limitations of a technology focus but also appreciating its symbolic value in facilitating the process of adapting traditional service delivery towards more responsive citizen eGovernment expectations and requirements.

Keywords: eGovernment, UK local authorities, information systems function, structuration

1. INTRODUCTION

It is argued that the highly bureaucratic, paternalistic and inflexible hierarchical government structures, established over a century ago, have failed to keep pace with changes in society, particularly rising citizen expectations and a more competitive business environment (Bentley, 2001). There is some evident criticism of UK local authorities as being inaccessible, unresponsive and essentially out of touch with citizen demands (Nye, 1999; Norris, 1999). There is a need for local authorities to undergo structural changes in order accommodate changing citizen needs and persistent business transformations (Burn and Robins, 2003; Ho, 2002; Holliday, 2002).

The UK Government announced its modernisation agenda in a White Paper: Modern Local Government, In Touch With People (DETR, 1998). This paper proposed a direction for radical reforms in local government. Implementing eGovernment is a key part of this modernisation and transformation agenda. At its simplest, eGovernment is about providing citizens with public services and essential information, using a variety of information and communication technologies (Burn and Robins, 2003). This technology focus is located within broader aims of improving public service delivery by decreasing levels of bureaucracy and increasing flexibility, efficiency and opportunities for citizen interaction. Although the Society of Information Technology Management (SOCITM) (2001, 2002) and UK Online (2001, 2002, 2003) reported that eGovernment implementations were well developed by the end of 2003,

many UK local authorities appear to be struggling to make the necessary transformations to this electronic service delivery infrastructure (Fountain, 2003).

The modernisation agenda promotes the use of electronic Information Systems (IS) in local authorities as a means of adapting traditional service delivery to a more customer-focused, on-demand environment (Hoff et al. 2000, Heeks, 1999, 2001a, 2001b). Conventional organisational wisdom would delegate responsibility for this IS-inspired transition and adaptation to the IS Function (Laudon and Laudon, 2000). Through the development, integration and re-organisation of information resources, those in local authority IS Functions (ISFs) have the potential not only to increase the speed of information processing, but also to support new communication channels between themselves and their users. Relationships enacted through changed communication topography of joined-up systems and channels could lead to new political and organisational structures (Peristeras et al., 2002). With due regard for the dangers of technological determinism (Wajcman, 2002) it is therefore important to appreciate the role and potential of the ISF in eGovernment initiatives. However, to date, relatively little is known about the role of the ISF for eGovernment facilitation in local authorities. Existing literature fails to cover the relationship between the ISF service providers and their users in the public sector organisations in the context of structural transformation.

In almost all previous technology enabled organisational transformation studies, any in-depth enquiry into how public sector manages structural and technological transformation has remained relatively limited (Tan and Pan, 2003). Some studies have considered structural change in local authorities from the legal-institutional perspective (e.g. Stewart, 1988; Wilson and Game, 1998). However, they tend to focus on state transitions ignoring the complex, continual and subtle ways in which local authorities evolve and the roles of people and technology during the change process (Fountain, 2003).

More recently advances in the adoption of technology in the public sector have brought with them more critical perspectives focusing on citizens and their needs (Scavo and Shi, 1999; Ho, 2002). This in effect shifts interest from the traditional bureaucratic structures, which prioritises internal efficiency, departmentalisation, functionality, top-down management, hierarchical communication and control, to a new eGovernment agenda. This is to emphasise organisational flexibility, efficiency in service delivery and partnerships (Bozeman, 2000; Wigan et al. 1997; Rosell, 1999). Consequently, technology enabled IS is presented as having a key role in this modernisation agenda. There is, however, a lack of clarity on how this shift should be facilitated which makes it difficult for local authorities to derive a clear vision of the structural and technical changes required for 'successful' eGovernment (SOCITM, 2002; Wired-Gov, 2003).

The shortage of research in structural and technological change in public sector can be interpreted as a theoretical and empirical gap that needs to be filled. The aim of this paper is to help filling this gap by focusing on factors that enable and constrain the structural and technological transformation of UK local authorities in e-Government context. Key empirical questions concern ways in which UK local authorities are facilitating eGovernment and how they are realising the potential of the ISF to modernised structures and improved service delivery performance.

2. THE IS FUNCTION IN UK LOCAL AUTHORTIES

Local authorities are complex organisations that operate both as administrators and providers of basic services in their environment (Greenwood et al, 1980). Within a common legislative umbrella, set by central government, every local authority in the UK has evolved its own structure and service delivery systems, but there is considerable commonality. Local authority structures have been based traditionally on a bureaucratic model that emphasizes decentralisation and specialisation in a mechanical and pre-planned approach (Nye, 1999). Public service delivery and administration has tended to be organised in the same bureaucratic manner. This potentially generates inefficiencies and inflexibility in management systems where organisational actors, their roles and tasks, are locked into vertical hierarchies (Bentley, 2001). Local government researchers have concentrated heavily on transparency, security, democracy and the digital divide since the late 1990s mainly through a legal-institutional lens that emphasises the legal framework within which local government operates (Greenwood, et al. 1980). In order to appreciate the extent of the transformational challenge facing local governments attention must also be given to local organisational complexities, variation in structures and the impact of change on individuals and technology over time.

The purpose of an Information Systems Function (ISF) in a local authority is generally regarded as deploying resources to support information needs arising from organisational tasks and processes, and ensuring that IS and technology are aligned with organisational strategy and goals (Laudon and Laudon, 2000). However, its role is not necessarily passive. Within a local authority it can act as a powerful agent for change, proposing and implementing new strategies and new services (Senyucl, 2002; Moon, 2002). The ISF typically supports internal and external information and communication needs, internal processes, policy development and application, monitoring and auditing; and enabling communication with government employees, citizens and businesses. Its central role in eGovernment facilitation is unquestioned (Loader, 1998). *Figure 1* illustrates an overview of ISF in local authorities. The purpose of the ISF main systems and its key features are identified to illuminate its role in implementing and developing eGovernment initiatives.

Purpose of the IS Function	System Types	Key Features of the IS Function
to structure work	Operational	work rationalisation
to evaluate performance	Monitoring	measures, standards, feedback, KPI's
to support information process	Planning	data analysis, modelling
to enable communication	Communication	transactions, communication networks
to deploy resources for tasks	All	people, finance, knowledge
to align technology with goals	All	implementing and developing

Figure 1. Overview of the IS Function in Local Authorities (based on Winfield, 1991)

The combined demands of fast and effective public service delivery have fuelled the modernisation process and implementation of eGovernment initiatives in local authorities. Efforts to improve service delivery and organisational efficiency have focused on structures and activities. Local authorities have engaged in business process redesign, joining up services through horizontal information flows and eliminating steps that do not add value from a citizen's perspective. Similarly, they are reengineering administration and support activities by creating information and communication networks between citizens and departments. The

scope of these business process redesign initiatives has resulted in new working relationships between the ISF and other departments: for example, in collaborative e-Payment initiatives for paying council tax bills (DETR 2001a, 2001b).

It is argued that Giddens (1984) may offer the opportunity to enable recognition of these critical processes from a theoretical standpoint and therefore provide useful insights for an empirical analysis. The value of Giddens' (1984) work is embedded in appreciating sources of facilitation and constraint within a shifting organisational context such as the situation within eGovernment.

3. DUALITY AND THE IS FUNCTION

The success of the ISF depends on how its role is practiced in local authorities. Technology makes an important contribution to that role and it is important for any study of social action to clarify how it is conceptualised (Orlikowski, 1992, 2000). Some conceptualisations consider technology in a narrow way, limiting its scope to material artefacts that substitute for human functions such as tools, machines, etc. (Kroes, 1998). From this perspective the role of the ISF could be equated to the emergent properties of the computer hardware, software and telecommunications network for which it has responsibility. Parayil (1991) views technology not only as an artefact but the knowledge that underlies the artefacts. This view broadens the definition of the ISF from simply being a set of physical structures to the theoretical knowledge of the hardware and the software. Some analysts view technology as a set of activities carried out by people that contain aspects of knowledge, material and skills to accomplish a task. The ISF according to this view would incorporate physical structures including all the skills to collect, store, process and manage information; and the procedures around these processes (Teich, 1981; Street, 1992)

Orlikowski's (1992) Structural Model of Technology (SMT) restricts the concept of technology to its material artefacts, and distinguishes it from people's activities. This enables the interactions between technology and organisations to be examined as SMT separates technology from human agency. Her work expanded on Giddens (1984) Structuration Theory emphasising the dynamic and dialectic relationship between technology, people and the organisational context - similar studies of this kind are well documented in the literature (Jones, 2003).

Specific elements of Giddens are considered as a 'sensitising device' that can act as a lens for appreciating the role of the ISF in eGovernment facilitation. This role is strongly associated with the technology services for which it is responsible, but it is not intended to regard the technology as embodying structural properties that determine its adoption. Such a conceptualisation (which partly underlies Orlikowski's SMT) is inconsistent with Giddens' central idea of structure as 'memory traces'. Instead, Orlikowski's more recent work is adopted in which her arguments for 'emergent' structures of technology, rather than 'embodied' structures are noted. This shifts the research emphasis from technology features that promote change to the appropriation of technology by individuals as evidence of structures enacted through *use*.

It is in appreciating *use* that Giddens' ideas have particular relevance through the notion of inevitable unanticipated and unintended consequences of purposeful action. Charting deliberate acts by the ISF to enable new ways of working does not imply adoption and the automatic creation of new government structures (Jones and Karsten, 2003). Giddens' duality of structure is posited on a notion of structure as memory-traces that guide action; those structures become more 'well-grooved' as actions are repeated across time and space. Technology is often intended to enable patterns of behaviour to be repeated over time and coordinated in different locations, thereby reinforcing particular ways of doing things, but its mere presence does not guarantee that it will fulfil its intended purpose. It is congruence between actions that evidence intended use (normally the domain of IS developers) and actual use (the domain of IS users) that is of particular interest to our study of ISF eGovernment facilitation.

The paper seeks to analyse the mutually constitutive relationship between the ISF and its organisational context in terms of two interlocked systems of development and use (Rose and Lewis (2001). Whilst participative development approaches and modern 'self-service' web-based information systems blur the line between provider and user (Orlikowski and Hoffman, 1997) this maintains a provider-user split for analytical convenience as it facilitates comparison with others who have drawn similar boundaries (Pillay and Hackney, 2001; Moon, 2002).

The provider-user split enables the notion of eGovernment to be viewed from two perspectives, as noted the ISF provider and from its user community. The central interest is in a shared understanding about ways of working envisaged by those developing the technology for eGovernment and those who will be using that technology. Congruence between provider and user perspectives is critical to the evolution of eGovernment and recognising processes which underlay the situation offers a powerful critique of, for example, power relations between providers and their user communities (Nandhakumar and Jones, 1997). This is achieved by revealing patterns through the extent of congruence observed in this respect.

4. METHOD

To enhance sensitivity to recurrent patterns, the empirical research was guided by an extensive literature search on e-Government and consisted of ten randomly-selected case studies from the sampling frame of British local authorities. This sampling frame ensured that each case shared common structural attributes with the others: all were subject to the same legislation determined by central government and funded jointly by central government and local tax payers, making them typical UK local authorities. However, initial checks confirmed that the sample varied in size, structure, demographics and were at varying stages of implementing and developing e-Government services.

The purpose of the study was to reveal the structuration of congruence between those developing the technology to support e-Government (providers) and those who would set the new ways of working (users). Between December 2002 and March 2003 each of the case studies was visited and semi-structured individual interviews were carried out with ten Head of IS, ten IS Project Managers and with ten designated e-Government managers who had

particular responsibility for new ways of working. Interview findings were triangulated with data collected from document analysis carried out at each site. Documents included SOCITM reports (2001, 2002, 2003), government reports such as UK Online reports (2001, 2002, 2003), ODPM (2001, 2002) and DETR (1998, 1999, 2000a, 2000b, 2001a, 2001b), Cabinet office reports (2000a, 2000b) and various other financial reports, minutes of the meetings, etc. that were provided to us by the participants in each authority. Informed consent was sought from all participants who were assured of confidentiality. The in-depth, semi-structured nature of interviews provided an open and flexible structure that enabled information about various angles of the topic to be gathered (Kvale, 1996). The overall structure for each interview was provided by a standard case study protocol (Yin, 1994) derived from the 'sensitising device' of Giddens' dimensions of structuration as shown in *Figure 2*.

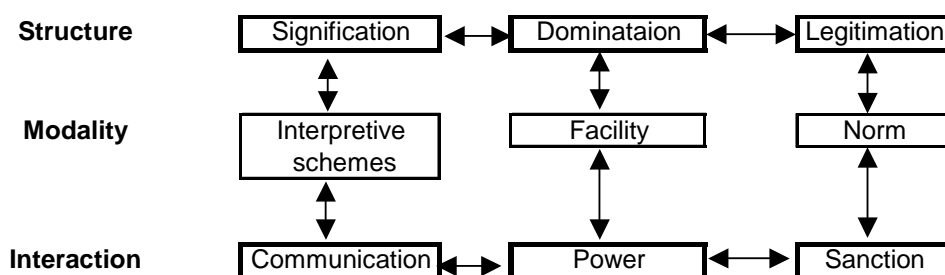


Figure 2. Giddens' Dimensions of Structuration

A combination of open and direct questions was employed. Themed 'how' and 'why' questions enabled participants' views to be probed on the challenges they faced in developing rules and resources to address the eGovernment agenda as they perceived it. The structuration theory-inspired interview protocol ensured that questions covered:

- Interpretations of the eGovernment concept.
- Resource allocation mechanisms that shaped its evolution and norms of behaviour that dictated eGovernment development.

The analysis of the qualitative data collected through ten case studies were completed by using NVivo package. NVivo's speed and flexibility had positive effects in analysis by reducing the amount of paper work and increasing the speed of searching. It enabled the shuffling of the data in various ways that made it possible to look at data from different angles and try out new analytical approaches. NVivo was particularly useful in storing data from multiple sources, sorting out and organising data to produce an explicit, systematic and documented analysis, which increased the transparency of the research. Transparency affects the process and the product of the research and makes the analysis more fruitful by avoiding under interpretation (Fielding and Lee, 1998). The explicit, systematic and documented organisation and management of data helps to avoid over interpretation as it makes it easier to detect where the data have been subjected to premature analytic closure. Computer packages have now established themselves as key aids in handling and analysing of qualitative data (Kelle, 1995; Fielding and Lee, 1998). However, there is no computer package that can substitute the interpretive skills of a researcher. Thus, at times the researcher supported the data analysis manually. Analysis is conducted by searching for regularities and patterns of codes (e.g. repeatedly occurring codes). These regularities are treated as signals for causal links between

the information in the text segments referred to by the linked codes. Permanent comparison of text segments and codes within the text and across texts form the core of for this research.

Whilst the interview protocol remained constant across the ten case studies sensitivity to recurrent themes and particularly pertinent questions (inevitably) heightened during the study. On completion of the case study visits the findings were organised into two groups: ISF providers (Heads of IS and IS Project Managers) and ISF users (eGovernment managers). To reveal the extent of congruence between these two perspectives each of Giddens' dimensions was used as a lens for comparing the data. When combined with the emergent appreciation of recurrent themes that had built up during the course of the fieldwork these dimensions provided a powerful way of recognising the insights gained.

However, it was clear that rich evidence was clustered around the notion of perceived *threats* that were not readily accommodated within Giddens' original dimensions. Respondents in many authorities did not feel they had any means of sanction but at the same time some management approaches were seen as *threats* to eGovernment deployments. The term *threats* was used to refer to the dangers and hurdles that might occur before, after and/or during eGovernment facilitation. The addition of *threats* to the dimensions of duality of structure clearly enhanced an appreciation of the extent of congruence between providers and users and indeed the likelihood of successful eGovernment implementation.. The inclusion of *threats* appears to enable a more valid enhancement of analytical insights gained and is not intended to reify the dimensions. Data was therefore analysed under this category thus presenting and opportunity to augment Giddens' original framework, as shown in *Figure 3*.

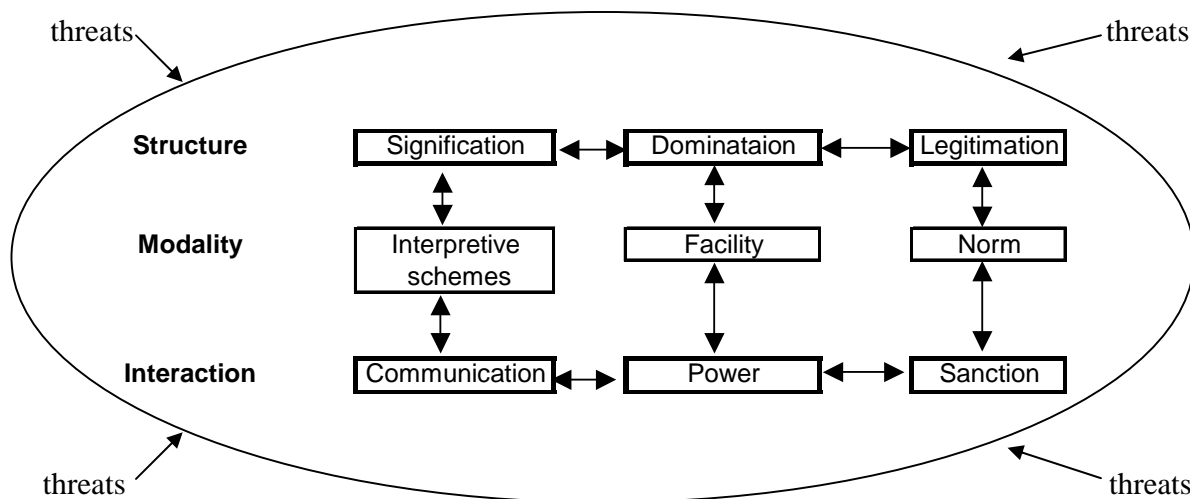


Figure 3. Giddens' Augmented 'Dimension of Structure'

5 FINDINGS AND DISCUSSION

This paper set out to understand factors enabling and constraining eGovernment adoption in UK local authorities. To reveal those factors, fieldwork concentrated on congruence between the perspectives of those developing the technology to support eGovernment and those who would set the new ways of working within local authorities. The findings were analysed and recurrent themes are discussed below.

5.1 eGovernment at Local Authority Level

Signification	Both groups agree that joining-up services and departments, and delivering public services online are the main focus of eGovernment facilitation. The ISF is relevant and useful to both providers and users, as it contains information that is used by both groups in everyday activities and to adapt organisational structures to the digital environment. Communication is often two-way between the developers and the users.
Interpretive Scheme	
Communication	
Domination	The traditional bureaucratic system reinforces the hierarchy of local councils in general. However, the ISF providers are beginning to have more of a say as departments are becoming dependant on technology for everyday tasks. This results in the feeling of powerlessness by other departments. ISF providers' interests dominate the eGovernment project structures. However, ISF users hope eGovernment will alter the nature of the interactions between departments and empower the people involved.
Facility	
Power	
Legitimation	The ISF reinforces and reproduces the legitimate way of working. The ISF is beginning to change the status quo as more and more services are delivered by multi channels. It is not legitimate for ISF providers to take up action if other service departments do not wish to be involved in any eGovernment activity. However, ISF users can regulate departmental issues by controlling the eGovernment budget.
Norm	
Sanction	
Threats	Both groups view lack of funding, lack of management awareness and support, lack of leadership, and lack of desire to change as major threats. In addition, ISF providers are concerned about the exaggeration of eGovernment benefits and 100% electronic service delivery by 2005. For ISF users silo mentality is a source of concern.

Figure 4. Overview of key eGovernment concepts at local council level

5.1.1 Signification, Interpretive Scheme, Communication

Although ISF providers and users have similar views on the significance of eGovernment, different views emerged between the two groups regarding the degree of sophistication of the concept. Compared to ISF providers, ISF users gave deeper definitions of eGovernment and they claimed that unlike the popular belief it is not about meeting targets, but about adapting organisational structures to the new digital environment. ISF users thought eGovernment to be about delivering public services in various different ways citizens can choose to use that cannot be delivered through traditional structures. One user mentioned that eGovernment is not about technology but about reviewing the way public services are delivered to the public. This fits with Street's (1992) views that technology is not just an artefact but also a part of a wider socio-technical system that includes structures, people, processes and decisions on how to use technology.

ISF providers, on the other hand, defined eGovernment with more of a 'textbook' style and their definitions did not go beyond the use of the Internet for service delivery and 24/7 accessibility in public service delivery. From a more technical point of view, ISF managers defined eGovernment in broader terms as anything and everything delivered electronically to local councils' staff and its citizens. They regarded eGovernment as an extra tool for citizens to interact with the council. This is in line with Kroes (1998) where technology is seen just as an artefact. Some ISF providers perceived eGovernment as a '*bunch of initiatives to cope with*'. Terms like '*improved service delivery*', '*reduction of bureaucracy*' and '*effective use of IS*' also came up, however, they were not fully explained. Their explanations provided the bones but not enough meat. This lack of clarity stems from three reasons: the nature of their job, inefficient internal communication channels in the local authority and the complex nature of eGovernment itself.

ISF providers are responsible for designing, creating, implementing and developing eGovernment in local authorities. IS departments in local authorities are often understaffed and lack highly skilled workers. Thus, having additional work on their shoulders could be the reason for their tendency to see eGovernment as a burden. In addition, getting the messages across to departments and individuals still seems to be an issue. The nature of the eGovernment concept is not simple and its main objectives can vary from authority to authority, department to department and individual to individual. Participants indicated that effective management is a key element in creating a platform to discuss tasks openly. This is believed to precede shared understanding of what eGovernment actually is. Both groups held departmental managers and executives responsible for the lack of shared meaning and understanding of eGovernment.

Peristeras et al. (2002) indicate that a shared understanding of eGovernment can be created through effective use of the ISF. Departmental managers and executives need to realise the full potential of the ISF and turn it into their advantage in improving internal communication. Although a more citizen-focused approach is necessary in public sector, internal efficiency still remains as a top priority in the modernisation agenda.

5.1.2 *Domination, Facility, Power*

The findings confirmed what Bentley (2001) indicated in that local authorities are operating on traditional bureaucratic systems with strong hierarchies; however, both groups stated that this system is soon to be changed as more and more eGovernment initiatives are translated to everyday activities. All participants stated that eGovernment facilitation depends on central government's funding and local authorities' own revenues. The use of project management tools (e.g. PRINCE 2) and use of solid project management schemes were also mentioned as key components in facilitating, and easing the monitoring of the evolution of eGovernment. ISF users emphasize that strong business knowledge is vital when creating resources to implement and develop eGovernment services in local authorities. This is in line with Bozeman (2000) that traditional bureaucratic paradigm is inadequate for eGovernment facilitation.

In addition, ISF providers underlined the importance of careful management of internal finances as a key factor for eGovernment facilitation. This was believed to emerge from the

close relationship between the IS and Finance departments during the implementation of eGovernment initiatives and later in the development stages regarding procurement and budgeting issues. Moreover, it was found that Finance departments were regarded highly amongst the ISF providers for being one of the leading departments in embracing the modernisation process compared to other departments such as education, social services and planning. Finance departments being the first amongst others to use technology, having sufficient knowledge, and '*knowing the language*' was shown as reasons why ISF providers felt closer to Finance departments.

Both groups felt that eGovernment and the use of technology are changing '*the way things are done*' and this has effects on the role of individuals. As more and more services are delivered electronically, departments depend increasingly on the ISF. The current situation enables ISF providers to rise in the hierarchy, but makes most other departments feel powerless. ISF users are hoping that joining-up departments will ease the power struggle by making information and technology shared commodities.

5.1.3 *Legitimation, Norm, Sanction*

The main difference in the legitimacy of ISF providers and its users was that it was legitimate for ISF providers to work with every department on a customer-client basis, but ISF users had to adopt a consultant role toward other departments. ISF providers had the power to discriminate between departments and to classify them according to their cooperation levels. Some departments were highly regarded by ISF providers while others were hardly spoken of. This resulted in ISF providers favouring certain departments in everyday tasks. Some ISF users expressed their concerns about this and stated that some departments feel '*neglected, ignored and dragged by others*'.

The number of ISF providers who stated that they were not in a position to put sanctions on other departments was overwhelming. Although they admitted viewing some other departments as inferior, they argued that they desperately needed collaboration to collect, process, and deliver information. It was clear that ISF providers viewed sanctions directly as a matter of exercising control and that due to their position in the local government hierarchy, they had no ability to do so. However, although ISF providers did not have formal ways of sanctioning others, they stated that they could slow down the support for some eGovernment projects. These views confirm that role of people in local authorities and the way they interact are changing with eGovernment facilitation. This is however contradictory with Scavo and Shi (1999) view that the emphasis is shifting towards user needs.

The ISF users, on the other hand, suggested that exploiting the corporate mentality in governance can lead to better enforced regulations on departmental issues and that it can also be used to monitor the budget distribution of eGovernment projects. They argued that departments used to be given resources according to their projects under the traditional structure, which encouraged them to come up with too many. They suggested that with corporate support, resources can be distributed to departments not only on the basis of their projects but also on their success after various assessments to ensure feasibility and effectiveness. However, ISF users claimed that this is not easy, as identifying departmental priorities and finding ways to measure outcomes remain major problem areas in the public

sector and they added that techniques needed to be developed to overcome these problems. The dominance of traditional approaches questions the emergence of a new eGovernment paradigm that emphasises user needs, organisational flexibility and partnerships (Rosell, 1999)

It is apparent that both groups are clearly lacking efficient sanctions to aid delivery of the facilitation of eGovernment services. It was found that none of the councils had much choice in terms of creating sanctions and executing them through the ISF. Existing sanctions do not go beyond abandoning projects or raising problematic issues with corporate managers.

5.1.4 Threats

Both groups agreed that lack of funding, lack of desire to change, lack of management awareness and support; lack of leadership; and exaggeration of eGovernment benefits is a major threat to facilitation. Among one of the major issues is the role of management which came across very strongly amongst both groups. ISF providers claimed that some managers are not realistic in their demands regarding information systems infrastructure, which can be traced back to an inward-looking approach in the literature. This was attributed to some managers still having difficulties seeing the long-term benefits of eGovernment. Most departmental managers were seen as highly suspicious of new initiatives and unsupportive. ISF providers argued that this managerial shortsightedness has the potential to jeopardise the success of eGovernment facilitation.

ISF users stated that conflicting priorities of departments is a major threat, which can jeopardise the efficient delivery and sharing of information between departments, which goes against the joined-up government principle. In addition, ISF users mentioned ODPM's (Office of Deputy Prime Minister) lack of clear guidance as a threat. They argued that ODPM failed to create standards or priorities early enough for local councils to act, making it difficult for local authorities to meet deadlines such as the 2005 target for electronic service delivery, which in itself was seen as *'ill-defined'*. One ISF provider concluded: *'to set up online information for parents to check what their children will be eating in schools for lunch is waste of time, money and effort'*.

ISF users argued that there is a strong *'silo mentality'* and *'local empire building'*. Departments were still not as collaborative as they should be to create a joined-up service environment. This problem was seen as a result of managers' conflicting characters and attitudes towards modernisation. Both groups expressed their concerns with regards to exaggeration of eGovernment benefits. They argued that both the private sector and central government are exaggerating the benefits of eGovernment by regarding it as *'revolutionary and a national priority'*. ISF providers mentioned that although eGovernment initiatives remain at the core of the modernisation agenda, they should not be regarded more highly than citizens' needs – see *Figure 5*. One ISF user mentioned that some eGovernment initiatives consume valuable resources that could be used to meet citizens' priorities instead. He continued that eGovernment is number 101 on a list of most citizen's top 100 priorities.

It is evident from the above responses that the 'real world problems' of eGovernment facilitation in local authorities needs further attention; and there is more to this than website evaluations and citizen opinion polls on electronic service delivery (e.g. SOCITM, 2002).

6 CONCLUSION

Although it has been more than six years since the UK Government launched its e-Government initiative as an important part of public service reform, local authorities are far from facilitating e-Government comfortably. In almost every occasion, central government is emphasising the importance of the use of ISF in e-Government facilitation, but local authorities do not know much about the potential of ISF and its core issues such as the effects of provider-user split in everyday e-Government facilitation. It has been a constant struggle for local authorities to create an efficient ISF and e-Government vision and establish a supporting programme of structural and technological change. Our findings suggest that opportunities for the ISF to realise its potential facilitation role have been constrained by technology-oriented thinking and a lack of clear direction from central government. The use of technology to improve public service delivery was a powerful message from the central government but without much guidance and support local authorities feel that e-Government is oversold and it is a burden. Thus, it becomes very difficult for local authorities to operationalise the ISF without the guidance and expertises needed for the job.

For e-Government to work in local authorities in the kind of citizen-focused way there has to be a complete re-acculturation of local government bureaucracy and a new focus on outcome rather than process. The operational powers of local authority managers must be enlarged, for our actions are dictated and diminished by the concepts we possess. Otherwise, it seems that its present resistant and unresponsive character will continue however much central government claims that e-Government can change it.

Too much faith has been invested in e-Government as a cure for all problems in the public sector. There is belief in government that at some level e-Government will make local authorities more citizen-focused, responsive and flexible, but there is no inherent reason why this should be the case. e-Government has the potential to make local authorities more efficient, but this does not mean that it can also make local authorities more effective. There needs to be deeper understanding of the individual and structural dimensions of the phenomena.

Giddens' (1984) dimensions of duality of structure is used as a 'sensitising device' to build a rich picture of factors underlying differences between users' and providers' views on e-Government. Differences and systemic factors that reinforce them highlight the complexity of the situation at a local level but also point the way to enhanced management action based on deeper appreciation of processes at work. Our case studies revealed differences between providers of technology and their users regarding what e-Government actually is; how it will work; what role the ISF should play; and how it all comes together to improve service delivery. There is clearly a split between the providers of ISF and their users. This is a problem for e-Government facilitation because it creates a division (us and them) amongst local authority staff (providers and users), which leads to resistance to change and lack of communication and lack information sharing. The findings suggest that managerial resistance in particular, has emasculated the application of the idea of e-Government at the local level.

Great potential exists to improve the efficiency of technology support in local authorities, but integration of heterogeneous databases and overcoming conflicting system requirements across different departments are still major problems. However, problems are compounded when officials, from local authorities or central government, label these problems as simply technical, ignoring their organisational and managerial aspects. Differences in user-provider perspectives speak to a history of functioning as silos of distinctive expertise. The sample in this study is small but it suggests that enacting e-Government as a technology project does little to break down barriers between 'expert' technology providers and business users, and can actually exacerbate problems. Respondents did unite in attributing problems to central government's failure to set clear targets and standards; educate key players; and create solid communication channels to enable local authorities to share information.

The findings encourage local authorities to re-frame their e-Government initiatives as a way of thinking rather than a project or a solution. e-Government should be seen as a vision of how local authorities might be structured to become more citizen-focused, not just through a specific technological process but by exploiting human resources and business by designing and enacting new structures that make appropriate use of integrated information and communication technologies.

It is apparent that changing traditional government structures is vital for local authorities to facilitate e-Government in the digital environment. However, it is problematic to view structural changes as a short-cut to successful e-Government facilitation and superior public service delivery. To change structures without changing the processes they are designed to sustain is an empty action (Stewart, 1971). A fundamental re-think of business processes is not an IT project and it would be a mistake to portray technology as the key to local government reform. It should only be utilised if it can improve the service to users and the overall economic well-being of local authorities generally. This paper has highlighted, through theoretical formulation and empirical context that these issues are of critical importance to e-Government facilitation in UK local authorities. There are signs of improvement in the public sector but many still regard e-Government as a burden to cope with. If local authorities are going to lead their citizens in the digital era, they must look beyond short-term struggles. Progress in local authorities has been uneven, but there are positive signs that it will accelerate as departmental managers recognise the long-term advantages.

For future studies on the subject, two specific areas of research are identified that might effectively enhance the readers comprehension of eGovernment facilitation. First, role of the central UK government could be illuminated and greater attention could be paid to the details as to how central government perceives the role of technology in modernisation of local authorities. Finally, additional investigation is needed to ascertain if there is a difference between local authorities and central government in their approach to provider-user relationship in e-Government facilitation.

References

- Bentley T. 2001. *It's Democracy, Stupid: an Agenda for Self-government*. Demos, London.
- Bozeman, B. 2000. *Bureaucracy and Red Tape*. Prentice Hall, New Jersey.
- Burn, J. and Robins, G. 2003. 'Moving towards eGovernment: a case study'. *Logistics Information Management*, 16 (1): 25-35.
- Cabinet Office. 2000a. *eGovernment: a strategic framework for public services in the information age*. Cabinet Office, London.
- Cabinet Office. 2000b. *e-gov: Electronic Government Servicesw for the 21st Century*. Cabinet Office, London.
- DETR. 1998. *Modern Local Government: In touch with people*. DETR, London. Available <http://www.local-regions.detr.gov.uk/lgwp/index.htm>
- DETR. 1999. *Local Leadership, Local Choice*. The Stationary Office, London.
- DETR. 2000a. *Preparing Community Strategies: Government Guidance to Local Authorities*. DETR, London. Available <http://www.local-regions.detr.gov.uk/pcs/guidance/01.htm>
- DETR. 2000b. *Implementing EGovernment – Guidelines for Local Government*. DETR, London.
- DETR. 2001a. *eGovernment: Delivering Local Government Online, Milestones and Resources for the 2005 Target*. DETR, London.
- DETR. 2001b. *eGovernment, Delivering Local Government Online: Guidelines for Implementing Electronic Government Statements*. DETR, London. Available http://www.idea-infoage.gov.uk/resources/esd/misc/egov_dlgo.pdf
- Fielding, N.G. and Lee, R.M. 1998. *Computer Analysis and Qualitative Research*. SAGE, London.
- Fountain, J.F. 2003. *Information, Institutions and Governance: advancing a basic social science research programme for digital government*. National Centre for Digital Government, Harvard University, Cambridge, Massachusetts.
- Giddens, A. 1984. *The Constitution of Society: Outline of the Theory of Structuration*. Polity Press, Cambridge.
- Greenwood, R., Walsh, K., Hinings, C.R. and Ranson, S. 1980. *Patterns of Management in Local Government*. Government and Administration Series, Martin Robertson, Oxford.
- Heeks, R. 2001a. 'Building e-Governance for Development: A Framework for National Donor Action'. *I-Government Working Paper*, 12, ISDPM, University of Manchester, Manchester.
- Heeks, R. 2001b. *Reinventing Government in the Information Age*. Routledge, London.
- Heeks, R. (Eds.) 1999. *Reinventing Government in the Information Age: International Practice in IT-enabled Public Sector Reform*. Routledge, London.
- Ho, A.T. 2002. 'Reinventing Local Governments and the EGovernment Initiative'. *Public Administration Review*, 62(4): 434-444.
- Hoff, J., Horrocks, I. and Tops, P. 2000. *Democratic Governance and New Technology, Technologically Mediated Innovations in Political Practices in Western Europe*. Routledge, London.
- Holliday, I. 2002. 'Building EGovernment in East and Southeast Asia: Regional Rhetoric and National (in) Action'. *Public Administration and Development*, 22: 323-335
- Jones, M. 2003. 'Structuration Theory and IS Research'. *IS Forum*, Cambridge. Available http://www.jims.cam.ac.uk/research/seminar/isforum_2003-4.html

- Jones, M. and Karsten, H. 2003. 'Review: Structuration Theory and information Systems Research'. *Research Papers in Management Studies*, W11/2003, The Judge Institute of Management, University of Cambridge, Cambridge.
- Kelle, U. 1995. *Computer-Aided Qualitative Data Analysis: theory, methods and practice*. SAGE, London.
- Kroes, P. 1998. 'Technological Explanations: the Relation Between Structure and Function of Technological Objects'. *Journal of the Society for Philosophy and Technology*, 3(3): 18-35.
- Kvale, S. 1996. *InterViews*. SAGE, London.
- Loader, B.D. (Eds.) 1998. *The Governance of Cyberspace: Politics, Technology and Global Restructuring*. Routledge, London.
- Laudon, K.C. and Laudon, J.P. 2000. *Management Information Systems: Organisation and Technology in the Networked Enterprise*. International ed., 6th ed. Prentice-Hall International, INC, New Jersey.
- Moon, M.J. 2002. 'The evolution of EGovernment among municipalities: Rhetoric or reality?'. *Public Administration Review*, 62(4): 424-433.
- Nandhakumar, J. and Jones, M. 1997. 'Designing in the Dark: The Changing User-Developer relationship in Information Systems Development'. In Kumar, K. and DeGross, J.I. (eds.) *Proceedings of the International Conference on Information Systems (18th)*, 15-17 Dec., Omnipress, pp. 75-87, Atlanta, Georgia, USA
- Norris, P. 1999. 'Who Surfs? New Technology, Old Voters, and Virtual Democracy'. In Kamrck E.C. and Nye, Jr.J. (Eds.) *Democracy. com? Governance in Networked World*, Hollins Publishing Company, NH, pp. 71-94
- Nye, Jr. J. 1999. 'Information technology and Democratic Governance'. In Kamrck E.C. and Nye, Jr. J. (Eds.), *Democracy. com? Governance in Networked World*, Hollins Publishing Company, NH, pp. 1-18
- Orlikowski, W.J. 1992. 'The Duality of Technology: Rethinking the Concept of Technology in Organisations'. *Organisational Science*, 3(3): 398-427.
- Orlikowski, W.J. and Hofman, J.D. 1997. 'An Improvisational Model for Change Management: The Case of Groupware Technologies'. *Sloan Management Review*, Winter, pp.11-21.
- Orlikowski, W.J. 2000. 'Using technology and Constituting Structures: A Practice Lens for Studying Technology in Organisations'. *Organisational Science*, 11(4): 398-427.
- ODPM. 2001. *Strong Local Leadership vs. Quality Public Services*. ODPM, London.
- ODPM. 2002. *Implementing electronic government statements: Draft guidance*. ODPM, London. Available http://www.odpm.gov.uk/stellent/groups/odpm_localgov?documents/pdf/odpm_loggov_pdf_605194.pdf
- Parayil, G. 1991. 'Technological knowledge and technological change'. *Technology and Society*, 13(2): 289-304.
- Peristeras, V., Tsekos, T. and Tarabanis, K. 2002. 'Analysing EGovernment as a Paradigm Shift'. *UNTC Occasional Papers Series 1*: 2-14.
- Pillay J. & Hackney, R. A. 2001. 'Organisational Mission Statements: a postmodernist perspective on the management of IS/IT function within a financial services group'. *Information Resource Management Journal*, 15(1): 28-37.

- Rose, J. and Lewis, P. 2001. 'Structuration theory, action research, and information systems development'. In L. Russo, B Fitzgerald, and J.I. DeGross (Eds.), *Realigning Research and Practice in Information Systems development: the social and organizational perspective*. Kluwer Academic Publishers, Boston, pp. 273-296
- Rosell, S. A. 1999. *Renewing Governance: Governing by Learning in the Information Age*. Oxford University Press, New York.
- Scavo, C. and Shi, Y. 1999. 'World Wide Web Site Design and Use in Public Management'. In Garson, D.G (Ed.), *Information Technology and Computer Applications in Public Administration: Issues and Trends*. Idea Group Publishing, Hersey, PA, pp. 246-266
- Senyucel, Z. 2002. 'The Impact of the IS Function on the Transition of eGovernment Services in Welsh Unitary Councils'. *Manchester Metropolitan University Working Paper Series, WP02/13*, Manchester University, Manchester.
- SOCITM Insight. 2001. *Better Connected 2001? A Snapshot of Local Authority Websites Updating*. SOCITM Services Ltd., Northampton.
- SOCITM Insight. 2002. *Better Connected 2002? A Snapshot of Local Authority Websites Updating*. SOCITM Services Ltd., Northampton.
- SOCITM Insight. 2003. *Better Connected 2003? A Snapshot of Local Authority Websites Updating*. SOCITM Services Ltd., Northampton.
- Stewart, J. 1971. *Management in Local Government: a Viewpoint*. Charles Knight, London.
- Stewart, J. 1988. *Understanding the Management of Local Government*. Longman Information & Reference, Essex.
- Street, J. 1992. *Politics and Technology*. The MacMillan Press Ltd., London
- Tan, C.W. and Pan, S.L. 2003. 'Managing e-Transformation in public sector'. *European Journal of Information Systems*. 12: 269-281.
- Teich, A.H. (Ed.) 1981. *Technology and Man's Future*, 3rd Edition. St. Martin's Press, New York.
- UK Online. 2001. *Annual Report*. Office of the e-Envoy, Cabinet Office, London.
- UK Online. 2002. *Annual Report*. Office of the e-Envoy, Cabinet Office, London.
- UK Online. 2003. *Annual Report*. Office of the e-Envoy, Cabinet Office, London.
- Wajcman, J. 2002. 'Addressing Technological Change: The Challenge in Social Theory'. *Current Sociology*, 50(3): 347-363.
- Wigan, R., Picot, A. and Reichwald, R. 1997. *Information, Organisation and Management*. John Wiley, Chichester.
- Winfield, I. 1991. *Organisations and Information Technology: systems, power and job design*. Information Systems Series, Blackwell Scientific Publications, London.
- Wilson, D. and Game, C. 1998. *Local Government in the UK*, 2nd ed. MacMillan. London.
- Wired-Gov. 2003. *Internet Connectivity*. National Statistics, March, 2003. Available <http://www.wired-gov.net/WGLaunch.asp?ARTCL=17210>
- Yin, R.K. 1994. *Case Study Research: Design and Methods*. Sage, London.