

# ALL STAKEHOLDERS ARE FLEXIBLE BUT SOME ARE MORE FLEXIBLE THAN OTHERS – EXTERNAL STAKEHOLDER INFLUENCE : A CASE STUDY EXPERIENCE.

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## Abstract

*This paper concerns an innovative and current real-world UK Government IS project aimed at improving the administration and management of the EC's Agricultural Policy across the region. Although the flexibility of core stakeholders is principal to the negotiation of systems requirements and key to successful development, for this interpretive case study the inflexibility of the EC, as core stakeholders and external regulators, had a critical impact upon the project that impeded a successful outcome that has implications for practice.*

*This paper presents a perspective gained through the empirical setting that provides evidential insights into the difficulties experienced by exploring the dynamics of the factors involved. It presents the real-life context, experiences and commentary that provide meaningful insight and validity to the findings. The aim is not to present another model, framework or proposal to address this issue but rather through the analysis of the data gathered to offer 'rich insight' and increase the understanding of such difficulties from which lessons can be drawn. Thus there is no one question that can be answered but rather it is important to draw upon such research experiences so that validated conclusions can inform the IS domain.*

**Key Words :** IS Development, External Stakeholders, Flexibility, Lessons Learnt

## 1. Introduction

Much of extant literature that relates to information systems development reflects development approaches and aspects of failure or success. More recent related literature has examined internal or environmental issues in terms of requirements management, cost benefits, competitive pressures, customer satisfaction, consumer issues, improvements in effectiveness, efficiency and productivity, and so on. A focal point across these themes relates to the stakeholders/users of the system

being developed (Baronas and Louis 1988, cited in Kappelman and Maclean 1991, Beynon-Davies 1998, Hirschheim, 1983). Previous research has reported on the themes of the level/depth of stakeholder participation (Barki and Hartwick 1989, Kappelman and Maclean 1991, Ives and Olson 1984), identification of key/right players (Beynon-Davies 1998), people management (Bayer and Highsmith 1994, Hirschberg 1998) and communication (Cockburn 2002, Coughlan and Macredie 2002, Lengel and Daft 1988 cited in Balogun and Hailey 2004). Core stakeholders are regarded as key to successful development (Doherty and King 1998, Luna-Reyes *et al.* 2005). Thus stakeholders' influence is acknowledged as a significant factor in successful IS development. However it is also argued that it is not possible to predict the effect that organizational stakeholders can impact upon a development project (Doherty and King 2005, Ewusi-Mensah and Przasnyski 1994, Lyytinen and Hirschheim 1987).

This paper concerns a case study of an innovative and current real-world UK Government development project currently being implemented within a UK Region [the Client Department]. The Client Department has a number of links with outside agricultural organizations, associated farming unions and interacts with a number of internal government departments. However we focus on the EC as key stakeholders of the system being developed because they had significant affect as external legislative regulators on the development project.

There is little critical, empirical debate that looks at the issue of how external stakeholders, particularly those who hold a regulatory power over the developing system, can project a negative impact on project development that generates a barrier to the eventual outcome of the project. Thus although the flexibility of core stakeholders is principal to the negotiation of systems requirements and key to successful development, for this interpretive case study the rigidity of the EC, as core stakeholders and external regulators, had a critical impact upon the project that has implications for practice. This paper focuses on the issue of how, the EC as a core stakeholder external to the project arena had a significant influence upon the development project from two perspectives. Firstly, upon the behaviour and attitudes of the Business Managers, and secondly, by imposing legislative directives that radically changed the remit of the system under development contributing to missed development schedules and project delays.

Thus it presents a perspective gained through the empirical setting that provides evidential insights into the difficulties experienced with the stakeholders with a particular focus on the inflexibility of external stakeholders. It explores the dynamics behind the problems experienced and the causal factors involved. It presents the real-life context, experiences and commentary that provide meaningful insight and validity to the findings. The aim is not to present another model, framework or proposal to address this issue but rather through the analysis of the data gathered to offer 'rich insight' and increase the understanding of such difficulties from which lessons can be drawn. Thus there is no one question that can be answered but rather it is important to draw upon such research experiences so that validated conclusions can inform the IS domain.

The paper is organized into five sections including this introduction which has surveyed the salient literature to provide the context for the study. The next section presents the theoretical lens and research approach. The third section describes the case study background and context. In the fourth section we discuss the case study analysis that focuses firstly on the EC's influence on the key stakeholders, and secondly on a direct impact imposed by an EC directive. The final section sets out the conclusions drawn from the empirical case study.

## **2. Theoretical Lens and Research Approach**

This paper examines the issues of the negative impact of stakeholder interference through the lens of an interpretive case study. Theory suggests that high levels of user involvement results in better IS development and high rates of success – this was not the case for this research study. We aim to contribute alternative viewpoints that add to the debate that is a necessary part of the advancement of academic knowledge within the IS domain.

Literature recognizes the need for more interpretative research that examines the social and organizational contexts of information systems development to inform the IS domain. Consequently this research adopted an interpretive stance within a case study setting that involved an ethnographic method of qualitative data collection. The suitability of this approach is reflected by its association within the IS domain and other development projects (Beynon-Davies 1997, Harvey and Myers 1995, Myers 1997, 1999, Orlikowski and Baroudi 1991, Pettigrew 1985, Strauss and Corbin 1990, Walsham 1997, Yin 1993, 2003). Such research facilitates a broad understanding of the organizational environment of the IS with particular reference to cultural and contextual situations, and the wider external context in which the IS is related (Gill and Johnson 1991, Walsham 1997). It is necessary to explore why individuals act the way they do, and what

common understandings and behaviour result (Hammersley and Atkinson 1983, Loftland and Loftland 1984, Myers 1999).

The inductive approach used enabled the researcher to collect data from primary and secondary research that would subsequently develop or contribute to theory as a result of data analysis. Although criticized for its limited breadth [an in-depth knowledge of particular contexts and situations] it is possible to generalize from one ethnography to theory (Yin 2003). Moreover increased use of ethnography will facilitate development of general models (Myers 1999).

This research study adopted the Model of 7 Principles for Interpretative Field Research that are pertinent to case studies and ethnographies put forward by Klein and Myers (1999) as follows: [1] Human understanding was achieved through iterative enquiry of both the 'parts' and the whole in terms of individuals and the environment, [2] context was achieved through the critical reflection of the social and historical backgrounds, [3] sustained interaction occurred between researcher and subjects, [4] the theoretical framework is concerned with generalizations of an ecological nature, [5] dialogical reasoning was applied through the recognition of possible contradictions and preconceptions and subjected to subsequent cycles of revision. [6] The ethnographic approach examined multiple interpretations and influences borne from the social contexts and participant behaviour. [7] Finally data gathered were examined in terms of social and political interests of the stakeholders to acknowledge socially created biases and distortions from participants.

In terms of generalizing conclusions drawn, we adopt Orlikowski and Baroudi (1991, p5) view that '*Generalization from the setting (...) to a population is not sought; rather, the intent is to understand the deeper structure of a phenomenon, which it is believed can then be used to inform other settings*'. In support of this view Remenyi *et al.* (1998 cited in Saunders *et al.* 2007) argue that there is no space for generalizability because of the dynamic nature of the world and its organizations but that it is necessary to discover "*the details of the situation to understand the reality or perhaps a reality working behind them*" (p84). Consequently this research study applied ecological validity that specifically relates to the extent to which conclusions drawn from this research case can be significant to comparable social contexts. Thus a 'lessons learnt' approach can be applied from a retrospective view for like developments in similar environments.

The case study consisted of longitudinal research project over three years situated within the project environment. It involved a sustained period of fieldwork (9 months intensive observations) in order to get close to the organization/participants being studied, and to analyse behaviour by observing events as did, or did not occur, in practice within their natural context (Silverman 1985 cited in Alvesson and Deetz 2000). Complementary to the ethnographic approach 126, 1:1 informal semi-structured interviews were conducted, audio-taped and respondent validated for added rigour and to offset unintentional observer bias (Alvesson and Deetz 2000, Patton 1990). The interviews were recurrent throughout the project in an iterative process that is associated with grounded theory (Glaser and Strauss 1967, Strauss and Corbin 1990). Spontaneous discourse occurred during the natural flow of interaction between the researcher and project participants and recorded in a project diary (Patton 1990, Preece *et al.* 1998).

The empirical data gathered was stored and managed in a case study database (NVivo) to support a more rigorous and fluid research process than manual methods provide (Richards 2002, Myers 1999, Yin 2003). Data analysis was driven by the data rather than the researcher and concerned 'open coding' where data were organized into meaningful themes. Subsequent categorization, through axial coding, established and how the categories might inter-relate and link into sub-categories and organized by reoccurring theme (Orlikowski 1993). Data was differentiated such that it facilitated both factual and heuristic searching.

Secondary research involved an in-depth and systematic analysis of published literature, project documentation and artefacts that facilitated cross-checking such that strong substantiation of analysis and conclusions drawn could be established. To increase validity and provide meaningful insight the real-life context, experiences and commentary from individuals directly involved is applied. Access to the project environment and to the population of the project community was granted through the Senior Management Board of the IS development project. The researcher was effectively a 'fly on the wall', an outside observer, no action research was involved.

### **3. Case Study Background and Context**

The case study concerns a UK Regional Government Department (the Client Department) that is responsible for managing the administration and expenditure of the EC's Common Agricultural Policy (CAP) schemes through a number

of grants and subsidies. Scheme management is the responsibility of scheme specific Process and Scheme Managers (referred to as Business Managers). It is these Business Managers who attend to the business needs and administration of the schemes under EC guidance and control that are identified as key internal stakeholders, and who had significant impact upon project development. Due to the dynamic nature of the EU's agricultural policy, schemes are frequently changed with new schemes being drafted by the member states as required. Each year the EC issues a number of directives that impact on the administration and management of the CAP schemes that all Member States must comply with. Therefore the Client Department is directed to comply with EC legislation and regulations using a framework of controls and working practice mechanisms specific to the EC schemes. Thus as a part of the UK as a Member of State, it is answerable directly to the EC and at risk of fines and penalties imposed by the EC that are collectively termed 'Disallowance'.

In the event of a failure to comply with the regulations, make timely CAP payments or to meet the specified payment deadlines in accordance with EC legislature, then the Client Department is liable for Disallowance. This means that the EC disallows any CAP payments that go through late as a result of delayed or inaccurate processing; these monies are not reimbursed by the EC but are borne by Central Government. These factors expose the Client Department to the vulnerability of significant disallowance that could result in the European Commission imposing penalties of £m's p.a.

### **3.1 *The New IS System***

The legacy system had a history of late payments, poor customer satisfaction and an increasing inability to meet the EC's changing requirements such that the development of a new system was rationalized. Business Managers reported that the need for a new system was long overdue and described the legacy system as *'somewhat antiquated and outdated...'* it had had so many little add-ons, bolt-ons and new programs added to it, it must have been creaking at the seams. Originally it has been written to do a far simpler job. The New IS System moves away from the previous individual scheme administration procedures towards a Generic Process Model that integrates the core processes of the common activities of the separate CAP schemes. It represents an integrated solution through redesigned and standardized processes that involve automated data capture, data validation and speedier payments to customers.

The Project is described as large. Its size and complexity are reflected by an initial cost estimate of £10m+, a projected timeframe of 2-3 years, a core project team of 50+, and a customer base that is measured in terms of 100,000s of grant and subsidy applications per annum across the region. The project went into overrun and is still on-going.

### **3.2 *Organizational Culture***

The culture of the UK Government Department can be characterized as bureaucratic. It is hierarchy driven, highly procedural and risk averse, operating within a regulated, and control oriented environment within a perceived blame culture. The clear management lines of responsibility and authority support the work processes that are highly organized, compartmentalized and systematic. Traditionally, the bureaucratic patterns of working operated on a 'one person, one job' basis that required a high degree of job specialization. Thus specific skills sets and business knowledge belonged to individuals and information was inherently owned discretely and knowledge remained domain specific. In bureaucratic cultures *'position power is a predominant form of power'* (Carnell 2003, p232) and it was this that is relevant to the behaviour of the Business Managers.

### **3.3 *Development Approach***

Development was out-sourced to a commercial company who were selected on the basis of their experience in the field of systems transformation and of developing customised software and hardware. The project environment remained within a central location where both the Clients and Developers were co-located on the same site for the project's duration. The Developers adopted their own in-house commercial Agile development approach - Iterative Application Development (IAD), to promote a controlled, structured but flexible development method, which they believed was

suiting to the uncertainty of, and the continually changing business requirements. The IAD development approach involved a sequence of short, time-boxed iterative development cycles. Consequently project development was broken into development modules that involved process definitions relevant to the development stages of the Generic Process Model. The Developers were provided with a Requirements Catalogue and the proposed Generic Process Model concept at procurement that formed the basis and scope of development activities.

It was anticipated that high levels of stakeholders would be involved participating in a co-operative and collaborative manner. Developers imported their customary technique of JAD workshops for requirements gathering purposes. The aim was to provide early visibility of the system being developed with the potential to incorporate user feedback, and the flexibility to handle new and changing business requirements.

The project structure consisted of a senior management project board and teams of project workers with a pre-defined reporting structure. Teams were subject and specialist specific according to need that evolved in line with development. The project community refers to the core team of 50+ that reflects the Developers and organizational people in terms of Business Managers, scheme related business people and members of the Project Board.

The project is considered to be unique within the UK because traditionally government projects generally adopt a more linear and structured approach such as SSADM (Structured System Analysis and Design Method) because history has illustrated how such approaches are no longer effective for the increasingly volatile, and dynamic nature of current business environments.

## **4. CASE STUDY ANALYSIS**

This paper focuses on the issue of how the EC as a core stakeholder external to the project arena had a significant affect upon the development project from two perspectives. Firstly through the Business Managers who were subject to a need to satisfy and comply with rigid EC legislature. This was a major drive behind their behaviour and attitudes in development and decision-making activities that caused problems for the Developers. Secondly, by imposing legislative directives the EC radically changed the remit of the system under development. This necessitated re-planning and re-direction of project focus (and resources) which initiated a 'version 2' of the system to accommodate the shift in focus and effecting further delay. Due to the commonality of the causal factors involved there is some overlap that emphasizes the points being made.

### **4.1 EC Influence on Business Managers**

It is responsibility of the Client Department to administer the EC grant and subsidy schemes in compliance with the EC's legislation and regulations. Thus, the Department is answerable directly to the EC, and any failure to comply with the fixed payment deadlines, or non-payment of EC monies results in fines and penalties (Disallowance) imposed by the EC. These are borne by Central Government. This was a major drive behind the Business Managers who were responsible for scheme management and administration. It is essential that they ensure that scheme payment deadlines are met to avoid such risk of Disallowance. Thus from their perspective because the schemes have different payment periods/windows that are completely rigid and inflexible, and scheme specific regulations that apply the Business Managers were each working to their own individual agendas and their perceived risk of non-compliance. Business Managers commented:

*The fundamental deadlines that we are working to are the EC deadlines.* Business Manager (11)

*At the moment we are at risk...we have to make the balance payments for two schemes on 1st April, that's when we get the funding from the EC...there are an awful lot of little bits of functionality that haven't been delivered...that need to be in place...it's a lot of risk.* Business Manager (5)

*...the balance [of advance payments] have to be paid...otherwise there are serious repercussions, and disallowance applies.* Business Manager (7)

Evidence posits this discrete working culture had two direct impacts upon development progress. Firstly, Business Managers experienced difficulty in coming to a consensus about what was core to development and what was secondary due to their need to achieve their scheme requirements which held up the Developers. Secondly, agreeing the prioritization of scheme development was problematic causing further delays. Observations confirm that they believed their own priorities to be paramount and would not sign off development work if it meant they could not meet, or it was counter to their individual agendas. This frustrated the Developers and delayed development work that ultimately impacted upon the project schedules. Developers commented:

*When we started to try and get the Business to really prioritize and they couldn't, they just couldn't, because they were very schemes specific.* Developer (6)

*...actually what happened was everybody was still saying 'my priority is first, mine's the first', from 5-6 different Business Leaders.* Developer (18)

Business Managers experienced further difficulties in decision-making activities. The Developers applied timeboxed development iterations where the development scope was subject to the 'fit for purpose' concept that is associated with the iterative focus of the IAD development approach. Analysis shows that this was unacceptable to the Business Managers who were mindful of the risk of Disallowance. For them conformity to EC legislation and regulations meant that scheme requirement reflected almost 100% of business needs. Thus descopeing within the timeboxing concept resulted in a reluctance to agree to any reduced scope that was deemed by the Developers as 'fit for purpose' – but which from a business perspective did not satisfy the individual EC scheme requirements. Thus even though they were empowered to make decisions they were not willing to sign off development work if it did not completely enable them to meet the obligatory requirements of the EC. This contributed significantly to their behaviour in decision-making activities. For example in meetings they would leave, defer or just avoid decision-making leaving issues unresolved. Additionally, the strict deadlines tied to legislative demands from the EC also meant that the project had to be reactive to pressure. It was necessary to accept that the EC were a powerful stakeholder and could impact the project in these ways, but the Developers only really accepted the Department as their customers. Project commentary supports this:

*...it's a kind of unusual business in a way, all of their [Business] dates are immovable, allegedly immovable and it seems to be a business where, because they can't move the dates and they can't really move the amount of work they need to do to get those dates met...and that's not a business I've been in before...* Developer (1)

*The Developers view us [the Business] as their customer but we've got our external customers that we get pressure from, this didn't seem to affect them [Developers].* Business Manager (7)

*The EC is necessarily a stakeholder, they are interested in any of the outputs. In the end if we don't get it right then we don't get the money that we are paying out.* Business Manager (4)

Investigation into the rigidity of the EC deadlines reveals that no allowances or concessions could be made for the system under development. The Project Manager confirmed this:

*It's not within their gift to be able to do that. It's giving tax payers money away. There has never been any suggestion that they would contemplate relaxing the rules. If there are any severe problems ...It is our responsibility as a paying agency, we have to manage the risks.*

## **4.2 EC Directive – Radical Reform, A Shift in Project Focus**

Towards the end of the second year of the project a reform of the Common Agriculture Policy was applied to the CAP scheme administration through an EC directive. The reform represented a fundamental change in the way CAP grant and subsidy payments are awarded. Grants and subsidies would be decoupled from production based payments via the existing CAP schemes towards a Single Farm Payment provision that represented a fairer distribution of EC monies. This would replace the current schemes administration. The EC Directive radically altered the operation of the CAP schemes. This change impacted across the development and implementation of the schemes being prepared for the New IT System. The changes involved meant that a number of the schemes would cease to exist as individual schemes

in the following year. Consequently a critical assessment was made as to the viability of continuing existing development and of the proposed scheduled development planned for the New IT System in terms of investing time, effort and resources. A high-level decision was made to maintain the schemes, or parts of schemes, already using the Generic Process, but to halt new development of schemes waiting to go onto the Generic Process that would cease to exist. Consequently development on the New IT Project was restricted to those parameters. The deferred activities were transferred into a new project that evolved out of the case study project [‘version 2’] and is still on-going. It is aimed at accommodating the new objectives of the EC changes. Thus at the end of the third year development activities were concentrated on the new project objectives.

It is interesting to note that although the Business Managers were aware that the EC schemes change on a yearly basis they were ignorant of this degree of radical transformation. Further investigation through discourse with the projects senior management revealed they thought it was reasonable to assume that there was some realization of the proposed/planned change by senior government officials within the regional department. However this was not communicated to the project environment. Nevertheless they were obliged to conform to the changes due to their public sector status.

*...certainly I don't think that this Reform is common. I think what they are actually proposing to do now is quite extraordinary.* Business Manager (16)

*That's our environment we haven't got a lot of choice about that, whereas commercial organisations could choose not to do certain things if it suited their business model with us it is a regulatory requirement and we have to meet it, there is no other choice.* Project Manager

An interesting interpretation of the situation made by a senior developer is set out below:

*...here's a fundamental change, bang, build it and add it on to our existing systems, we just have to sit there and it comes along. I've never been in an environment like this before, God bless the Politicians they just create years and years of work for us [Developers], it's a 'Cash Cow'.* Developer (9)

## **5. CONCLUSIONS**

This paper has examined, through the lens of an innovative and current real-world UK Government IS project, how a powerful but inflexible external stakeholder negatively influenced key stakeholders impacting critically upon the eventual outcome of the project. We highlight this as an area of unexpected risk that needs to be recognized and managed and thus has implications for future practice.

Through the empirical setting it provides evidential insights into the difficulties experienced by exploring the dynamics of the factors involved. It presents the real-life context, experiences and commentary that provide meaningful insight and validity to the findings. The aim was not to present another model, framework or proposal to address this issue but rather through analysis of data gathered to offer ‘rich insight’ and increase understanding of such difficulties from which lessons can be drawn so that validated conclusions can inform the IS domain.

Theory suggests that stakeholder involvement results in better IS development and higher success rates. However this was not the case for the research study where the level of control exerted by key stakeholders influenced by EC legislature impacted negatively upon project outcome. Through this paper we have attempted to contribute alternative viewpoints that add to the debate that is a necessary part of the advancement of academic knowledge within the IS domain. Evidence posits that a perceived ownership of key business processes where specific skills sets and business knowledge belonged to individuals generated a level of legitimate power and control borne from the actual working practices.

Analysis suggests that a lack of proactive leadership and weak people management meant that the authority exerted was not sufficient or effective enough to handle the impact this issue had on development delays that contributed to actual project overrun. Additionally despite senior management recognition of the on-going problems the development

environment became a reactive arena where problems were experienced, and if not resolved, were addressed in an effort to maintain a level of project activity rather than aggressively progress it forward. This also has implications for practice.

We believe that a focus on ‘thought leadership’ could have motivated and influenced key stakeholders to move away from their previous working mindsets to the new integrated working culture, focussed productivity towards a common perspective of development objectives and influenced the acceptance of new co-operative working behaviours and practices.

We have also discussed a second issue that was a serious constraint upon the project such that the project’s outcome was affected, that of the EC Directive. There is some argument as to who was ‘in the know’ and why this was not communicated to the senior management of the project team. Regardless of further research it was not possible to determine the actual facts involved because it was not possible, at this point, to access the appropriate government officials. Whatever the reasons it must be noted that this situation presented a critical risk that hitherto has not been acknowledged but which must be managed in future developments.

External factors outside a project’s control will continue to present challenges within this genre of public sector development arena. We question the practicality of developing systems to meet rigorous legislation requirements where the Regulatory Body plans to make fundamental changes to core elements of the system being developed that may render them obsolete before they can be put in place. We ask where the responsibility lies? Should the External Body inform on proposed and/or anticipated plans that will radically change the focus of the system under development. Alternatively, where large amounts of public money are concerned, is the Public Body concerned obligated to disseminate knowledge of such intentions? These are questions we hope to address through further research papers.

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