# An Ethnographic Study of IS Investment Appraisal

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## ABSTRACT

*Both academics and practitioners have invested considerably in the information systems evaluation arena, yet rewards remain elusive. The aim of this article is to provide rich insights into some particular political and social aspects of evaluation processes. An ethnographic study of a large international financial institution is used to compare the experience of observed practice with the rhetoric of company policy, and also to contrast these observations with the process of IS evaluation as portrayed within the literature. Our study shows that despite increasing acknowledgement within the IS evaluation literature of the limitations and flaws of the positivist approach, typified by quantitative, 'objective' assessments, this shift in focus towards understanding social and organisational issues has had little impact on organisational practice. In addition, our observations within the research site reveal that the veneer of rationality offered by formalised evaluation processes merely obscures issues of power and politics that are enmeshed within these processes.*

*Keywords: ethnography; IS evaluation; IS project control; organizational politics*

## INTRODUCTION

A considerable amount of research has already been conducted in the information systems (IS) evaluation arena yet rewards remain elusive. This has been variously explained and in this article we aim to contribute to the evaluation literature by our examination of some of the particular political and social aspects of evaluation processes in organisations. The intention of the research is to study at close quarters the process of IS investment appraisal and ex ante evaluation as undertaken by a large international financial institution, and to assess this within the context of the established research tradition in the area. The focus of the study is on evaluations of IS project proposals; assessments which occur pre-implementation. Our objective is to compare the experience of observed practice in the studied organisation with the rhetoric of company policy, and also to contrast these observations with the process of IS evaluation as portrayed within the literature.

The structure of this article is as follows. We begin by providing an overview of the IS

evaluation literature by highlighting the difficulties entailed. The next section discusses the ethnographic research methodology before proceeding to the analysis and findings of the study. Our intention is to highlight that despite increasing acknowledgement within the IS evaluation literature of the limitations and flaws of the positivist approach (typified by over-reliance on quantitative techniques and tools), this has had little impact on organisational practice. In addition, our observations of organisational practice reveal that the assumed rationality of formalised evaluation processes merely obscures issues of power and politics that are enmeshed within these processes. Finally, we conclude with a summary of the points made in the research study and a review of the argument presented.

## The Difficulties of IS Evaluation

In considering the evaluation question (and by implication the issue of 'value' for money of information systems), the first observation to be made is the amount of attention that the subject has demanded, both in terms of the academic literature and the level of practitioner interest (Galliers, Merali & Spearing, 1994; Niederman, Branchaeu & Wetherbe, 1991). Yet in spite of this abundance of academic study and an increase in the organisational practice of evaluation, it appears we are nowhere nearer to finding a solution to the problems surrounding it (Ballantine, Galliers & Stray, 1999) and there is little indication that the 'hard academic, foundational questions are being widely addressed, let alone answered' (Farbey, Land & Targget, 1998, p. 156).

With an increased level of investment in IS, organisations are becoming increasingly concerned to find appropriate mechanisms to measure performance and decision-makers are being pressured to better justify their IS investments. Whilst there has always been a degree of scepticism over the 'real' benefits of IS initiatives (Earl, 1996), there is now a widespread and growing concern that IS investment does not deliver value. Yet, evaluation is seen as important to business operations, being variously

described as an indispensable tool for managers, a vital organisational function, and an essential part of the management process (Hirschheim & Smithson, 1988; Love, 1991; Walsham, 1993). It is closely associated with decision-making (Farbey, Land & Targett, 1995) and with management desire to improve organisational economic productivity (Picciotto, 1999). So, if careful management is seen as necessary to achieve IS benefits realisation (Earl, 1996), the obvious question that arises is why so many investments appear to evolve without undergoing any formal assessment (Wilson, 1991). This absence of formal evaluation practices does not necessarily indicate a lack of endeavour within the academic or practitioner community to devise appropriate methods: 'Many a scholar, consultant and practitioner has tried to devise a reliable approach to measuring the business value of IT at the level of the firm, none has succeeded' (Keen, 1991). IS evaluation, then, appears to be characterised by a level of complexity that renders it very difficult both conceptually and practically (Hirschheim & Smithson, 1988; Willcocks & Lester, 1999; Zuboff, 1988).

Reflecting on the growing number of roles that information systems play within organisations, assessment of the costs and benefits depends not only on the hard technical data but also the human, social, political, and cultural aspects. The technical specialists implementing the information systems are relatively well equipped to estimate the hard costs of implementation,[1] rather the main problem appears to be the indirect, hidden, and soft costs (Hinton & Kaye, 1994) of organisational effort. The difficulties associated with this increase as information systems embrace a more prominent position within organisations and management becomes keen to demonstrate the worth of such investments.

Given this context, much attention has been paid to methodological developments in evaluation. Indeed estimates suggest that over 60 methods have been developed within the last 30 years (Renkema & Berghout, 1997). Many of these were initially based on functional and

economic approaches (Hirschheim & Smithson, 1988; Symons, 1993), but the changing role and nature of IS has rendered these techniques inappropriate given the elements of intangibility and uncertainty (Remenyi, Sherwood-Smith & White, 1996). Various taxonomies have been proposed for classification of evaluation methodologies (e.g., Irani, Ezingeard & Grieve, 1997), with suggestions that the type of information systems might influence the choice of evaluation method. Of these different theoretical and methodological approaches to IS evaluation aside from a couple of notable exceptions (vis: Smithson & Hirschheim, 1998; Walsham, 1999), the social and political issues that are inherent to this process have been consistently neglected. We concur with Smithson and Hirschheim (1998) that the concentration on the means of evaluation (better tools) has detracted attention from to its end (what to measure and why).

The attitude to evaluation within the IS literature itself mirrors the evolution of the IS field and various paradigmatic developments (Orlikowski & Baroudi, 1991). Accordingly the early reliance on functional and economic approaches, with their underlying rationalist paradigm, has more recently been discredited, with critics identifying a number of flaws (e.g., Symons, 1993; Willcocks & Lester, 1999). Researchers have increasingly contrasted the limitations of evaluation approaches imposed by the positivist tradition with the potential richness achievable using evaluation practices based upon an interpretive paradigm (e.g., Walsham, 1993). The close interdependence of evaluation process and content demands a much more profound consideration of the organisational context for IS evaluation (Serafeimidis & Smithson, 2000) and a consideration of how the evaluation approach complements organisational culture (Pouloudi & Serafeimidis, 1999). However, this human and organisational focus is largely ignored by traditional methods (Serafeimidis & Smithson, 2000).

Although the tradition of IS evaluation dictates a positivist approach 'where the decision maker allows the methodology to make

the decision' (Remenyi, 1999), decisions are themselves based not only on so-called objective data but are influenced by cultural, political, personal, and other factors (Irani, 2002; Jones & Hughes, 2001; Serafeimidis & Smithson, 2003). How these influences are manifested and their effect on the decision is usually the most difficult part of the evaluation process to understand. After the data have been assessed, a judgement still has to be made, and, in the absence of complete knowledge of all the alternatives and the consequences, this is an essentially political activity. Despite this observation, which reflects the nature of the intervention as necessarily a subjective process, recent research confirms previous observations (Ballantine, Galliers & Stray, 1994) that practitioners show little sign of moving away from quantitative, financially-based data as a basis for IS investment appraisal (Ballantine & Stray, 1998; Lycett & Giaglis, 2000). Financial reviews of costs and benefits still represent the most common aspect of evaluation procedures and financial techniques such as NPV (Net Present Value) and IRR (Internal Rate of Return) predominate (Farbey et al., 1995). Despite the growth in the legitimacy of the interpretive paradigm in IS evaluation, little has changed in the hearts and minds of the decision-makers, who continue to rely on hard financial calculations (Farbey et al., 1995).

The tendency to pursue IS evaluation as an overly rationalistic approach is understandable given that historically, the process of IS development is characterised by rationality whereby actions are justified on rational grounds and the appropriate organisational rituals are adhered to (Boland & Pondy, 1983). Such a perspective is epitomised by the assumption that information systems are designed to contribute to specific ends, ends that can be articulated, are shared, and are objective. Once built and installed, the system, itself an 'icon of rationality' (Franz & Robey, 1984), will improve the efficiency or effectiveness of decision-making processes and thus represent a sound investment. The tools and methodologies associated with the IS evaluation process also possess an aura of rationality, often

based on mathematical and logical processing techniques as opposed to reliance on human intuition, judgement, and politics. This rational myth assumes a 'foreground' position, enabling organisational actors to behave in accordance with certain cultural expectations. Yet despite the predominance of the rational myth, the 'background myth' of political behaviour is of equal importance (Boland & Pondy, 1983). In fact, for some 20 years the political elements of IS development within organisations have been commented on, for example:

*Political interests are of basic importance to the actors in the organization. Political actions are not isolated episodes to be interpreted within the context of rational problem-solving efforts. It is the other way round. The rational elements are tools used by participants to gain new ground or to protect ground already won. They also serve as 'facades' to mask political motives and legitimise self-interest.* (Franz & Robey, 1984, p. 1209)

The focus on the rational aspects of evaluation fails to recognise the possibility that the outcome of such processes can be decided ahead and devised to support other managerial decision-making – a phenomena known as '*de facto* decision-making' (Vroom & Yetton, 1973). One conclusion in this respect is that evaluation is a highly politicised process that is employed to justify investment and decisions already made – no matter what rhetorical disclaimers such as objectivity, rationality, or quantitative measurement are proffered. The implication for IS researchers and practitioners is that, when employed to carry out evaluations, we are engaged in a political game that is skewed from the outset, often in favour of the sponsors. In this article we aim to shed some light on this 'thorny problem' by focusing on the dissonance between espoused rationality and the lived experience of organisational practices, which are more typically characterised by power, politics, and conflict.

In order to provide some 'theoretical scaffolding' (Walsham, 2001) and to help make sense of our empirical study, we will draw on the work of Hardy (1985), who provides a model for understanding the different ways in which power is used. Her work integrates Lukes' (1974) three-dimensional view of power into a model which addresses how power is exercised to defeat opponents, pre-empt conflict, and prevent resistance. Many writers concern themselves with overt power, described as 'the ability to secure preferred outcomes in the face of competition and conflict among declared opponents' (p. 388). Hardy's work is of interest since she also considers *unobtrusive power*, which is centred on attempts to create legitimacy and justification for certain arrangements, so that the outcomes are never questioned.

Hardy draws upon Pfeffer's (1981) work to argue that symbolic power (language, symbols, and rituals) can be used to legitimise desired outcomes in advance in such a way that the use of overt power (such as the wielding of authority) may be unnecessary since the outcome is regarded as legitimate, acceptable, or inevitable. She outlines a number of mechanisms and sources of unobtrusive power and considers how these mechanisms are operationalised. These symbolic aspects of power include: the use of *language* to mobilise support or quieten opposition; the use of *myths* or fictional narratives to stress the importance of tradition and thereby legitimise the status quo or emphasise change and modernisation; and finally, rituals, ceremonies, and settings, which can be used to convey certain messages and meanings. These issues will be discussed in the empirical setting; this follows the details of the research approach that was employed for the fieldwork, which follows next.

## RESEARCH APPROACH

The purpose of this research project is to explore the underlying political and social aspects of evaluation processes and procedures despite the emphasis on the rational, objectified measurable aspects of assessment. The research being reported here is based on an interpretivist perspective which views reality as a social construction (Walsham, 1993) and makes

sense of this by focusing primarily on human interpretations and meanings (Walsham, 1995a) with each interpretation having no absolute or universal status. Given the nature of the subject under consideration and the need to understand the evaluation processes *in situ*, ethnography offers an appropriate research approach. Ethnographic research provides valuable techniques for studying the social, political, and organisational contexts of IS phenomena (Myers, 1999) whilst also attempting to 'bridge the gap' between the different concerns of academics and practitioners (Harvey & Myers, 1995). Given that one of our objectives is to consider how the shift in focus in the IS evaluation literature has impacted the conduct of evaluations within institutional contexts, ethnography enables the generation of knowledge that is appropriate to both academics and practitioners (Harvey & Myers, 1995).

One of the most valuable aspects of this research technique is its depth since the ethnographer 'lives' the situation under research and experiences this for a considerable period of time. This provides insights into what people are *doing* and not simply what they are saying (as reported, say, in interview data). Given the longevity of an ethnographic study, the researcher can build up a richer understanding of the actors, the attitudes, culture, and artefacts of an organisation, and the broader context within which they have significance. One problem researchers are often faced with in interview situations is the 'Hawthorne effect' whereby participants respond in 'sanitised' ways in which they think the researcher wants them to respond. By contrast, intensive ethnographic observation at close quarters over a considerable period of time enables other elements to come to light, such as hidden agendas, power centres, contradictions, and behaviour that might be perceived as against the 'orthodoxy.'

However, despite the obvious strengths of an ethnographic approach, it is not without its practical difficulties, which are often perceived in terms of time demands and access to in-depth field observation (Fetterman, 1998; Yin, 1989). This issue was addressed as one of the authors

was based within the organisation at the start of the study, thus allowing him to 'go native' whilst providing access to the research data over a significant time period. The research was planned to coincide with a period of paid employment within the firm and informants were made aware of the researcher's intent and the research project. The author held a pivotal position with the IS evaluation process, enabling him to observe and participate in the various stages of the process.

The role of the author as both researcher and active participant can be problematic in itself. In particular the researcher was concerned with how he might influence the practicalities of the process. Accordingly, this presented a unique contextual example of the reflexive concern that is significant to any ethnographic study. The responsibility of the ethnographer, however, did not extend beyond facilitating the workings of the IS evaluation process. He was not an *active* stakeholder with a vested interest in the outcome of any particular investment proposal, but a facilitator of the activity required to reach an investment appraisal decision.

The research itself lasted for a period of six months and was carried out largely in synchrony with the appraisal and evaluation cycles, which took place on a monthly basis. Initially a period of organisational 'induction' was undertaken, which assisted the ethnographer's understanding of the organisational history and the context of the IS evaluation process. The induction included largely unstructured interviewing of a wide variety of stakeholders who were selected because of their role in the evaluation process and because they represented differing levels of seniority within the organisation. Based on some early negative responses to tape recording and in order to encourage disclosure, handwritten notes were taken during the interviews. These interviews were useful for establishing some initial background context and were also an appropriate 'way in' to the research so that relationships could be formed with informants. It has been argued that if we are to improve our understanding of IT production and use, then an engagement in an ongoing dialogue

with multiple voices can provide an enhanced understanding of the values of the relevant actors and their framing of problems and potential solutions (Suchman, 1994). The initial interviews were carried out with representatives from the following key organisational sub-units:

• The IT group (from each distinct technology area or discipline, amounting to 12 interviews)
• The different major business areas (at senior and middle management level, amounting to 6 business units and 14 interviews)
• The Finance division at senior, middle, and junior management level (a single interview/meeting)

Generally, interviews were undertaken on a one-to-one basis and followed a semistructured approach, although for operational reasons the finance interview was undertaken as a single meeting between the researcher and three finance representatives at different organisational levels. These early interviews initiated review of further background materials, often sent to the researcher via e-mail. These documents were scanned in detail and led to the emergence of some common themes that were identified as potential areas of interest, as they showed signs of either converging or diverging from the assumptions of practice as presented within the IS evaluation literature.

Participatory observation took the form of sitting with people and observing and taking notes of their working practices. In addition, the researcher was present at formal meetings, thus allowing him to observe the evaluation processes and procedures as they were negotiated and took shape. A period of six months of appraisal cycles was observed in this way, giving the researcher a pivotal observational role with access to all documentary evidence and stakeholders. Being permanently based on-site also meant that the researcher was able to take advantage of informal 'opportunistic' meetings (such as in the office kitchen and during ad-hoc project meetings) where it was possible to watch and listen to people's interpretations as the situation unfolded. A summary of the observation material is presented in Table 1.

In addition to the observational material, a continuous review of other material was conducted including e-mails, documents, forms, databases and spreadsheets, organisation charts, flowcharts as well as Web-based material (see Table 2). Qualitative techniques were used to

*Table 1. Observation background material*

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| **Observation** Background material | • Company meetings, conferences, etc.<br>• Departmental meetings<br>• One-to-one meetings with business stakeholders<br>• Informal discussions with employees across a range of subjects at a range of different events, both formal and informal |
| **Observation** Material in support of the evaluation process | • Attendance at all forums and meetings associated with the evaluation process (including sign-off sessions with U.K. Finance, U.K. COO, and participation in the executive committees)<br>• Discussion with stakeholders about the effectiveness of and potential improvements for the evaluation process<br>• Participation in and observation of all relevant discussions and communications within the process flow, end-to-end.<br>• Attendance at occasional projects reviews with heads of business areas<br>• Telephone and conference call communications with the stakeholders in support of the evaluation process |

analyse the data. Although the observational data and other data artefacts were collected on a daily basis, any active development of themes was not undertaken until the end of each monthly cycle, though often impressions and hunches were formed and collected during the ongoing IS investment appraisal cycle. A variety of analytical techniques were used to assess this, including content analysis, in order to develop themes to feed into the ongoing research. Simultaneous literature review and the identification of specific themes were allowed to influence the ethnography in so far as was practical by providing continuous input to the process in support of the reflexive and self-analytical nature of the ethnography itself. In this way, multilevel assessment, check pointing, reviewing and development of the research approach provided an emergent research strategy. This iterative approach of data collection, analysis, and refinement of approach or confirmation of emerging themes, characterised the ethnography throughout its lifetime. In this way the research can be said to have *evolved* as it proceeded.

The process may figuratively be characterised as bottom-up, top down, and inside-out in nature. The data collection was supported 'interactively,' that is, concurrently by analysis and creative interpretation, which fed into and influenced the subsequent approach. When analysing the data, our aim was not to uncover the consensus or majority view, but to understand the processes and themes within these multiple interpretations with a view to presenting a plausible theoretical explanation. We began with reading through all of the interview transcripts, observation notes, and documentary evidence to identify issues and topics and arrive at a common set of themes; the data were then re-examined in the light of this. Initial findings were shared with various participants within

*Table 2. Documentary background materials*

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| **1.** | **Documentary** organisational contextual information | 1. Company history presented on corporate public Web site and internal intranet <br> 2. Information pack provided to new starters as part of the orientation process <br> 3. Policy documents - Information Systems Development Policy (current) <br> 4. Systems Development Initiation Procedure (current) <br> 5. Education materials for the new process <br> 6. Enhanced Project Initiation Reference Guide v.1.0 <br> 7. Guideline documentation for performance management, budgetary control <br> 8. Employee Goals Template (current) <br> 9. Employee Appraisal Template (current) <br> 10. Actual performance management documentation, personnel records <br> 11. Specific instances of templates referenced in 9, 10 above <br> 12. BSS Systems Development Evaluation Process Instruction Manual <br> 13. U.K. BSS New Starter presentation |
| **2.** | **Documentary** Material in support of the evaluation process | 1. All paperwork and supporting material for all investment proposals submitted for consideration within a six-month period <br> 2. Project Initiation Request form (current) - (initiation request form for information systems developments ) <br> 3. The minutes of business review, U.K. TAR, ITWG (weekly) <br> 4. The financial cost/benefit analysis (spreadsheets and supporting documentation) for every proposed investment (one for each Project Initiation Request form) <br> 5. E-mail exchanges, including the U.K. BSS to Corporate Resource Allocation exchanges <br> 6. CPG/CPWG minutes (monthly) <br> 7. Reports of active projects with prioritisation guidance (monthly) |

the organisation and their helpful comments confirmed and elaborated these themes. The reaction of practitioners in the field is seen to offer a crucial validation of the interpretation (Klein & Myers, 1999).

As noted elsewhere (Harvey & Myers, 1995; Myers, 1999), the write-up of ethnographic studies does not easily lend itself to conference and journal length output. Consequently, the section that follows is of necessity, segmented, and can only offer a microcosm of the larger picture.

## FINDINGS AND ANALYSIS

As stated above, this ethnographic study is a slice from the organisational life of a large European bureaucratic company. The study is not intended to draw conclusions or even make recommendations, but simply open up

channels for further discussion on the nature of IS evaluation. The organisation of concern was selected for this study because it provides a typical example of institutionalised IS evaluation processes. The reader will also note the existence of a number of contradictions between what is claimed on behalf of company policy regarding the 'official' evaluation process and observed practice.

## Background and Setting

The organisation under review is a U.K.-based subsidiary of an international bank with its headquarters outside the U.K. The history of the organisation (as it presented itself) is that of a successful financial services company with a significant and growing market share.

The tale that follows includes a number of different stakeholder groups, often with dif-

*Table 3. IS evaluation stakeholders*

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| **IT group** | • the technologists based in the U.K. organisation responsible for application development, infrastructure development, and operational support. |
| **IT Assessment Group (ITAG)** | • a subset of the IT group that is responsible for assessing proposed developments and creating initial estimates for costs, complexity, and development timescales. |
| **Business & IT Consulting Services (BICS)** | • a team of business consultants responsible for the initiation of business system developments. Initiation includes working with the business areas in identifying business opportunity or requirement, proposing a development to the ITAG, using the defined evaluation process to the point of decision whether to make the investment, and providing business prioritisation input for the project management team for approved systems development investments. |
| **Business Areas** | • the operational business units within the U.K. business. |
| **Finance** | • core financial organisation within U.K. with traditional financial responsibilities. In the IS evaluation process, responsible for validating the financial cost/benefit analysis for proposed information systems investments, for confirming funding for investments and for tracking the realisation of financial benefits of information systems investments post-implementation. |
| **Chief of Operations** | • senior executive responsible for reviewing all proposed information systems investments before submission to corporate headquarters for review. |
| **Corporate Resources Department (CRD)** | • responsible for assessing, challenging, and validating all proposed information systems investments prior to review by senior executive committees and for approval of low-value investment requests. |

fering interests. Details are provided of these groups who featured as *dramatis personae* in the story (Table 3).

In terms of working practices, all of the interviewees portrayed the company in positive terminology (with comments such as 'good', 'great', 'dynamic', 'interesting'). Indeed during the period of this study the company was highly rated in a U.K. survey of the best places to work (Great Place to Work Survey (U.K.) - *The Times*, 2002). However, most employees also used the term 'challenging' or spoke of 'challenges' in their daily experiences and this seemed to be part of the corporate vocabulary.

Although surface impressions were generally positive, on closer inspection it seemed that tension and conflict simmered beneath the surface. The phrase 'blame culture' was used by U.K. IT staff and business unit staff in the interviews to characterise a prevailing feature of the organisation. U.K. IT staff expressed suspicion of their business unit colleagues and questioned their motivation. One interviewee spoke of being 'shafted' in the past by information that they perceived had been deliberately misinterpreted and for which they had later been blamed. Indeed, so widespread was the perception of blame culture that it was tabled as a specific subject for discussion at the annual U.K. management conference. Its existence was vehemently denied by senior management, but this denial was later ridiculed in a number of informal conversations observed by the researcher.

Although on the surface the attitude to the U.K. organisation was positive, the relationship with the corporate parent was much more ambiguous. Much was made of the fact that the U.K. management seemed to require ratification of management decisions by the corporate parent and there was resentment expressed about what was described as interference in the affairs of the U.K. subsidiary. Indeed there were several sarcastic remarks made about the extent of this intervention which was embodied in the chief executive. One interviewee described him as having been 'parachuted in' by the corporate parent to run the U.K. on a short-term contract

before being replaced by another 'big brother'. This 'interference' was coupled with what was perceived to be a lack of trust and confidence in the U.K. staff to manage their own affairs. This theme resonated on numerous occasions: some expressed it in candid and somewhat barbed terms whilst others made jokes, but what came out clearly was the way in which the parent exercised control over its subsidiary, and indeed the importance of control to the organisational culture. This control ethic was further exemplified in the performance management system, which insisted on control and compliance with company policy as a goal to be achieved by every member of the organisation.

As is typical of large bureaucratic organisations, the evaluation process consisted of approximately 12 stages (with subdivisions) and involved eight or more organisational functions. Each of these stages was observed in detail, but for simplicity the key aspects that illustrate the dissonance between organisational rhetoric and organisational practice will be reported here. Historically, the organisation has been involved in the routine conduct of IS evaluations, but the evaluation process reported here is one that has been recently introduced within the organisation.

## Initial Stages: Scan Business Environment

In order to generate potential ideas for IS development, it was the responsibility of the various business areas to scan the business environment and identify any new opportunities. Business & IT Consulting Services (BICS) liaised between the business areas and the IT department in order to ensure sufficient cooperation had taken place and that the two groups were in agreement that the investment proposals were both technically feasible and practical from a business perspective. However, one of the drawbacks was that BICS offered incomplete and patchy representation of business areas as a number of business units' resisted participation in this process. Consequently, BICS did not have a full picture of the U.K. business environment and so the process of business facilitation was

referred to (by a BICS consultant) as 'the blind leading the blind'.

## Investment Request Submission

The next stage is the Technology Project Investment Request, which involved the completion of high-level business requirements as well as business costs and financial benefits. This request included an option for 'fast-track' IS developments which included, for example, initiatives to meet contractual commitments or legal requirements, which could be expedited for approval.

It soon became clear that the Technology Project Investment Request was treated mainly as a way to get a potential investment into the process and was regarded of little value apart from being a vehicle for collecting the required signatures. It was later seen to have little relevance as BICS management was informed by the corporate resources department that the key decision-makers did not refer specifically to the details but rather summarised the request into a presentation format that relied upon verbal explanation of the project in order to elicit an executive decision. Given this disclosure, BICS relaxed their requirement of accurate and high-quality information.

Surprisingly, there was no difference in approach when assessing proposals. Thus low value investments queued patiently alongside the more substantial investments. Furthermore, despite the ability to provide support for 'fast-track' projects, during the study every 'fast-track' justification (23 in number) was ignored and proceeded in a manner that was identical to 'normal' investment proposals.

## Business System Services Review

The BICS review was a weekly forum at which all new proposed submissions were presented and discussed. One of the stated objectives was to leverage a cross-divisional position, to add value in technology decisions and implementations. Accordingly each request was reviewed with the intention of identifying any synergies and potential efficiencies by expanding the scope of or altering the request in some way.

Yet, in practice there were only four occasions where a material change was made to the request arising from this meeting. The practicalities of holding a meeting consisting of all the relevant stakeholders, in itself proved to be a significant challenge which was exacerbated by the fact that BICS failed to represent certain powerful departments that elected not to participate. As the evaluation cycles progressed, it became clear to BICS that the process was rigorous, demanding, and intensive. The number of initial submissions that proceeded to final approval was approximately 1 in 5. One BICS representatives made the observation that this meeting, even if fully attended, would be 'wasting its time, 80% of the time'.

## IT Review

A group made up of representatives from the IT department then assessed each request based on an estimate comprising: costs to deliver, timescales, and levels of complexity. The IT assessment group (ITAG) was expected to provide such estimates within the context of a single meeting and they struggled to do so. Many expressed their concern regarding their ability to provide cost estimates based on such limited conceptual requirements. Allied to this discomfort was the demand for an immediate estimate and on numerous occasions the ITAG preferred to defer an estimate until the next meeting. This delaying tactic can also be seen as an indication of their resistance to working practices that they felt had been imposed upon them. This dislike of the process allowed delayed estimates to become established practice, so that the ITAG stated that it was their objective to provide estimates at the meeting 'only where appropriate'. The number of IS development requests that received estimates at these meetings was less than 50%.

At this stage in the process, the information required by corporate headquarters from ITAG included: project name, business sponsor, BICS relationship manager, complexity assessment, financial assessment (the cost estimate), interim funding requirements, timing, and whether or not the project was a fast-track request. How-

ever, it became clear during discussions with BICS that subsequent reviews that considered the investment proposals referred only to the financial assessment and all the other information was disregarded. Over time, the practice of accurately trying to supply the required information became completely undermined.

Because of the lengthy approval process, ITAG and BICS expressed their frustration that every type of development request was treated in the same manner. Whilst there was an acceptance that significant projects should be closely scrutinised, there was a feeling that smaller projects were stifled because of a lack of willingness to invest in the process required for approval. As a result, a number of tactics were employed to facilitate development without having to go through the full rigours of the evaluation process. Thus, many potential projects were submitted as 'work requests' via IT helpdesk trouble tickets, thus bypassing the formal evaluation process. As IT developers and BICS representatives agreed on their local priorities, some developments were undertaken without ever entering the formal process. In addition, a number of 'deals' were made at ITAG, whereby IT staff proposed to categorise costs in a particular way such that the bill for a development would be minuted as zero. Technically even these zero-costed 'projects' should have been steered through the process but they also bypassed the formal evaluation.

## Creating a 'Business Case'

The output of the ITAG review was sent to BICS so that they could construct a 'business case' to be presented to the finance department for validation. The 'business case' was used almost exclusively to describe what was essentially a cost/benefit analysis (CBA) detailing only hard costs and benefits and consisted of little more than an Excel spreadsheet. Large investments required completion of a corporate CBA spreadsheet with five-year projections and calculations of the usual capital investment financial measures (such as Net Present Value, Internal Rate of Return, and Payback Period).

The finance department, who were later required to ratify these 'business cases', introduced templates outlining 'allowable' financial models to be used by BICS which were predominantly based on financial details over any other considerations. The only benefits categories that could be shown on the investment appraisal request form were: increase in corporate revenues; reduction or avoidance of corporate costs; and reduction in corporate losses due to bad debt/fraud. Projects with large benefits in the increase in corporate revenues category received the most prompt attention as compared with other proposals. Many of these projects had the endorsement of senior management. This was even to the extent that on more than one occasion significant projects were started by the IT department before the project had even entered the formal evaluation process because it was assumed that senior executives would subsequently approve of this sort of development and so 'nod through' the project.

Every project received some financial assessment, which often amounted to reviewing costs so that these might be tracked and reviewed as the project progressed. However, for many projects, even those that were required in order to comply with legal requirements or directives, there was a pragmatic assessment made on the basis of risk exposure and the cost of potential penalties as against the cost of the investment and the timing of the spend.

One interesting development that emerged during the study was the growing awareness by the relevant stakeholders of the overwhelming importance of the financial case, expressed in hard numbers. Initial investment proposals, which included business benefit details, were soon amended as business benefits were simply no longer detailed. The reasons stated were twofold. First, the effort to produce a benefits statement was too much of an overhead given the possibility that prohibitive costs may be supplied by ITAG. As one BICS representative commented: 'We're not going to spend time working out the benefits before we know it's worth it'. Second, it was admitted that once the

costs were known, a benefits assessment that would prove attractive could be 'manufactured' to provide the best chance of approval. BICS managers working within the business areas colluded in this process. As it became clear which kinds of investments were being approved, this intelligence was shared, as one business manager commented: 'If it's got a payback longer than two years, forget it!'

## Finance and Funding Review

Verification from the finance department was needed before a project could be further progressed. Costs identification and assessment were based purely on hard technology and business costs with no attempt to capture softer costs of implementation. Although these benefits might be used as supporting verbal evidence, this was only ever referred to in support of financial benefits identified and modeled using financial tools. For each investment – Irrespective of value – Net Present Value (5-year), Payback Period, and Internal Rate of Return were necessary. The financial review was regarded by BICS as a 'black and white' process, and as long as the calculations had been completed in a manner that finance would find acceptable, there was little room for discussion. In this sense the evaluation was little more than a case of presentation.

Despite the so-called rigour of the evaluation process, several projects, which had been previously rejected at some stage, later re-emerged with the 'unacceptable' details changed or removed. Thus, one project, which had a supporting business case that was deemed to be financially unattractive and was rejected, simply repackaged the business case with differently stated benefits. For powerful business managers who wanted the project to be implemented, they would sidestep the process by making the presentation of the benefits more appealing. The finance department was put under pressure to validate the new case and instructed to defend the new figures vigorously. When questioned about this practice, a finance representative conceded that the business cases were often artificial and the decision as what to do had

already been made and could not be influenced. The power of the finance group was such that it was seen in purely administrative terms, with one senior finance manager confiding: "I'm the highest paid administrative assistant in this company".

## Chief of Operations Review

The final U.K. review was an assessment by the chief of operations to ratify the investment proposals before submission to corporate headquarters for further review. Although the final U.K.-based review was expected to be a rubber-stamping exercise, in practice more active participation was demanded by the chief of operations. Since stakeholders at corporate HQ dominated the executive decision-making process, there was sensitivity about the scrutiny that would be applied to requests. For this reason there were occasions where a project would be stopped at this stage as the visibility of the project was deemed to be unnecessary. This would result in the investment being 'approved' outside of the official process and work commencing without corporate ratification. Here, the researcher observed a number of occasions when the chief of operations decided that a particular project did not need to proceed through the approval process, he approved immediate commencement of the project and the investment proposal was then withdrawn.

## Corporate Resources Department Review

Once investment proposals had been reviewed within the U.K. they were submitted to the corporate resources department (CRD) for further review. Before CRD would even consider the merits of the IS proposal, proof of adherence to the evaluation process was needed in the shape of signatures and form completion. As the study progressed, the amount of validation material required increased or changed to such an extent that the process was inconsistent from one cycle to the next. It appeared that there was a deliberate policy to challenge the resolve of the sponsoring divisions. The policy of putting practical hurdles in front of invest-

ment proposals was openly compared (by a key actor from the CRD) to the theory of evolution, with only the fittest of the investment proposals surviving. The CRD team admitted that their intention was to test the willingness of BICS to jump over the hurdles that they invented along the way, as one CRD member noted: 'if a business area doesn't come banging on my door, I'm guessing they're not really serious about it. If they really believe in the numbers, they'll make it happen'. This was seen as a way of 'separating the wheat from the chaff'. The exchanges between CRD and BICS were often light-hearted in nature and seen on both sides as something of an intellectual game. One member of CRD admitted that their hold over the IS development process was 'theoretical rather than practical'. Typical of this was an e-mail auto signature on CRD e-mails:

*My usual disclaimer: What could be perceived as petty bureaucracy is intended to ensure we make business decisions based on the best information available from the proper authorities.*

The light-hearted nature of much of these communications between BICS and CRD allowed both organisations to discuss openly their feelings towards the process. The 'pointlessness' and 'futility' of the reality of the job was acknowledged by one member of the CRD department:

*We all know that statistics are crap and can be used to support any bias we choose to promote.*

On one occasion a very small investment proposal was discussed over a period of four months before CRD was satisfied to approve the proposal. Both BICS and CRD agreed that the cost of putting the investment through the approval was probably 20 times greater than the value of the investment, yet this overhead was never factored into the costs of an investment.

## CRD and Senior Executive Review

For low value investment proposals CRD could provide approval. For higher value investments CRD was required to present the investment proposal at the executive committees. Given the scrutiny by the CRD function, it was unlikely that anything that was taken to the executive committees would be rejected. This was something of a point of honour for CRD and on the occasion that investment proposals were not approved, this was taken as a personal slight. In fact during the six-month study the committee declined only two items outright. One significant investment was deferred and the reason for this was that a member had attended the committee for the first time and appeared to have 'got out of bed with a sore head' and had been trying to 'make a noise'. BICS were assured that there would be no problem next time and were not required to answer any further supplementary questions about the proposal. When the proposal was approved at the subsequent committee meeting, CRD commented that the proposal had gone through unopposed with very little comment. 'I just jiggled the presentation up a bit—sometimes it just depends on their mood.'

## Observations Outside of the Process

The processes and practices described above refer to activities that took place within the evaluation process. However, throughout the study it became clear that in practice there were many examples of investment proposals, which managed to avoid going through the prescribed evaluation process. This is in spite of the stated mission of the corporate resource allocation group, which described 'an inclusive approach to allocation of corporate financial resources'.

### *High-Value Corporate Investments*

High value investments often did not go through any formal evaluation process as decisions were taken directly by executive management within corporate headquarters. This entailed considerable risk since these decisions were less likely to

have been based on a full understanding of costs. Indeed, in one example IS/IT costs (which were substantial) were underestimated by a factor of approximately four. The reasons given for this avoidance of official procedure were based on the need for a quick response, although the factor of error was the subject of enormous political sensitivity. This investment 'proposal' was later put through the official evaluation process as a purely academic exercise in order to act as post mortem review by executive management. On this occasion CRD was required to dissect the business case in extreme detail.

### Very Small Investments

Because of the time required to pass through the bureaucratic process, there was sometimes collusion between business areas, BICS and ITAG to find ways of initiating the development work outside of the process, for example, by exploiting other existing work structures or practices.

### Contractual Commitments

Often, the marketing department would enter into contractual agreements with third parties, which required some type of IS development effort in order to fulfil contractual obligations. As many of these obligations were usually under tight time constraints, the IT department was pressured into carrying out the development without prior approval. On each occasion, BICS attempted to take the IS development request through the approval process even though work had already commenced. This represented a considerable gamble by BICS and on two occasions this risk was exposed when CRD were unconvinced of the validity of the financial case and considered rejecting the investment request. BICS were then forced to admit that the work had already begun and that any decision to proceed was illusory.

### Projects with Informal Backing from Senior Executives

Whenever senior executives were convinced that an IS development was worthwhile, work

was often initiated outside of the process. Here again there was no formal authority to proceed except for so-called executive intuition. Again, these proposals were formally escorted through the evaluation process to legitimise the decision, which had already taken place outside of the process. As a point of interest, these were the same executives who made the decisions at the senior executive committees to which investment proposals were submitted.

## SUMMARY AND CONCLUSION

Our overview of the landscape of the IS evaluation literature reveals a trend that is mirrored in the IS field more generally; that is, the move towards the increasing concern with the social and organisational aspects of IS and, correspondingly, an increase in the use of interpretivist research as a lens to make sense of these processes. Therefore, we ask the question, how is this trend reflected in the organisational practices of IS evaluation? Are attempts being made to understand the 'softer' elements of evaluation that consider the human and organisational aspects of IS development and use? Is there an increasing recognition of the political process of evaluation and a move away from hard quantitative measures?  In order to address these issues an ethnographic study of a large financial organisation with institutionalised evaluation processes was conducted. Ethnography was felt to be particularly appropriate since it enabled the researcher to become deeply immersed in the organisation to study the social and cultural context of the phenomena of interest and thus move beyond surface explanations.

In keeping with the well-founded tradition that views IS development as a process of political and social contention (Franz & Robey, 1984; Knights & Murray, 1994; Markus & Bjorn-Andersen, 1987), the results of this research reveals similar tendencies by illuminating the political context to the development and implementation activities that frame the evaluation process. The implications for those of us involved in evaluations are recognition of

the social, economic, and political conditions that constitute the context within which evaluations take place.

For example, the study reveals instances of the exercise of overt power, whereby differential access to material and structural resources enables some organisational members to mobilise their power in such a way as to skew the decision-making process to suit their own interests. This is most clearly evident in the ways in which senior executives deliberately bypassed the process so that they could push through their own sponsored projects, particularly regarding high value corporate investments or projects which had a senior executive as a sponsor. Interestingly, these project proposals were later formally escorted through the evaluation process in order to legitimise and justify the decision, which had already taken place outside of the official evaluation process.

The study also illustrates the use of unobtrusive power as certain stakeholders engineered the situation in such a way as to endow their actions with legitimacy, thereby removing any opposition and achieving their objectives. In this respect, the evaluation process operated for the benefit of some and at the expense of others as legitimate alternative means ('loopholes' or workarounds) were sought to achieve their own ends or simply in order to avoid the lengthy, drawn-out process before securing project approval. For example, IT staff proposed 'zero-costed' projects as a means of bypassing the formal procedures. These various stakeholders were not unaware of the political manoeuvrings that took place and often there was acknowledgement of the futility of the process and its role in the 'rubber-stamping' of projects that may have already been started. This was to the extent that some projects began before they had even entered the formal process since it was assumed that senior execs would 'nod them through'. They simply 'played the game' by following official procedures on most occasions, whilst cleverly avoiding them when it suited them. The legitimising devices of language, ceremony, and rituals are all evident in the way in which organisational members – more often than

not – followed official procedures for project approval, even though many acknowledged that this process was little more than a façade. For example, BICS were aware that business cases were used almost exclusively as a cost benefits analysis and so they were constructed accordingly. Relevant stakeholders realised the overwhelming importance of the financial case and therefore benefits assessments were 'manufactured' in order to give them a stronger chance of success. Some projects that had previously been rejected later re-emerged with the 'unacceptable' aspects edited out.

Whilst these examples illustrate the more covert aspects of power, they also highlight the role of agency as some actors (such as BICS) deliberately undermined the IS evaluation process as a form of resistance by avoiding participation, rather than merely comply as expected. Similarly, the IT assessment group were uncomfortable about the expectation that they would to provide cost estimates and therefore used delaying tactics, to the extent that it became a common assumption that only 50% of the proposals would contain estimates. The study shows how various organisational members adopted different tactics to sidestep formalised organisational procedures, whilst simultaneously employing quantitative, 'objective' criteria to suit their own purposes.

The research study illustrates the predominance of the formal-rational management paradigm with heavy reliance on quantitative analysis to support decision-making. However, this quantitative data provided input to decision-making in complex ways. The ostensible rationality within the organisation suggests that the quantitative evaluation data provided input to a decision-making process mechanism which itself generated a decision on behalf of the organisation. However, observations suggest that the data were often treated in a less 'objective' manner and those outcomes from the decision-making process owed much to the political positioning and manoeuvring of the various stakeholders, with the 'official' rationality of the evaluation process being used to justify decisions taken in a far less rational or

scientific manner. These findings are consistent with Ballantine et al.'s observation (1994) that there is a reluctance to move away from the comfort of traditional 'hard' evaluation techniques towards the more interpretive paradigm suggested increasingly in the literature. Within a large bureaucratic financial organisation, this is perhaps unsurprising. However, this positivist machinery in fact masks the less comfortable reality that significant business decisions are being taken outside of the organisation's management orthodoxy. Furthermore it seems that the formal-rational process of approval also influences the type of information system proposed, such that efficiency-based applications predominate. Whilst these may be worthy in themselves, there is a risk of diminishing returns when pursuing this type of limited application portfolio and the process of innovation may be constrained or even stagnate. This is itself reflected in the rather limited strategic intention within the organisation, which emphasises growth of market share by acquisition over more imaginative forays into new product sets or diversifications. In this respect, the shackles of the IS evaluation process risk stifling innovative development.

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## ENDNOTE

[1]   Although even this is contentious

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