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Seconds Out, Round Two: Contextualizing eGovernment Projects Within Their Instutional Milieu - A London Local Authority Case Study

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SECONDS OUT, ROUND TWO: CONTEXTUALISING E-GOVERNMENT PROJECTS WITHIN THEIR INSTITUTIONAL MILIEU - A LONDON LOCAL AUTHORITY CASE STUDY

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Abstract

It is early days yet to be able to truly determine whether the visions of e-government are realisable or not. The focus of the majority of the projects, and even research, on e-government has been on the possible impact of technology on government's interaction with citizens. This paper looks beyond this level, investigating the challenges faced by local government authorities when implementing e-government projects. A case study within a forward looking London borough implementing an e-procurement system was carried out. The research data suggests that the uncertainties faced by the authority during the implementation, and the mechanisms enforced to tackle them, have to be considered if we want to better understand the chances of success of e-government projects.

The study hints that amongst these uncertainties the institutional barrier of departmentalism, which lies deep in the public sector, is playing a major role in defining the possible outcome of e-government projects. The paper concludes that this organisational barrier has to be undoubtedly considered to comprehend the chances of ICT driven reforms such as public sector e-procurement.

Keywords: E-government, E-Procurement, Departmentalism, Implementation

1   INTRODUCTION

The infiltration of electronic business (e-business) and electronic commerce (e-commerce) technology into nearly every branch of the private sector has made governments worldwide reconsider the role of technology within the public sector. Governments deal with huge amounts of information, much of which has already benefited from past advances in computerisation and information communication technology (ICT), but current plans for electronic government (e-government) go further than simple notion automation. Using an array of ICTs, governments worldwide aim to drastically improve all areas of government activities – from democratic participation using online voting, to improving efficiency of citizen interaction with government by providing government services online. Hence, recent work in e-government has attempted to re-enforce the view among the public of an online portal to government, creating an illusion that work behind this portal will be performed in unison (Neef 2001). However, just as the private sector realised that e-commerce was not just the development of a 'jazzy' website, but more like an 'octopus' with tentacles in all of a business's operations (Smithson *et al.* 2002), government has realised that the true benefits of e-government in improving the state lie beyond the modernisation of service provision to citizens. Local authorities in the UK have embarked on a whole host of projects aimed at leveraging ICT to reform their operations in line with the central government agenda which has set 2005 as its deadline for achieving e-government reform. Procurement – traditionally seen within most public administrations as a back-office function – has been heavily targeted by computerisation in many of the private sector fields. In 1999 the UK government introduced plans to cut government procurement costs by £1billion over the following three years; by the following year the government had withdrawn these plans having fully realised the extent of the work involved in changing the back-end systems and in rethinking paper-based processes (Neef 2001). This objective has now been re-instated, with one of the most ambitious local e-government projects being the use of procurement technology to drastically cut costs within the everyday purchasing activities of local governments. The move to new corporate purchasing practices may however encounter more problems than expected.

The paper is structured as follows. In the next section, the literature review introduces the political ideologies which have led to current reform trends, as well as discussing where the current focus on research lies (or should lie), and the role of procurement within the public sector. The research approach and the chosen analytical framework are then described, followed by an introduction into the chosen case study organisation and its procurement systems. A further analysis of the changes in organisations procurement operations is then provided in light of the chosen framework. The penultimate section introduces and discusses the relevance and importance of a specific institutional barrier uncovered by the research. Lastly, the main argument is summarised and concluded.

2   LITERATURE REVIEW

In April 2000 the UK government shaved three years off its target for delivering its services online, the deadline being optimistically reset to 2005 (Left 2000). Government spin doctors have recently been busy trying to deliver the message of e-government as the solution to the inefficiencies of the public sector. Governments worldwide remain the single largest collectors, holders, users and producers of information (Heeks 2002) and so it would seem logical that such information intensive work could be rationalised and improved by ICT.

Ideas of rationalization of government activities underpinning e-government projects are not new. The Chicago School of Economics developed the standard ideas of public sector reform – i.e. Deregulation, Privatisation and Marketisation (DPM), an ideology which supported the idea of competition as a prime tool for the provision of government services (Lane 1997). Osborne and Gaebler (1992) coined the term 'Reinventing Government' but in their vision of public sector reform, technology and more specifically ICT played a small part, and their work overlooked previous studies

on the effects of ICT on the public sector. Fountain (2001b) identifies the major economic effects of the use of the Internet in government as lower transactions costs, improved efficiency (due to the positive network externalities) and the likelihood of new strategic and operational possibilities. Heeks (2002) reassess the role of technology in this reinvention of government, broadly stating that ICTs could impact on the four classical 'pillars' of the public sector reform agenda, these are efficiency, accountability, decentralisation and marketisation.

As an institution, the public sector has a very distinct character from that of the private sector; its sheer size, its alienation from the threat of bankruptcy, the dichotomy between policy-making and administration (especially as a result of the last centuries reforms), its inherent visibility to the public, and the monopoly it holds over some of its functions (Margetts and Dunleavy 2002) clearly mark the public sector's individuality. Furthermore the public sector ethos is one of accountability and not profit maximisation, as past attempts to improve efficiency and reduce costs have resulted in staff reductions and budget cuts (Fountain 2001a). While the use of technology in the private sector has often been linked to the attainment of enhanced efficiency and effectiveness, governments attempting to push the 'reinventing government' agenda have struggled to achieve such improvements having realised that there is often a trade-off between goal achievement and procedural accountability (Lane 1997). Moreover, traditional public sector traits such as individual departments and agencies developing proprietary systems, project champions been constrained and de-motivated by the risk-averse bureaucratic culture of public organisations, and the negative reactions of citizens who are treated merely as customers (Taylor *et al.* 1996) have created formidable barriers to the diffusion of innovation in public organisations.

> "Experience shows that it is harder to make change happen in the civil service than elsewhere in the public sector, which fits the traditional argument of the power of civil servants to avoid change." (Walsh 1995, p.192)

2.1   The Tip of the Iceberg – Current e-Government Research and Practice

Developments in the e-government arena bear a stark and worrying resemblance to those experienced by e-commerce during its heyday at the turn of the century; there is no doubt that for the public sector the "success of e-commerce has acted as a stimulus prompting to raise the engagement of e-business" (Wimmer and Traunmüller 2001, p.1). Nevertheless, worldwide approximately 85 percent of government information technology projects have said to been failures (Fountain 2001b). In the UK, the press has recently highlighted the issue of e-government costs not only soaring, but possibly even outweighing the stated benefits it aims to provide (Rogers 2003, Timmins 2003) .

Developments in e-government within the UK have so far been largely focused on autonomous, or semi-autonomous, government agencies. There exists a noticeable lack of research on local authorities as fundamental public sector organisations. Slowly the realisation has been that e-government reform relies as much, if not more, on local authority 'reinvention' – this would explains the dramatic increase in the number of websites and portals aimed at local e-government.

Much of the work carried out so far in most local authorities has focused on online information provision activities, most noticeably web-site development (DiConti 1998). In their framework for e-government, Lenk and Traunmüller (2000) class such work under the 'addressee's perspective' and designed to provide citizens with an "integrated access management and single-window service" to government front office operations. Their paper metaphorically portrays e-government as an iceberg, nine-tenths of which is composed of back-office work and remains hidden underwater. Research has also uncovered that despite efforts by government to modernise its citizen interaction points much of the work within the government organisation itself has not yet benefited from computerisation (Margetts 1999).

2.2   Behind the Scenes – A Look at Procurement

Over a decade ago, as part of their manifesto for reengineering business processes, Hammer and Champy (1993) illustrated the extraordinary effects ICT could have on procurement processes, a view which has since been heavily criticised (Galliers 1997, Galliers 1998, Grant 2002). ICT adoption has frequently been at the centre of procurement operations for the automation and rationalization of buyer and seller exchanges in order to increase efficiency and competitiveness of the business (Holland 1995, Mukhopadhyay *et al.* 1995). Systems adopted to foster these exchanges have been classed as inter-organisational systems (IOS) as they are required by their very nature to link the different organisations working within the supply chain. Procurement in the public sector, defined by government as "the acquisition of goods, works and services from third parties" (ODPM 2002, p.12), is big business and a constant concern for government policy makers. The Improvement and Development Agency estimates that the English and Welsh authorities spend over £25 billion on goods and services, and around £2.5 billion on administration costs for their 35 million purchasing transactions (Hunter 2002).

The New Public Management (NPM) ideology introduced a "cluster of contemporary ideas and practices" (Denhardt and Denhardt 2003, p.12) with the aim to use business approaches to improve public sector performance. With the creation of private and public sector partnerships, it was hoped privatisation and marketisation (coupled with decentralisation of financial control) would increase the efficiency and effectiveness of services and goods provision (Denhardt and Denhardt 2003). These initial reforms had larger central government service procurement contract needs as their focus and not the micro-level procurement activities of local administrations.

The recent realisation that e-government must be put in place at local level has brought renewed interest in procurement activities occurring within these organisations. A series of government commissioned reports were produced which reviewed the current state of local administration's procurement in England. The most influential of these, the 'Byatt report', concluded that local administrations needed to take a strategic view of their procurement and use best practice techniques in order to drastically reduce their inefficiencies (Byatt *et al.* 2001). The report made a clear case for the use of markets and e-procurement tools to reduce transactions costs, but failed to elaborate on what type of e-procurement technology the authorities had to focus on. Practitioners advocating e-procurement have argued that it will be this technology, and not electronic voting or online tax services, which will finally push government into the electronic age:

> "it may well be that the original 'reengineering the government' effort that was initiated…nearly 10 years ago was premature, at least in part because the technology…simply wasn't there to allow for a wholesale restructuring" (Neef 2001, p.11)

Recent reports have claimed that due to lack of procurement strategy and corporate purchasing management, inefficient procurement is costing councils in England £430 million per year (BVP 2003); this has fuelled the government's interest in the introduction of e-procurement for goods and commodity purchasing within local administrations, and in developing external markets to further meet their procurement needs. The government has proposed "radical change" (BVP 2003) as a necessity to make full use of both rationalisation and other improvements offered by e-procurement technology, as well as the economies of scale achievable through a common market place. As a result several pilot projects were commissioned and recently completed.

3 RESEARCH APPROACH

3.1 The IOS Research Framework

The latest reform push to develop e-procurement has forced local authorities to reconsider the role played by their procurement systems as no longer just being internal back-office systems, but as corporate inter-organisational systems. Bensaou and Venkatraman's (Bensaou and Venkatraman 1996) conceptual model of interorganisational coordination was chosen as a flexible framework which would allow for a less rigid analytical approach to the research. The framework builds and extends on Galbraith's (1977) thesis on effective intra-organisational design of information processing to best deal with task uncertainty, and provides a macro level view of the issues affecting the dyadic relationship between the organisations in an IOS. This model looks at the 'fit'- the level of performance and coordination - which an IOS achieves by examining how well the information processing needs (created by the environment, partnership and task uncertainty) are met by the information processing capabilities (granted by structural, process and IT-mediated mechanisms) within the dyadic relationship where an IOS will be used.

3.2 Research Methodology

In order to obtain a deeper understanding of the phenomena being investigated, an interpretivist research approach was adopted whereby the researcher "attempts to understand the phenomena through accessing the meanings the participants assign to them" (Orlikowski and Baruodi 1991, p.5). The single case study research method was chosen as a qualitative research instrument, and the organisation studied was The London Borough of Kensington and Chelsea (from here on referred to as The Borough). At this stage within the e-government agenda such a case would serve as what Yin (2003) classes as a representative case of a London local government, though the heterogeneity of London local authorities should not be ignored. Researchers have demonstrated the appropriateness of the case study research approach where the boundaries between the phenomena and the context are not clearly defined (Yin 2003), and equally in novel areas with few theories have been applied (Cornford and Smithson 1996). The chosen approach also had to maintain a balance between the wider context of e-government and the issues of IS development and change at the local government level.

3.3 Interviews

The research interviews were held throughout the month of July 2003. Twelve interviews were held, most of which lasted almost two hours. The interviews were semi-structured allowing the open-ended questioning of key topics within a flexible interview structure. This allowed for the emphasis to be shifted accordingly in order to adapt to the interviewee's role within the organisation. Participants were asked to comment on previous events as well as those which were planned for the future, hypothetically increasing the dimension of time and introducing a longitudinal element to the research. It was important to obtain a cross-sectional sample of information and opinions across the council – as well as members from the IS and Finance departments, members from the Social Services department were also interviewed as they represented a crucial actor within the organisation's procurement.

Interviews were tape recorded and extensive notes were then taken from the tapes. Any 'loose-ends' emerging from this analysis were chased-up via emails to the participants. This culminated in over 50 pages of typed notes.

4 CASE STUDY: THE ROYAL BOROUGH OF KENSINGTON AND CHELSEA

The Royal Borough of Kensington and Chelsea is generally regarded as an affluent one due mainly to its extravagantly priced property, though wealth is nonetheless very unevenly distributed between the borough's wards. The Borough is composed of a diverse range of cultures; over 90 languages are spoken and though 84% of the local population is white, 44% of heads of all of The Borough's households were born abroad.

In 1990 The Borough began to operate a business group structure to which it devolved operating responsibility. The council is currently made up of five business groups: Housing and Social Services, Planning and Conservation, Environment Services, Education and Libraries and Corporate Services. The Finance and IS department is one of six departments found within the Corporate Services group. The management board reports to the Executive Director and is made up of five directors, one from each business group (bar Corporate services which is managed by the Town Clerk and Chief Executive) along with the Director of Finance and Information Systems. Business groups are then broken down into smaller departments to cater for the various areas of work handled, these departments are led by chief officers. For procurement needs, departments are further broken down into what is known as 'processing locations' and there are over 300 processing locations at The Borough. Budgeting and staffing responsibilities are devolved among the business groups each employing its own finance and personnel staff.

Despite the devolved financial and thus procurement responsibility, public sector organisations are required to meet certain procurement regulations set by central government. The type of procurement considered in this research was for standard and commodity goods and services. The Head of IS estimated that these procurements made up 70-80% of all procurement activities of The Borough, with each invoice costing £50-£100 to process. Procurement responsibility for such goods/services lies with each department. Procurement for higher value goods and services requiring tendering exercises and senior-level involvement and authorisation were not the substance of the day-to-day procurement activities of The Borough, and so were not considered here.

Every local authority in the UK has to produce a yearly 'Implementing E-Government' (IEG) plan, which essentially outlines the authority's e-government strategy. Within the IEG document, local authorities chart their progress and future plans on e-government projects. The model for the local e-organisation of government shows procurement as key concern, The Borough's IEG 2002 statement scheduled the commencement of the e-procurement project in April 2003. The project, which will "implement e-procurement and identify a corporate model for e-enabled financial transactions", lists as its general benefits "improved efficiency in the whole procurement cycle from ordering to delivery" (RBKC 2002, p.33).

The Borough, despite being behind schedule on its e-procurement plans, had already realized a considerable amount of changes to its procurement system – in 2001 the council had undertaken a major project to upgrade and change its internal procurement system and operations.

4.1 Evolution of the Procurement System – From FMS to OneWorld

Prior to 2001, the Council used the old Financial Management System (FMS) for its procurement activities which consisted of a combination of paper-chase based approval and mainframe technology for partial electronic recording, as well as a document scanning facility for historical retention of invoices. This system was not purchase order (PO) driven and invoices were sent to specific purchasing locations which could easily get lost, as a result payments would be delayed and could incur additional interest charges. Due to the more complex environment that the Social Services and Education departments work under, the bespoke financial management systems they had developed

were not integrated into FMS, creating additional work when it came to consolidating all the financial data on FMS. FMS had been in use for some time, had exceeded its life-cycle and needed replacing.

The procurement process reengineering exercise undertaken in 2001 essentially turned the old practice on its head. Deloitte&Touche, in line with Hammer and Champy's (1993) BPR philosophy, proposed to reengineer the process to align it better with newer technology and JD Edward's OneWorld was chosen as the new financial management system. The aim was to increase the use of official POs from 30-35% (under FMS) to 65-70%. The 2001 overhaul essentially pushed the use of technology within The Borough to the limit and created an electronic office environment by integrating imaging software, Microsoft Outlook and OneWorld.

The system was PO driven with invoices now being centrally received by The Borough and then scanned. All subsequent work would then proceed from the electronic images created with the intention of eliminating paper trails. OneWorld used workflow technology to automate all internal operations, tasks and transaction required to approve and process POs, invoices and payments. The system aimed to improve accountability and control and was programmed with, amongst other constraints, the individual user's authorised approval limits. Further efficiency was expected by the automated electronic payment of those invoices with matching POs which had been 'goods received' and required no further work. For budget holders and senior managers, OneWorld introduced the availability of management information which coupled with commitment accounting provided up-to-the-minute information on budgets and accounts.

4.2   From OneWorld to e-Procurement

At the time of the reengineering exercise in 2001 e-procurement as it is currently defined was not on the agenda, although the Finance Manager did state:

> "[OneWorld] aimed to reengineer the procurement process to a future proof solution using sound controls so that we would be ready for things like e-procurement"

The re-engineered process described in the previous section does not comply with the full set of 'e' components provided by the Local Government Online model of e-procurement. On paper, The Borough's planned changes to the finance system and procedures would have met many of the e-procurement requirements, the switch to OneWorld addressed for example: the need to move the internal procurement procedures online (e-transactions); the capability for three-way automated matching of PO, invoice and goods receipt was provided; the means to make online payments via BACS (e-payment); management information would also be available.

For the past year The Borough has been working on projects which will serve to extend the functionality of OneWorld. They have been collaborating with Deloitte&Touche to implement not just a web-interface to OneWorld, but also to develop the functionality to allow the system to connect and place electronic orders via external marketplaces, or even directly to individual suppliers. These modules had been successfully tested and were scheduled for installation at the end of summer.

5   ANOTHER LOOK AT THE JAGGED MOVE TO ONEWORLD

The move to OneWorld as the new finance system for procurement encountered major problems and was said to be "stalled" and, although it would be unfair to call the change a complete failure, conversely there were also few areas of clear success.

In their 2002-2003 budget forecast, the Financial Services group projected to overspend £151,000 "due largely to additional costs for OneWorld". The Borough's rating on its percentage of undisputed invoices paid within 30-days fell to 53% at the start of 2002/2003 this was well below the previous year's figure (78%) and the national target (95%). The latest figures for this year show an improvement in invoice payment performance, with 75% of undisputed invoices being paid on time.

Currently over half of all payments made to suppliers are made electronically by BACS, which is above the national target and is equally dependent on supplier adoption. The uptake of OneWorld and the new purchasing procedures has been disappointing: only 30% of the 3900 employees at The Borough have access to the system with only 20% actually using OneWorld. Despite all these factors, the Finance and IS Service Delivery plan states that the system after having experienced some initial problems, is now working satisfactorily. The research conducted brought to light a very different conclusion. A whole host of issues with the new system and The Borough as an organisation came to light. The Head of Finance summarised this well:

> "When we were doing it [the reengineering] we weren't necessarily implementing it to make savings, although we thought we'd be processing invoices more efficiently … at the moment we're processing them less efficiently and at more cost"

Rather than simply listing the factors contributing to the partial failure of the system, the IOS framework used allowed a more coherent and relevant analysis and classification of the research material found according to the uncertainties The Borough is having in terms of developing e-procurement, and the capabilities it has attempted to create according to the mechanisms deployed by both the 2001 and more recent bout of changes.

5.1 Procurement Needs and Uncertainties

At this stage in the development of e-procurement the research can not equally consider both sides of the dyad which the IOS framework was conceptualised for. Much of the work carried out by The Borough to date has been (organisationally) inward looking, concentrating on the development of the organisation's capabilities to deal with e-procurement task requirements and uncertainties.

5.1.1 Information Processing Needs

There is inherent *environment uncertainty* in any government related organisation due to the political context in which it is enveloped. The recent push for e-government – and the limited funding from central government – has in a sense added to this uncertainty, with many interviewees not fully comprehending the raison d'être of the drive for e-government based reform.

The nature of e-procurement requires inter-organisational coordination as a key to improved purchasing. At this stage however, The Borough had not fully realised the level of *partnership uncertainty* that this would eventually entail when they would be required to work with not only marketplaces and current suppliers, but also with other adjoining local authorities. As a future 'partner' this last group will greatly heighten the level of uncertainty – indeed many of those interviewed questioned the viability of such a partnership, with even the Councillor explaining how a previous joint IT committee with another local borough had broken down due their organisational differences.

The e-procurement *task uncertainty* has dictated what The Borough has come to see as its information processing needs. There were several different reasons given by interviewees as to what the previous 2001 reengineering exercise had aimed to achieve and not all where fully aware of the senior member's objective to move to centralised invoicing and online PO based procedures. The senior members interviewed stated The Borough had always had an ethos of embracing technology and had always being leading edge in its use. Despite this, there was an uneven awareness on what e-procurement meant to the organisation.

Similarly, The Borough didn't see the financial savings resulting from price reductions as the main driver for e-procurement; senior members even questioned the true value of the market place for purchasing commodity goods. Interestingly, the Corporate Services Finance Officer expressed a keen interest in the possibility of lower prices, a view not echoed by the Social Services Finance Officer.

This difference of interests is most probably due to the different purchases being made – IT hardware and software versus complex personalised care packages for residents.

Responsibility for the task of developing e-procurement had not yet been clearly outlined. The implementation of OneWorld had been the responsibility of the finance department, with the IS department involved purely from a technical standpoint. How The Borough was going to handle the official e-procurement project and whose responsibility it would be was not yet clear. Clearly a much greater involvement by the IS department would be required for the successful development of e-procurement because such reform involves more than just a change in finance system, it requires corporate reform of procurement behaviour.

5.2   Capabilities and Mechanisms

The majority of the issues encountered by The Borough in moving towards e-procurement were based not so much on The Borough's uncertainties as reviewed in the last section, but more with The Borough's attempts to improve and extend its capabilities. This section critically considers the shortcomings of The Borough's attempts at further developing these mechanisms, looking first at the IT-mediated mechanisms, and then jointly discussing the structure and procedural mechanisms that were found to be interdependent within e-procurement.

5.2.1   Information Processing Capabilities

IT-mediated mechanisms designed according to the IOS requirements are mainly those which support inter-organisational relationships. This was not the case at the time the research was conducted, as The Borough was still in its preparation stage working to develop IOS capabilities as required by central government's e-procurement plans. Nevertheless, such systems would inevitably merge into larger systems uniting suppliers and marketplaces, and so were deemed appropriate for use with the IOS perspective.

Technical determinists have traditionally chosen user-resistance to new technology as the barrier to successful automation of previously manual and paper-based processes. Moreover, government organisations are seen as more likely to develop negative attitudes to ICT (Margetts and Dunleavy 2002) due mainly to their traditionally risk-averse culture (Andersen 1999). Considering The Boroughs attitude to 'embracing technology' this doesn't seem to be the likely cause for the rather limited success of the previous reengineering project. The interviews confirmed that much of the current bad aura surrounding the OneWorld system was down to the initial teething problems experienced, with the Director of Finance and IS stating that acknowledgement of improvements had been grudging. The poor project management used and the phased implementation across the business groups – chosen due to the sheer size of the project – were also blamed. A lack of available support for users meant the project team had to delay the move to centralisation of invoices – this was yet to be fully achieved and was found to be a major cause of inefficiency.

The research uncovered that the technology itself was not the cause of the more complex and persistent problems, the consideration of the change on *process* and *structural mechanisms* elucidates the deeper forces at play here. Ultimately the success of the re-engineered system relied on standardising the use of POs and moving to central receiving of invoices. The poor use of POs was not down to a lack of user training or awareness on the new system's procedures; what was holding-back the reengineering of both these processes, especially the use of POs, was the organisation itself.

A consequence of The Borough's business group structure, introduced over a decade ago, has been the decentralisation and devolvement of procurement decision-making and responsibility. This has been a common trend within the public sector (Currie 1996) and is justifiable taking into account the heterogeneous nature of departments housed by such organisations, typically led by service provision and requiring department specific local knowledge as an input to its decision making. Not surprisingly, no set standard or policy exists on how every-day procurement should be carried out, which has

permitted the emergence of different procedures. The system introduced did not 'fit' these procedures equally: the IS department found it possible to work with the new system more effectively, but not the Housing and Social Services group which, with over one-third of The Borough's budget, represented a key actor within the organisation and the plans for procurement reform.

> "We found it nigh on impossible to make OneWorld a useful purchasing tool for social care, it wouldn't fit they way our business is carried out" - Senior Service Support Officer

Another serious consequence of this devolved purchasing responsibility was that The Borough as a whole did not know how exactly it went about its procurement and was not obtaining the full realisable benefits or economies of scale from its contracts. Despite an attempt by the project group at reviewing purchasing practices when the project was initialised, several groups found that the system did not fit their ways of working, hence its slow and rather disappointing uptake. At the time of completing the research the Finance department was about to undertake a massive review exercise in attempt to account and understand how different business groups and departments were purchasing.

> "I think the problem is one step before [establishing your procurement strategy] – you can't even look at that until you look at your organisational structure" – Finance Systems Manager

6   A LOOK THROUGH THE INSTITUTIONAL LENS

The previous section provided a macro-level description of the problems plaguing the introduction of a modern procurement system within The Borough. The framework used clearly showed that the organisation was encountering grave problems in terms of developing its structural and procedural mechanisms to provide a solid organisational infrastructure for e-procurement. The framework offered no further insights into this area however, and already demonstrated some clear limitations by ignoring the time continuum involved in establishing the 'fit' between the needs and the subsequent necessary mechanisms, and by conceptualising structural and procedural mechanisms as distinct and seperate.

The data collected during the interviews showed that some of decisions and actions taken by the members of different departments were not 'rational' from an administrative point of view and were often a result of the group's local procedures enacted to satisfy the needs of the devolved structure. Here we discuss the organisational micro-level institutional barriers. Due to word limitations on this paper an extensive discussion on institutionalisation will not be provided; for a better understanding only its relevance to the change process associated with IS deployment will be considered. This section will discuss the institutionalised work culture that seems to persist within The Borough, and the public sector as a whole, and which is hampering the success of corporate reforms as expected following the promises endorsed by projects such as e-procurement.

6.1   Departmentalism as an institutional barrier

Researchers in the field of IS have shown the importance of the often underestimated critical role which 'politics' play in the installation of new technology (Angell and Smithson 1991, Avgerou and Cornford 2002) which can easily overpower the rational and planned economic and technical efforts made during the introduction of technology in an organisation. Avgerou (2000) defines the term 'institution' as the taken-for-granted standardised sequences of activity which establish and maintain the *modus operandi* of the organisation, that create "powerful myths" (Avgerou 2002, p.4) which can constrain, but also enable, change within organisations. Institutions are hence "habits and not things" (Fox and Miller 1995, p.91).

Institutional theory is a powerful framework to explain decisions and actions of organisations. As opposed to economic theories arguing for organisational behaviour based on rational choice, institutionalism sheds lights on the social aspects as the undertaken motivation for understanding organisational choices. More recently, institutional theories have been used to discuss information systems as institutions grounded in the social process where the use of formal training, professional

bodies and industry standards are among the other factors that legitimise and make sense of their existence (Avgerou 2002). The institutionalisation of a new system within an organisation can be a complex lengthy task as several research studies have demonstrated (Avgerou 2002, Backhouse and Silva 1997).

E-procurement as a procurement tool relies on essentially a shift in transaction costs in order to improve procurement within the whole borough. By rolling out the system The Borough hoped to reduce the procurement transaction costs, improving at the same time the accountability of procurement operations and establishing more coherent standardised corporate practices. Evidently, the move to OneWorld did not manage to homogenise purchasing practices. Interviewees confirmed that the new online process introduced more (albeit faster) steps in the procurement process. Whereas staff would happily use the phone to make their purchases, the online system required them to log on, raise a PO and maintain that PO. The effect was an overall increasing of the transaction costs faced at local level associated with increased dissatisfaction among users. The Social Services staff showed clear resistance to the new system:

> "[social workers] would see OneWorld as another system that they would've had to gotten involved in, removing them much more from there profession – they are social workers and care managers, not finance officers or administrators" – Senior Services Support Officer

The analysis of the case here presented highlights the existence of long-standing ways of working at The Borough where the use of procurement and technology was concerned. Institutionalism identifies in such ways of working the radicated habits in the organisation that become institutional barriers once there is an attempt to change them. The different departments within The Borough have always worked as independent units where procurement and relationships with suppliers were concerned. This institutional characteristic, once developed to better support the work of The Borough, seemed now to be holding back the development of a co-operative approach to working required for the effective use of any corporate-wide system such as OneWorld. It seems that this way of working may not just have been developed to enforce financial responsibilities within The Borough's different departments – interests and objectives were also devolved among the organisation. A review of the government literature helps to better understand the complexity of the dynamic associated to the deployment of information systems when organisations are considered above the rational economic behaviour. The notion of "departmentalism" exposed one type of institutional problem which helped shed some light on these attitudes to change evident within The Borough. Cole and Fenwick (2003) describe departmentalism as a work culture where departmental goals are given priority over the wider corporate interests:

> "Such authorities are characterized by substantial differences in the organisational culture of different departments, a weak corporate centre and an environment in which cross departmental working is regarded as, at best, a marginal activity and, at worst, a chore or a distraction" (Cole and Fenwick 2003, p.260)

Analysing the nature of central government, Kavanagh and Richards (2001) identify departmentalism as an 'institutional conflict' where initiatives which may be good for government as a whole are opposed, because such reforms threaten the interest, habits and uses of the departments constituting the organisation as a whole, as in the case here described. Departmentalism is not a new phenomenon; since the 1940s government leaders have tried to combat departmentalism which had trickled down to the local government level. Furthermore, Cole and Fenwick (2003) explain how several initiatives aimed at improving government operations – such as competitive tendering for contracts (CCT) and NPM – have placed further pressure on fragmenting departments and any common corporate interests. As a result departments have focused on how best to achieve their particular service objectives while largely ignoring the wider objectives of the organisation as a whole, undeniably increasing the institutional forces of that single department.

The adoption of the new e-procurement systems and the associated organisational reforms at The Borough have uncovered signs of departmentalism. The IS Strategist claimed that the installation of

OneWorld should have been more of a joint effort with other departments; it was common for departments undertaking IT projects to take ownership, and final decisions on the solutions chosen were often made without following or paying much attention to advice offered by the IS department. In the case of OneWorld, it would have been logical to combine the efforts and knowledge from both the Finance and IS departments, but this wasn't done, and the Finance team failed to effectively get input from other departments and business groups, which led to insufficient knowledge and understanding on what their particular requirements where. This situation led to a state where the business groups approached their implementation's of OneWorld very differently.

Two of the largest departments within The Borough, Education and Social Services, had also developed their own bespoke information systems to manage their specific information needs including those pertaining to financial operations – another common symptom of departmentalism (Kavanagh and Richards 2001). This, along with the aforementioned freedom given to departments in choosing ICT solutions, has inevitably led to a weaker IS infrastructure at The Borough. There is no question that a 'one size fits all' IS solution cannot be developed to compensate for the variety of operational needs present within a local authority, but with no whole direction or control, local practices were allowed to spread as people recommended and kept their idiosyncratic systems even when moving within the organisation. This situation was exposed by the Finance Systems Development Manager who had previously worked several years in the Housing and Social Services group:

> "…because of the way people develop through their careers, a social worker becomes a social work manager…so now they've been promoted and still don't see finance as their key role"

This culture of a narrow concern for departmental needs has lead to what some IS academics have referred to as 'institutional stovepipes' within the organisation, evident in the use of budget and management processes which encourage independent operations and administrative autonomy within local governments (Fountain 2001b).

6.2   Tackling Departmentalism

Institutional theorists have suggested the possibility to de-institutional long standing cultural and organisational barriers such as departmentalism. In the context of the public sector a specific type of isomorphic force, 'coercive' pressure, shapes government institutions. This pressure can arise from government mandates and regulations acting as mechanisms which impact on the organisation's structure, process and missions (Avgerou 2002).

When we consider e-government as the latest reform aimed at improving the service given to citizens through the enhancement of technology – what we have previously identified as the 'tip of the iceberg' – we have to question how many of the local e-government projects are encouraging local authorities to move towards more integrated ways of working. The focus has been on e-procurement as a corporate project aiming to shift the awareness of procurement from a historically back-office function to a wider organisational strategic purchasing tool. Working within what Lenk and Traunmüller (2000) class as the 'hidden machine of government', e-procurement faces the challenge of over-coming this machine's strong cultural and organisational institutionalised barriers, such as departmentalism, if it is to achieve any of the radical benefits which the UK government is anticipating.

E-procurement needs to centralize The Borough procurement and financial activities by bringing together the various different department procurement and finance packages. It was hoped that the adoption of OneWorld would be *the* move that pushed different departments to use the same system and procedures for their respective financial activities, unfortunately it failed to completely replace the "familiar and comfortable blanket old practices" [Director of IS and Finance].

The 2001 reengineering process was not a complete failure. The system is now in place, is bedding in and is there to stay. However the system seems not to be institutionalised within the organisation

practices of The Borough. Judging the use of the system in light of the efficiency framework proposed by central government's economic rationalities, one could be somewhat disappointed. The Borough was however confident that the situation was finally progressing and was aware of the inappropriateness of the strategy followed in order to introduce the new system and restructure the procurement practices. The Borough was now starting a mass review of local business group procurement practices to provide the knowledge that had not been gathered the first time around.

The reengineering effort served to bring in a new system and a new way of working; it however underestimated the strength of the institutionalised barriers at both The Borough and department level that could have halted the adoption of the new technology and the new required way of organising work. The introduction of OneWorld within The Borough has not managed to 'obliterate' the previous business process, it has instead grounded over it – now the system is in place, the next stage is to manage the changes brought by the system and the resistances enacted within the organisation to defend the institutionalised habits, rules and norms existing at different levels of the organisation.

If anything, the case presented in this paper shows clear signs that within the latest reform agenda it is not the technology that simply 'reinvents' the local authority's ways of working. Reform in the procurement system seems to be closer to forms of organisation and technological change that follow the path of emergence (Orlikowski 1996) and are once again more closely associated with management strategies grounded on improvisation (Ciborra 1999), cultivation (Dahlbom and Mathiassen 1993) and the phenomenon of drift (Ciborra 2000) rather than strategic alignment and reengineering. The acknowledgement of the social aspects as the undertaken motivation for understanding organisational choices asks for the same consideration when technology is also part of the change process. Changing organisational ways of acting in association to technological change calls for the identification of possible approaches to slowly de-institutionalising existing working procedures as a prior step to institutionalising new norms, rules and habits that are emerging around the adoption and use of the new technology deployed in The Borough, and shifting the disparate procurement activities to form united corporate practices.

> "I always believe that whenever you put a new system in you don't understand the implications. It's only through the thing becoming mature and being used that you realise that what you setup originally doesn't actually work and you so you have to modify, I always regard it as an evolutionary process not a revolutionary process. A lot of the mistakes that are made are because people haven't understood entirely what it is they need to do, and it's human nature, isn't it?" – The Councillor

7   CONCLUSION

This paper has discussed the inner challenges which a local government faces in light of the latest reform initiatives proposed under the umbrella of e-government. Although current e-government proposals seek radical modernisation of government, and despite interest so far being mainly on interactive citizen services and exciting new government IS 'strategies', the true long-term benefits lie hidden away underneath the surface of the public sector.

In line with the aims of this exploratory case study, this paper has not attempted to provide answers, but has instead identified the more pertinent issues of enacting technology within a local authority's operations. In effect it has presented more questions and has identified several streams of further research.

Departmentalism could pose a serious threat to those corporate e-government projects, such as e-procurement, where the organisation as whole is the primary stakeholder, and there is a noticeable lack of research in this area. The true benefits of the BPR approach as a short-cut to utilising technology for radical change – which the current e-government hype seems to be fuelling, and the public sector may still believe in – needs to be reconsidered. Further research is needed into the effects e-government will have on the local authority's structure and organisational processes; this paper has focused on

procurement activities, but no doubt there are other business processes undertaken by entire local authorities. Additional research could also elaborate on the role that improvisation, as an interpretive approach to the understanding of IS, plays within the heavily institutionalised context of local governments and their IS infrastructure development. It is also thought that in light of the added understanding that these interpretive concepts have provided in the case of e-procurement within The Borough, the case-study presented in this paper could greatly benefit from a hermeneutical research approach to further re-assess the role that institutional barriers (such as departmentalism) play as formidable barriers to local authority reform in the 'Information Age'.

The use of the IOS framework showed that currently The Borough's priorities lie with the internal preparations for e-procurement. However there is no doubt that the future holds immense uncertainties for The Borough when it confronts the next stage of e-procurement reform and has to consider procuring, and thus working jointly, with other local authorities. This move towards government-to-government business practices will endure possibly the most difficult institutional complexities and political challenges (Fountain 2001b).

Despite the critical findings of the research, The Borough may be in a better position than many other local authorities. The organisation benefits from having an evidently open culture which can assist in overcoming some of the bureaucracies in place. They continue to be keen on pushing the use of technology and, following the unsuccessful adoption of OneWorld, where now understanding the key role that social and organisational work cultures play in achieving the benefits of e-procurement.

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