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REFLECTIONS ON ISSUES OF POWER IN PACKAGED SOFTWARE SELECTION

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Abstract

The adoption of packaged software is becoming increasingly common in a variety of organizations and much of the packaged software literature presents this as a straightforward, linear process based on rationalistic evaluation. This paper applies the framework of power relations developed by Markus and Bjørn-Anderson (1987) to a longitudinal study concerning the adoption of a customer relationship management package in a small organization. This is used to highlight both overt and covert power issues within the selection and procurement of the product and illustrate the interplay of power between senior management, IT managers, IT vendors and consultants, and end-users. The paper contributes to the growing body of literature on packaged software and also to our understanding of how power is deeply embedded within the surrounding processes.

Key words: Power, Packaged Software, Software Selection, Customer Relationship Management, IT Vendors, IT Consultants, User Involvement.

1 Introduction

One response to the recurring problems of the 'software crisis' (Brooks 1987) includes the selection and adoption of packaged software. For organizations facing the difficulties associated with embarking on custom development, a dedicated package that offers support for a particular business function seems like an ideal solution. Yet despite the widespread adoption of packaged software, it remains a largely underrepresented research area in mainstream IS literature. Much of the existing research on package software selection and adoption mirrors the early custom development literature in the way that it conceptualises the process as rooted in a linear, rationalistic process that is based on optimisation. This paper contributes to this stream of research by using an in-depth, longitudinal study to describe and analyse the process of selection and procurement of a software package within a small organization. In particular, it applies the framework of power developed by Markus and Bjørn-Anderson (Markus and Bjorn-Andersen 1987) as a means of providing understanding of how power issues are embedded within this process. It is intended that this research contributes to the well-founded tradition in custom systems development that conceptualises systems design and implementation as a process of social and political contention (Franz and Robey 1984) (Howcroft and Wilson 2003) (Markus 1983) by using the case study as a means of illustrating similar tendencies with packaged software selection and implementation.

In the next section, we discuss packaged software in terms of its growth since the 1990s, its characteristics, and consider the role of various stakeholders in packaged software selection as compared with more traditional custom approaches. The next section briefly introduces the framework of power and this is followed by details of the research method that was adopted for the empirical study. Section four considers the field study proper, before leading on to the discussion, which illustrates how the power framework has much resonance with the contemporary systems development environment, albeit with some subtle differences. Finally, the paper concludes.

2 Packaged Software

There is an increasing body of evidence that suggests organizations are shifting from custom to standardised, packaged software development for major applications (Deloitte and Touche 1996) (PriceWaterhouse 1996) (Sawyer 2001; Houghton and Vickery 2004). Packaged software is generally sold as a tradable product (Carmel 1997) and can be purchased from a vendor, distributor or store. It is marketed as a form of 'IT solution' that embodies experience and knowledge from a large installed base. Large, configurable, generic packages cover the fullest range of organizational activities and processes, and are adopted with the aim of achieving substantial cost savings along with the benefits of alignment with perceived 'best practice'. With software packages, the intellectual property is generally licensed for use rather than sold outright as the vendor retains ownership of the application and negotiates a licence with the purchaser (Carmel 1997). As a consequence, developers of packaged software tend to have a product (rather than process) view of development (Quintas 1994). That is, their focus is on developing and 'shipping' a generic product, leaving the other (processual) activities associated with the systems development process such as implementation, system integration and user acceptance to the purchasing organization or third party implementers to manage. Many of these implementers or IT consultants are drafted into the project since they are seen as providing the necessary technical expertise. These intermediaries interpose themselves between IT suppliers and the client, presenting themselves as neutral conduits and in effect speaking for the technology (Bloomfield and Danieli 1995). Their 'objectivity' and status can then be used to legitimate or influence a course of action that is presented as a solution to new or continuing organizational problems (Sturdy 1997).

One issue with these software 'solutions' is that they do not easily translate across organizational, industrial sector, or cultural boundaries and compromises often result when adopting a product of finite configurability. In order to achieve the alignment of (local) organizational requirements with a (global) software package the required functionality may be only partially met, as consumer organizations find that around 20% of their functionality is missing from the software (Scott and Kaindl 2000). Even when attempts are made to understand the 'niche market' appeal of a particular software product, developers necessarily make predictions concerning the

future world of anticipated use and the user. Consequently, the product itself is embedded or inscribed with assumptions, values and opinions about patterns of use, the nature of work, and organizational structures (Webster and Williams 1993); this has been described as 'frozen organizational discourse' (Bowker and Star 1994). Research links software design to the construction (or configuration) of the user whereby he or she is configured to respond to the software in 'sanctionably appropriate ways' (Grint and Woolgar 1997: 93). This is based on the assumption that packaged software embodies scripts of particular behaviours, thus the organization must change its organizational practices in order to fit that prescribed behaviour or commit resources to modify the package to match the needs of the organization. Still, the attraction of packaged software is easy to see. The rhetoric of the packaged software vendors is particularly pervasive and has widespread appeal. The benefits they espouse include: the ability to deliver complex systems in a relatively short period of time; standardisation of applications across business functions; a track record of success over a large installed base; and, minimal maintenance costs.

In relation to package software selection and adoption, several studies (and consultancy groups) offer guidance (Lucas, Walton et al. 1988; Kunda and Brooks 2000). They suggest that the process should follow a linear pattern typically represented as follows: study existing needs, identify requirements, evaluate packages according to requirements, purchase product on the basis of the 'best fit' (Chau 1995) (Welke 1981) (Lynch 1987) (Stefanou 2001). This idealised model of package software selection that is presented in much of the literature tends to oversimplify a rather complex process. Many of these guidelines are often rooted in rationalistic selection and procurement processes that include the sequential stages of acquisition and specification of requirements, assessment of packages and evaluation of the 'best fit', and selection of the optimal solution. The dominant discourse within much of the packaged software literature assumes that organizational change arises as a result of the planned, intentional outcome of senior management decision-making with the technology providing the appropriate solution. When casting an eye over IS history, we see that custom development is also replete with problems and contradictions regarding technology adoption and use, and so it would be naïve to assume that packaged software selection and adoption is necessarily unique in this respect. There may be differences, but there is no reason to assume that the process is in any way more straightforward.

3 Power Framework

Within the last twenty years or so, the study of power remains fairly marginalized in IS research, being seen as an important yet elusive concept, often difficult to define, and studied from a variety of paradigmatic perspectives (Jasperson, Carte et al. 2002). Given this shifting landscape, the aim of this paper is to reflect upon and apply the classic framework on the exercise of power by systems professionals over users developed by Markus and Bjørn-Andersen in 1987. The framework was selected for a number of reasons. Firstly, their view of power is somewhat

controversial since the dominant literature on power tends to focus primarily on overt power, that is, when two parties disagree and behaviour by one of the parties is intended to influence the outcome. Within this more traditional view, power is perceived as something that is owned. By contrast, Markus and Bjørn-Andersen draw on the work of (Lukes 1974) to consider covert issues. This entails looking beyond observable conflict to consider how power is used to prevent conflict from ever arising. In this respect, Markus and Bjørn-Andersen reject the assumption that the absence of resistance signifies consensus and instead elect to problematize consensus by specifically addressing how power is used to pre-empt discord. A further reason for selecting this particular framework is because their closing comments refer to technological trends, in particular developments such as standard software packages, and how these may affect the degree or type of power exercise. Given that the focus of the case study is on the selection of a standard package, these insights seemed particularly relevant.

We will begin by highlighting the key elements of the framework, drawing on the original sources of inspiration, particularly the work of Lukes (1974) and his three-dimensional view of power. We then go on to briefly discuss this framework, given more recent research developments, such as the work of (Hardy 1985). The power framework will then be applied to analyse the case study.

3.1 The technical exercise of power

Technical power is exercised when IS professionals select system design features to which users object. Some may argue that the technical exercise of power represents rational persuasion through technical expertise, but Markus and Bjørn-Andersen (1987) question this attempt at rational explanation. Systems professionals often have a different view of users than the view that users hold of themselves and consequently their espoused theories are often quite different from their theories-in-use.

3.2 The structural exercise of power

Here 'IS professionals exercise power over users by creating organizational structures and routine operating procedures that give them formal authority over users or foster user dependence on them for important resources' (p.500). This aspect is primarily concerned with the *development* of policies and practices that constitutes the exercise of power rather than the application of these policies and practices.

The structural exercise of power is based on Lukes (1974) one-dimensional view of power which places stress on concrete, observable behaviour, usually in terms of which groups or individuals have more power in decision-making processes. The conflict is about policy preferences, which are assumed to be consciously made, exhibited in actions and discovered by observing people's behaviour.

3.3 The conceptual exercise of power

IS Professionals exert power by defining the parameters of the design concept by selecting the objectives that the information system will serve. This is closely linked

to systems development methods that are used throughout the process since many are largely based on the principles of scientific management techniques and thus tend to produce highly structured jobs and procedures.

The conceptual exercise of power is based on Lukes (1974) two-dimensional view of power whereby power is exercised by confining the scope of decision-making to relatively 'safe issues' and creating barriers to the public airing of conflict. This view of power incorporates into the analysis the question of control over the agenda and the ways in which issues are kept out of the political process. Markus and BjØrn-Andersen provide an example of this by illustrating how some questions are simply not asked, such as the relationship between the information system and job satisfaction. The two-dimensional view also places stress on actual, observable conflict, and so if there were an absence of such conflict the presumption would be that there is overall consensus.

3.4 The symbolic exercise of power

Markus and Bjørn-Andersen acknowledge that the symbolic exercise of power is the least examined and researched, partly because it concerns covert issues and – arguably – because it occurs beyond the awareness of the individuals concerned. It is described as follows: "IS Professionals exert power *symbolically* by shaping users' desires and values outside the context of an individual systems development effort…. Many researchers have observed that applications of information technology can embody ideas and theories about the desired nature and organization of work. Use of information systems with embedded ideals can influence users' attitudes and beliefs about job and work design." (p.501).

The symbolic exercise of power is based on Lukes (1974) three-dimensional view of power whereby he attempts to correct the deficiencies of the one- and two-dimensional views. He aimed to look beyond observable conflict, decision outcomes, or suppressed issues, and ask why grievances are not formulated and why conflict does not arise. He said: 'The most supreme and insidious exercise of power is to prevent people, from having grievances, by shaping their perceptions and preferences in such a way that they accept their role in the existing order of things, either because they cannot imagine any alternative to it, because they see it as natural and unchangeable, or because they value it as divinely ordained and beneficial' (p24). He suggested we consider the role of ideology in shaping perceptions and preferences that are contrary to the interests of those who hold them.

Of the four exercises of power, the first three are concerned with defeating opposition, in the face of conflict or disagreement. This type of power has been defined as overt power, whereby individuals are able to push through their own preferences when faced with competition with their opponents' (Hardy, 1985). In these situations, actors mobilise their power resources most effectively, resulting in winners and losers. It is assumed that overt power is intentional. The sources of such power are grounded in differential access to material and structural resources, e.g. access to information, expertise, political access and the control over rewards

and punishment. The fourth element of the framework – symbolic – is when power is used to prevent opposition, when issues do not arise at all and actors are unaware of their own interests.

Since the publication of the Markus and Bjørn-Andersen framework (1987), other writers have utilised and adapted Lukes' three-dimensional view of power. The work of Hardy (1985) is notable in this respect as she integrates Lukes' three-dimensional view of power into a model, which outlines how power is exercised to defeat opponents and to prevent resistance. Her work concerns *unobtrusive power* and is centred on attempts to create legitimacy and justification for certain arrangements, so that the outcomes are never questioned. Hardy draws upon (Pfeffer 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 emphasize change and modernization; and finally, rituals, ceremonies and settings, which can be used to convey certain messages and meanings. Hardy's work on unobtrusive power will be used to enrich our understanding of symbolic power as outlined in the framework of Markus and Bjørn-Andersen, which at the time of publication was reliant on the work of Lukes. This will be applied to the case study, the details of which follow next.

4 Research Method

The study involved an action research approach, which has been noted for its appropriateness to IS research (Baskerville and Wood-Harper 1996). The project involved two academics whose role ranged from that of detached observer to fully engaged participant (Blaikie 1993), providing specific guidance on IS as necessary. Our contact with the organization began in June 2000 and work is still ongoing. In December 2000, the client-tracking project began. During this period we have had extensive contact with several staff at T.Co, including their external IT consultants. This included staff across a range of hierarchical and functional levels, from senior management to administrative/secretarial staff, and from sales and marketing to client research staff (approximately thirty people). In addition, we have had contact with third-party vendors of packaged software products. One or both of the researchers attended the research site every week and spent between one half and a full day there. Consequently, we were viewed by the organization as temporary, part-time members enabling us to acquire an 'inside view' (Walsham 1995) of activities, including access to sensitive information. Therefore, we saw our position as being part of the change process itself, an essential part of action research (Benbasat, Goldstein et al. 1987).

Despite guidance on the conduct of action research suggesting it should be conducted within a 'mutually acceptable ethical framework' (Rapoport 1970: 499), it would be naïve to assume that the various stakeholders shared a set of unitary problems and equally welcomed our suggestions for improvements to practice. For example, as researchers, we were primarily interested in collecting data for research purposes (there were no consultancy fees involved) whereas most of the senior management team at T.Co. perceived our role as providers of inexpensive advice that would assist them in the implementation of their plans. The project and our role within it was at the initiative of senior management who viewed 'success' primarily in terms of tangible results – the delivery and implementation of technology as easily and cheaply as possible, with minimal resistance and disruption. Although our presence in the organization was in a problem-solving capacity, we viewed our primary responsibility as being one of support and guidance to the IT Manager as opposed to a commitment to the company and its primary goal of increased efficiency and profitability.

5 Packaged Software Selection at T.Co

The empirical study involves an owner-managed business (T.Co.) and its procurement of a customer relationship management (CRM) package. T.Co. provide a range of high quality career management services covering executive outplacement. The company was established in 1990 and operates from three different geographical locations in the UK. The turnover is £1.1 million and there are 19 internal staff with a further 20 external consultants who aid service provision. Although T.Co is a fairly small organization, the company is hierarchical with strong control and command structures (see Figure 1). The Managing Director, who is permanently based on site, founded the company. He is an individual with a strong personality and a definite vision of what kind of organization could be realised by his vision. Within this setting, management dictate organizational goals and there is an assumption that all employees are committed to this same set of goals, with dissent and disagreement seen as something to be reprimanded.

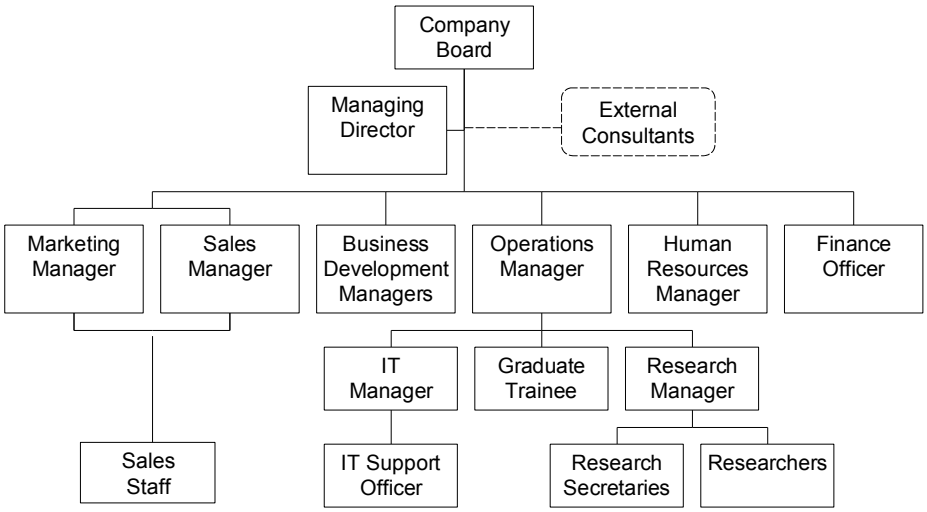


Figure 1:The Organizational Structure of T.Co

The Company's strategic aim is to improve productivity and profitability whilst maintaining the high quality of service that their customers expect. With the intention of achieving this they are embarking upon a fairly rapid programme of expansion to enable them to service a wider geographical area; with this expansion comes a range of issues concerning communication and the difficulties associated with maximising the benefits of their information system. At present, their IT-based business systems have been established in an ad-hoc manner and are running independently of each other, resulting in problems of communication and control. Senior management recognise this as an area that needs to be addressed, whilst acknowledging that the problem is compounded by the lack of in-house IT expertise.

The project discussed here concerns the acquisition and installation of a new client tracking system in the research department. This department provides a personalised service for clients, which has been described by senior management as a '*unique selling point*'. It was intended that the new system would outline the sequence of activities that began when the client arrived at T.Co., monitoring them as they went through the process of client placement. The client tracking system consists of two main stages: the first is related to the finding and securing of sponsors (that is, companies that provide clients, usually as a part of a redundancy package); the second stage concerns the monitoring of client progress during their time at T.Co. Clearly, the quicker the client progresses (that is, finds another position of employment), the less resources are provided by the company and this is seen as leading to greater profitability. It was hoped that a CRM package would contribute towards this enhanced profitability, standardising and streamlining

activities across the three geographic locations and ultimately leading to a greater market share.

5.1 The Launch of the Client-tracking Project

In December 2000 the client-tracking project was launched, with dedicated resources and an anticipated implementation date of February 2002. It was widely agreed that the focus (and thus the implementation) should be within the research department, which was considered the most complex business function. At this stage, end-users were aware that a new software installation was planned for the future and staff viewed this as a panacea to their problems, with one administrative worker remarking: '*when the client-tracking system comes, my head will stop spinning*'.

During the initial meetings with the project management team, we (the academics/researchers) advised the other team members of the importance of involving users, primarily because we believed they should have a voice in planned changes in their working practices, and also in order to enable a more informed evaluation of the packaged software products available. Whilst team members were accepting of this suggestion, little concrete effort was put into consulting end-users. However, in order to aid their own understanding of user requirements, two members of the project team (including the newly recruited IT Manager) conducted an analysis of the client journey, mapping out the business processes. During this same period, a focus day with end-users was scheduled on a number of occasions, intending to provide feedback to the project team, but this never materialised as staff were deemed to be too busy by their managers. As one supervisor commented: "*we'd love to get people involved, but we just don't have the time*".

It was hoped that the requirements document that had been drawn up by the project management team would be used to assess various packaged software products. At this stage, their main concern seemed to lie with ensuring the (financial) support of senior management. This was confirmed with much of the documentation that was written in a way that appealed to the interests of senior management. These documents included statements declaring "*Our aim is to introduce a flexible system that will streamline and improve our current business processes and speed up the client journey thus becoming more cost effective*." (User Requirements Document, 20 December 2001). Similarly, the client-tracking project was claimed to enable "*T.Co to continue to provide a business class service and grow effectively in the future, whilst maintaining efficiency in all areas*." (Board of Directors Document, 22 January 2002). There was little information provided on the day-to-day functionality that was required.

5.2 Product Identification and Selection

Concurrently, research was being conducted into a variety of packaged software products so that a number of vendors could be short-listed. By December 2001, four potential products (from four vendors) had been identified. The short-listing process was a difficult task as The IT Manager reported that she had been inundated with calls from numerous vendors following their expression of interest. However,

one of the providers (Vendor A) of a CRM package (Siebel) responded by stating that they could not meet the company's requirements, since their product was '*too big'* and T.Co '*couldn't afford us*'; any dialogue ended here.

Initial negotiations were set up with three other vendors and the project management team. The vendors included: Vendor B who supplied a Sage product; Vendor C who supplied Goldmine; and, Vendor D who supplied a product called Commence. Communications with Vendor B were problematic from the outset and the product seemed comparatively expensive and so this company never went beyond initial negotiations. Vendor D gave a presentation to senior management at T.Co, but the product was not perceived as containing the required functionality. Vendor C, who sold the Goldmine product, had a number of meetings with the project management team before demonstrating the product and discussing its capabilities with the Managing Director (See table 1 for details of the vendors and products). Despite having detailed discussions on the nature of the company requirements, this presentation was unsuccessful in that the salesperson simply demonstrated the standard product and paid no attention to the localized needs of T.Co. The MD concluded: "*Goldmine isn't for us*". Following this, the Board expressed their concerns about the value of a CRM package and demanded more research into the possibilities of further custom development of their existing applications.

Vendor/Product	**Details**
A: Siebel	Too expensive; 'You couldn't afford us'
B: Sage product	Communication problematic and too expensive
C: Goldmine	Standard product demonstration; 'Goldmine isn't for us'
D: Commence	Lacked the required functionality
E: Goldmine	Successful demonstration; negotiations continue

Table 1: Details of the vendors and products

Despite senior management's expressed desire to further explore custom development, the project team believed that a package was the best way forward and continued their search for a suitable vendor. An additional vendor for the Goldmine product (Vendor E) approached The IT Manager and was invited along to give a presentation to the project team (excluding the MD). The IT Manager, keen to avoid further custom development, coached the IT consultants in the language, culture, and ways of working at T.Co. in the hope that they would be seen as providers of a 'solution'.

A product presentation to the Board of Directors was scheduled whereby extensive use was made of the background information and much of the product terminology was personalised for the presentation. The MD took control in this meeting and asked if Goldmine was able to support a number of their business functions. The IT consultants responded by saying that Goldmine was able to support all of their requirements. Immediately, the MD was convinced and shifted position from his initial suspicion of the product to completely embracing it: "*This system can do all we*

need, and more!" The notion of further custom development was no longer an option. The MD also decided that the system was to be installed incrementally throughout the whole organization. Following the successful 'sales pitch' by the IT consultants, senior management resistance to cost seemed no longer relevant as the number of user licences increased and the costs were revised to over double the original estimates. Indeed, the cost of the package from Vendor E was marginally higher than the same product from Vendor C, but in the eyes of senior management the latter were no longer a viable alternative.

5.3 Implementation Planning

Interestingly, as the implementation was now to take place across the whole organization, the starting point was altered. The vendors felt that as the research department was the most complicated business function that it would be left until last. They proposed a different phasing of the implementation process, as shown in Figure 2.

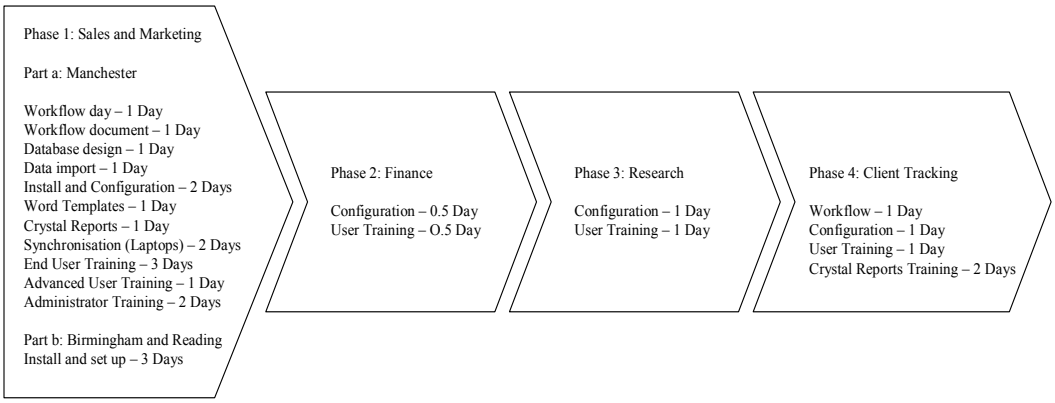


Figure 2:The Goldmine Implementation Plan - Adapted from Vendor E Workflow Document

As can be seen, implementation was to begin with the Sales and Marketing functions as it seemed they had the 'best fit' with the packaged software on offer. Interestingly, this was also the most expensive phase, accounting for nearly 60 per cent of the budget.

5.4 The Workflow Day

Up until this point, involvement in the project had been limited to project team members and senior management. Yet three weeks prior to the planned implementation date, the involvement of users was now seen as key to project success. The IT Manager reported "*Organizational change will be managed as a high priority and emphasis will be placed upon bringing the users fully into the project*" (Client Tracking Meeting Executive Summary). Part of this planning process with end-users involved a workflow day ran by one of Vendor E's technical consultants whereby selected members of the various teams (sales, marketing, purchasing, research) were expected to voice the opinions of their respective team members. Senior management agreed that all personnel needed to have the opportunity to be included in the project to ensure minimum resistance to change. Despite the fact

that the representatives selected were limited to managers of the various business functions, this exercise was perceived as a genuine attempt at user involvement.

The meeting began when the Goldmine technical consultant introduced himself, sat at the head of the table in the meeting room, and quickly pointed out that although the package was highly configurable "*sometimes the organization has to bend toward the product as well*". He also stressed that it was up to the users' to decide how they wanted the product to work and pressed the point that if "*you don't say it, you don't get it*", thus ensuring clear demarcation of responsibility. As the technical consultant discussed user requirements, he configured the package on his laptop, which was linked to a projector. As T.Co staff began to visibly see the capability of the application, they refined and generated further requirements as the day progressed. The mood was optimistic since the staff had been convinced that the product was '*good for them*', even though they were only discovering its capabilities as it was being demonstrated. Throughout the day there was an underlying tension as users focused on lower-level details (their everyday working practices) whilst the technical consultant resisted suggestions of reconfiguration in the hope of being able to implement the standard software - by far the easiest option for him. He interpreted staff discussion of their requirements as '*naval gazing*', complaining that they were '*getting into the detail*'. As more questions were being asked (partly fuelled by staff enthusiasm), he became increasingly uncomfortable and in an attempt to narrow the discussion he commented that the purpose of the day was to focus upon the Sales function, not the other areas of the organization.

Despite this tension, staff appeared positive about the capabilities of the product and this effectively helped the technical consultant to sell his product. For example, there were numerous occasions where staff obligingly agreed to consider changing some of the ways that they currently worked since Goldmine could not support these processes (for examples of incompatibilities between the product functionality and T.Co's business requirements see table 2). There was no overt conflict between the functional units as people put effort into thinking through how the various elements would integrate. Notwithstanding the good intention of users, the limitations of the technical consultant's sales performance and knowledge became increasingly obvious. It was clear from the outset that he was unfamiliar with the basic workings of T.Co in terms of both processes and terminology, despite having been sent company documents and mappings of the various business functions. As his lack of understanding became increasingly obvious, several staff noted their concerns about his capabilities and those of the package. As the Human Resources Manager remarked: "*I've only just joined the company and I know more than he does, he's just not prepared*."

Table 2: Highlights from The Workflow Day

- The Sales Manager wanted to be able to convert a client into a sponsor, yet Goldmine was unable to do this. A new record would have to be created and this meant that the history regarding the sponsor (as a client) would be lost. She asked if Goldmine would be able to do this in the future and the technical consultant replied: "yes, if enough customers ask for it".
- The Research Manager was impressed by the pipeline functionality for client-tracking purposes. However, it was not possible to construct individual pipelines that reflected an individual client's progress. Neither was it possible to create various standard pipelines, which reflected the stages at which clients would 'normally' be expected to have completed certain phases (e.g. CV preparation, Interview training).
- The Sales Manager wanted automatic reminders for follow-up actions (e.g. follow-up telephone calls when a brochure was sent to a potential sponsor). The technical consultant said that this was impossible, but when challenged by members of the academic team, he said that it would take more time to configure the software – but agreed to do it.

By the end of the workflow day, staff felt uneasy about the selection of Goldmine and these concerns were voiced to the MD. He contacted Vendor E to express his disappointment since he had assumed the workflow day would be focussed on aligning T.Co processes with those embedded within Goldmine, rather than ascertaining whether or not it was the right product for them. The IT consultants advised him to wait for the delivery of the workflow document. Prior to its arrival, the MD arranged a meeting with staff members in early July in the hope of trying to work out the best way forward. At the meeting, the MD asked staff to endorse Goldmine and agree that it could 'broadly' do what they required. He said: "*…we know there are problems with Goldmine, but can it do most of what we want – yes or no?*" Essentially, he was pushing for a decision and given his dictatorial attitude, the majority of people acquiesced. On this basis, the decision to proceed with Goldmine was made, despite not having yet received the workflow document.

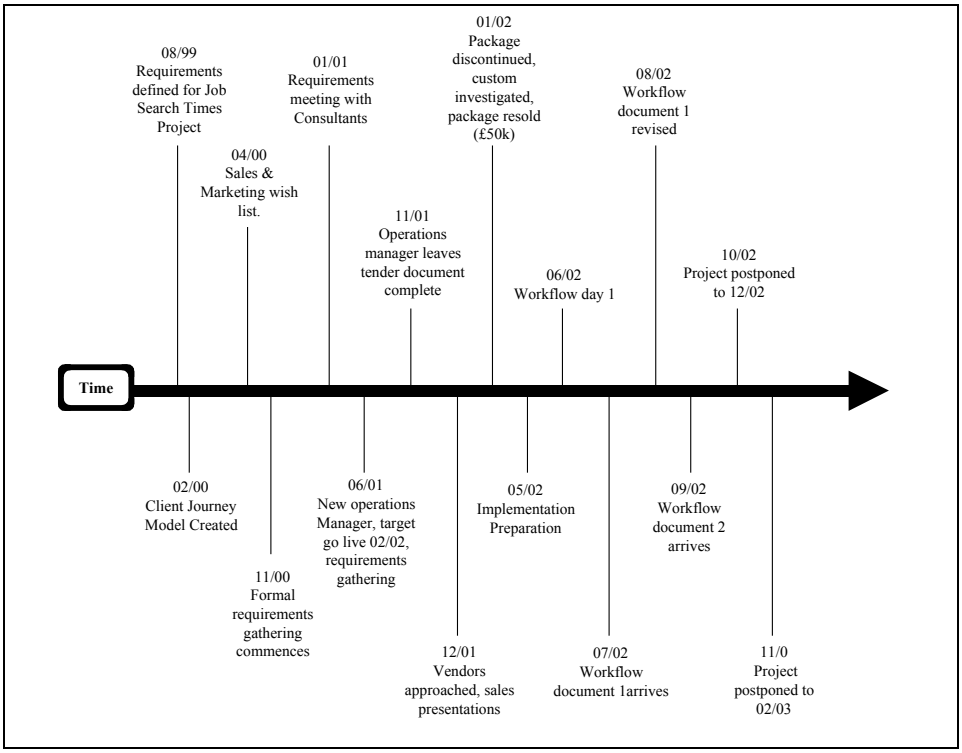
5.5 Signing Off the Workflow Document

The workflow document arrived mid-July, but failed to meet the expectations of the members of the project team. The Research Manager said "*it does not provide us with enough detail about the proposed system for us to sign this off*". The IT Manager was equally unconvinced stating: "*it's not clear what we are buying at this stage, it's going to need more work*". By now, the MD had become the 'product champion' of Goldmine and hoped to persuade the rest of the staff that this technology was the answer to their problems; a series of internal meetings were arranged to further endorse the decision that had already taken. A meeting took place involving the MD, The IT Manager, and the IT consultants whereby it was agreed that the two organizations would work together. The IT Manager relayed the tale of how the MD pulled off his favourite '*one-time party trick*', whereby he threatened to withdraw completely from the deal should the vendors not deliver the system they had promised in their original sales demonstration of Goldmine. This effectively

negated the workflow day and the subsequent meetings with staff, even though they were only ever brought in to 'rubber stamp' decisions that had already been made elsewhere.

Regarding functionality, The IT Manager and another member of the project management team had been charged with the responsibility of discussing requirements with the technical consultant prior to a meeting with the MD. At this stage, any attempts at user involvement were abandoned and negotiations took place primarily between the MD and the technical consultant. On this occasion, the MD stated he now had 'different, simpler requirements'. For example, he wanted to generate exception reports that would highlight where deadlines had not been met.The changes he suggested were reflected in a second workflow document that was delivered at the end of September. The 'sign-off' of this document was re-scheduled for 21 October 2002 but further internal meetings with the project team generated additional requirements. In October 2002 the purchase was postponed to December and further postponements are currently taking place. When interviewed a few months later, The IT Manager commented that it was becoming difficult to keep staff motivated because of numerous postponements and false starts. Her patience was clearly wearing thin: "This isn't over, I expect the workflow document to be double the size it is now – just you see." A summary timeline of events for the project to date is shown in Figure 3.

Figure 3: Summary Timeline of Events at T.Co.



6 Discussion

In this section, we apply the framework of power relations developed by Markus and Bjørn-Andersen to the case study. Nearly twenty years on, our aim is to apply the framework in a contemporary setting where the procurement of standard software packages has become a dominant feature of IS development. In order to do this, we take each aspect of the Markus and Bjørn-Andersen framework and discuss it in turn.

6.1 The technical exercise of power

According to Markus and Bjørn-Andersen, the technical exercise of power operates as rational persuasion through technical expertise, whereby systems professionals may impose their understanding on users. This element of the framework has been criticised by (Bloomfield and Best 1992) who argue that the positioning of the boundary between the social and the technical is itself an exercise of power. As the technical and the social is subject to negotiation, we posit technical objects in our accounts, and then speak for them (Bloomfield and Vurdubakis 1994). Socio-political and technical skills are interchangeable and indissoluble, even though IT consultants reproduce this dualism in order to sell their services (Bloomfield and Danieli, 1995). Thus, the 'technical' in the technical exercise of power is not fixed but is something that is subject to interpretation and negotiation. Many of these criticisms are well-founded and so for the purpose of the paper we will focus on the construction of the technical exercise of power in relation to packaged software development.

As compared to the Markus and Bjørn-Andersen framework, which concentrates on specific development projects at the organizational level, we see the construction of the technical exercise of power occurring within the packaged software *product* development process at the market level. With respect to the case, Goldmine as a software product had already been developed with a set of fairly fixed design features aimed to target a particular market. In this respect it could be argued that the technology is already fixed to a certain degree. However, as the case study unfolds we see how the IT consultants position themselves as knowledgeable experts and define the sociotechnical boundary according to their audience. For example, the initial presentation to the Board of Directors by Vendor E offered a product that was configurable and 'T.Co. compatible', yet only weeks later when this same product was presented to end-users, we see it had fixed technical features that would be problematic to customise. Through this we can see the paradoxical nature of the consumer-supplier relationship in the packaged software industry.

We also see how the technical exercise of power is constructed in relation to the IT consultants and the role they played. The use of outside expertise – seen as 'objective, expert, and expensive' (Pfeffer, 1981) – is seen as serving a purpose akin to that of the selective use of objective criteria, providing distance from overt power issues and enabling legitimation of decisions already made elsewhere. Power is exercised in such a way that it is perceived that the consultants only offer guidance concerning technical issues, but the setting up of this boundary is itself inherently political. During the workflow day, the technical consultant attempts to re-impose the standardised design features of the software upon T.Co. Although an

understanding of requirements is sought, it seems that there is little value in this exercise since the focus is bent towards selling a generic 'vanilla' product. The outcome of the day was that staff were not persuaded that Goldmine was appropriate for their organization. By contrast, the MD – as product champion - was of the opinion that the package would meet his requirements and match his vision for the future. In keeping with the culture of the organization, staff eventually coalesced into agreeing with his viewpoint. The struggle for power was not particularly concerned with the functionality of the software, but rather whose voice and opinion carried most weight. The technical consultant was able to ally himself with the wishes of the MD (the controller of the purse-strings), through the use of persuasive arguments regarding software performance and customisation.

6.2 The structural exercise of power

The structural exercise of power concerns the creation of policies and practices which are developed by those who have more power in decision-making processes. Markus and Bjørn-Andersen (1987) state that this takes place outside the context of any particular development project. Historically, within T.Co the appointment of the IT Manager initiated a process of 'IS professionalisation' which saw the development of a number of policies concerning user support, data standards and acceptable email use. This stemmed from the desire to provide greater control over the forthcoming project and in this respect policy creation was interwoven with the project. However, the primary area of governance was financial and this was within the purview of the Board of Directors who maintained a stronghold on all aspects of organisational policy, including IT development and expenditure. The move to a market-based model of software development involves a commitment to the purchase of a product, which represents a significant capital investment for the company and thus attracts the attention and involvement of senior management (Sawyer, 2001). In this respect, IT policy developed by the IT manager merely operationalised broader policies that were initiated and controlled by senior management.

Moving beyond the organizational boundary, we see other instances of the structural exercise of power, which arise as a result of the increasing adoption and purchase of package software products. Firstly, there are guidelines that govern how packages should be adopted and used, which are largely based upon implementing the 'vanilla' application. These are created and maintained by those that operate in the market environment, such as vendors and IT consultants. Many packages are developed for mass markets and are marketed on the basis that consumer organizations' can capitalise on the economies of scale whilst gaining the benefits of expertise across a large installed base. Therefore, adopting the standardised product in a 'vanilla' fashion is strongly encouraged (as illustrated during the workflow day), and customisation of the product is discouraged. At this level, the overt exercise of power by the vendors and the larger product market is strongly biased towards acquiescence with the vendors and the fixed design of the product.

Policies on new product releases, patches, and upgrades are also determined by vendor organizations (Raghunathan 2000). For example, during the workflow day, when the technical consultant was asked about future product development, he responded with the statement that it would happen "*if enough customers ask for it*". In addition, vendors have the power to control who purchases their product, particularly if they are concerned that it may have an adverse effect on their profitability (Raghunathan 2000). In the case study, we see an instance of this with Vendor A, who was not even prepared to tender for the project, as they believed T.Co would be unable to afford them and would be unlikely to become large revenue generators. In addition, the structural exercise of power operates in the various ways in which consumers can access support and maintenance mechanisms, as studies reveal that these services are offered at the market level (Keil and Carmel 1995) and provide little opportunity for input by individual organizations. Adopting organizations have limited influence over product design as this is primarily driven by expectations regarding potential future markets as opposed to the specific needs of the adopting organization (Sawyer, 2001). In this respect the vendors are able to specify clear parameters for both adoption and use.

6.3 The conceptual exercise of Power

The conceptual exercise of power refers to the way in which decision-making is scoped to only permit discussion of 'safe' issues, whilst avoiding the more contentious aspects of organizational life. At the market level, packaged software products are sold on the basis of realising an 'ideal' be that customer relationship management (as in this case) or office automation (with products such as Microsoft Office). So, the procurement and adoption process of package software is already constrained by the parameters of the 'ideal', leaving no space to raise the question as to whether the 'ideal' is appropriate or not. Within T.Co., the system objectives were decided at the outset by the senior management team, and this was centred around the goal of improved profitability and enhanced market share. Within these parameters, the initial business process mapping exercise was geared toward the achievement of these objectives, even though advice recommended end-users – who may have differing opinions - be consulted. The exercise was centred on optimising existing processes, with no consideration of how the system may impact on the working practices of users. However, senior management plugged into the notion that the new system would make employees heads '*stop spinning*' since this complemented their objective of making things run more efficiently.

The case study also reveals the shifting boundaries over time as we see the objectives alter to fit the changing needs of senior management. In the initial stages of the project senior management felt that the software package demonstrated in the presentation given by Vendor C was incompatible with their needs, even to the extent that custom development was reconsidered. However, as the project progressed we see how the IT consultants from Vendor E are able to persuade the MD that the 'promise' of the package is compatible with his vision. Interestingly, the scope of the package also became much broader than originally intended; yet this was never questioned. This seems to confirm the view that: 'consultants do not so much target themselves at a particular niche as seek to create

a niche and persuade clients that they are within it' (Bloomfield and Danieli, 1995), thus steering clients to an appropriate course of action as if it were their own idea.

During the workflow day, it became clear as the day unfolded that the fixed design of the Goldmine package was at odds with the working practices of T.Co. The technical consultant was firmly tied to the design of the package and was resistant to suggestions for modifications being made by staff members. He assumed that T.Co. would conform to the standard package and therefore there was no need to understand the finer detail of the organization, which he referred to as '*naval gazing*'. The power of the technical consultant was also enhanced when the MD emerged as project champion. This set the agenda - Goldmine was to be implemented regardless, and in a manner that was as close to the 'standard' as was possible.

6.4 The symbolic exercise of power

The symbolic exercise of power is concerned with covert issues that look beyond observable conflict to consider grievances that are neither articulated nor acknowledged. To understand how overt power operates, it is useful to consider the broader context. Here, as packaged software adoption is normalised into contemporary systems development, the myths or fictional narratives (Hardy, 1985) become increasingly pervasive as the benefits of packaged software are evangelised. Throughout our participation in the project, senior management were influenced by this ideology from various channels such as the trade press, through participation in professional associations (e.g. the Institute of Directors) and with their peers. This influence was such that they hoped that the adoption of the technology, steered by the expertise of the technical consultant, would alleviate their existing problems. In this manner, legitimacy in packaged software adoption was constructed.

Within the case we also note the role of ideology that equates technological adoption with progress and assumes 'better' technology was needed. For example, it was hoped that the CRM package would contribute towards enhancing the productivity of T.Co. by enabling them to standardise and streamline activities. This went beyond senior management through to operational level staff as the technology was imputed with the power to change and improve current working practices. IT consultants also play on the appeal of technical rationality in that it offers both the prospect of controlling uncertainty as it is seen as objective and politically neutral.

Similarly, the case illustrates the power of management prerogative and the way that this manifested itself in the authority of senior managers. It was presumed that this authority would not to be questioned and this was largely the case. T.Co. had a strongly hierarchical organizational structure, headed by a determined and forthright MD. The power of the Board of Directors is evident in the process of persuasion and enrolment surrounding the securing of the financial resources for the project.

Within the organization, the legitimizing devices of language, myth, ceremony, and rituals (Hardy, 1985) are all evident. At the ceremony of the 'successful' sales presentation, the IT consultant embedded the everyday operational language of T.Co. into the software demonstration. Even though the same product had been rejected in the past, the IT consultant mobilised the support of the MD by configuring the package so that it appeared to be 'T.Co. Compatible'. This was done in conjunction with the project team, particularly the IT manager, who worked the prevailing management ideology to her advantage. The IT manager believed that a package was the best option given the fragmented systems that were in existence. Thus, she too adopted language that would appeal to management in order to secure the resources she needed. She was also instrumental in the coaching of vendor E into presenting the product in keeping with T.Co. language and culture in order to minimise opposition.

At T.Co., a recurrent myth assumes that the organization. is comprised of people who share the same vision, and the presence of any conflict is seen as dysfunctional. The mantra of 'what is good for T.Co.' was often used throughout the study to push through desired changes. In the selection process, the IT consultants incorporated this vision into their sales pitch. They participated in the ritual of satisfying the MD by pitching their presentation to give the impression that the Goldmine package was highly configurable and would do the job required – it simultaneously affirmed the status quo, yet also met the requirements for change as initiated by the senior management team. The promise was far-reaching, adding the possibility of Goldmine supporting other departments and processes (previously unconsidered), thus extending its value as a transformer geared towards effective IT support.

The case also illustrates how the myth of user involvement is perpetuated, enabling end-users to feel that they have a 'voice' in the change process. Despite suggestions that a variety of end users should be involved throughout the project, this never materialised in practice. In the early stages of the project, the ceremony of requirements gathering took place whereby operational staff were asked about the details of operational procedures, as opposed to being consulted as to what they wanted. These staff were unable to participate in subsequent workshops as they were deemed too busy by their supervisors. Paradoxically, at the implementation stage, it was stated by management that users should be brought into the project in order to ease the process of change. Yet at the workflow day, operational staff were not included - only the line managers – despite the fact that these staff found it difficult to engage in the process. The technical consultant had started the workflow day with the phrase: '*if you don't say, you don't get*', but when things went awry, the MD took over to ensure his requirements were satisfied. At this stage, end-users were not a serious consideration, and it became clear that the only form of user participation that interested the technical consultant involved input from senior management.

7 Conclusion

To further develop the research presented here, future work could broaden the agenda by applying other social theories and frameworks to understand this process. For example, theories from science and technology studies, as applied by Bloomfield and Best (1992), may provide additional insights and their different contributions could be compared. We agree with the critique offered by Bloomfield and Best (1992), which notes that the four categories of power should not be viewed separately, but are indeed interwoven. For example, issues concerning the standardised processes that are inscribed within the software package can be seen with the technical, the conceptual and the symbolic exercise of power. Additional research to investigate this would be welcomed.

To conclude, this paper has applied Markus and Bjørn-Andersen's classic power framework to contemporary information systems development by focussing on a case study of packaged software selection. The analysis has been strengthened by the incorporation of Hardy's work on unobtrusive power, which allows us to untangle they ways in which symbolic power functions in the empirical setting. A number of rich insights emerged and these have been discussed in the preceding section, which has taken each element of the framework and discussed this in relation to the specifics of the case study and the wider environment. Although Markus and Bjørn-Andersen's framework was developed during a period that was dominated by customs systems development, this study makes it clear that their work still has resonance for contemporary systems development. We would argue that this is because of its strong theoretical foundations, being based on the work of Lukes and his conceptualisation of power. Indeed, our contribution demonstrates the issues of overt and covert power are still in evidence, even though the parameters may have altered, extending beyond the traditional organizational structures that encapsulate users and an in-house IT function.

The increasing dominance of a market-orientation (Sawyer, 2001) has meant that issues of overt and covert power are operationalised both within the organization and in the marketplace, expanding the number of stakeholders and diversifying their role. The research presented here has elaborated the model provided by Sawyer by using an empirical setting to detail how this market-based perspective occurs in practice. In this respect our work has considered systems development issues in a context that goes beyond the organizational boundary. We now see IT consultants playing a primary role as third-party implementers, negotiating and liasing between the vendors and those in the adopting organization. Our empirical work illustrates how in-house IT professionals may no longer be required to develop software, but are expected to negotiate a range of financial and contractual issues, both with IT consultants and internal financial decision-makers. At the same time they are expected to pacify users, legitimate the change process and endorse the technology as the driver of the change. Within this scenario, we note that the role of end-users has almost come full circle as we return to a situation that is reminiscent of early systems development practices. Once again, end-users involved in operational issues have minimal participation and influence.

Hopefully, the insights detailed above may be of value to both IS researchers and practitioners. They may encourage IS researchers to continue to direct attention towards understanding the social context of IS development and use. Practitioners should be made aware of the potential for almost any project to be fused with issues of power in the process surrounding software selection and adoption, thus providing insight into why the rational process may not proceed exactly as planned.

8 REFERENCES

Baskerville, R. and A. T. Wood-Harper (1996). "A Critical Perspective on Action Research as a Method for Information Systems Research." Journal of Information Technology, 11(3): 235-246.

Benbasat, I., D. K. Goldstein, et al. (1987). "The case study research strategy in studies of information systems." MIS Quarterly, 11(3): 369-386.

Blaikie, N. (1993). Approaches to social enquiry, Polity Press.

Bloomfield, B. and A. Danieli (1995). "The role of management consultants in the development of information technology: the indissoluble nature of socio-political and technical skills." Journal of Management Studies, 32(1): 23-46.

Bloomfield, B. and T. Vurdubakis (1994). "Boundary disputes: negotiating the boundary between the technical and the social in the development of IT systems." Information Technology & People, 7(1): 9-24.

Bloomfield, B. P. and A. Best (1992). "Management consultants, systems development, power and the translation of problems." Sociological Review, 40(3): 533-60.

Bowker, G. and S. L. Star (1994). "Knowledge and information in international information management: problems of classification and coding", in Bud-Frierman, L. (Ed), Information Acumen: the Understanding and Use of Knowledge in Modern Business. London, Routledge.

Brooks, F. (1987). "No silver bullet: essence and accidents of software engineering." IEEE Computer Magazine, April: 10-19.

Carmel, E. (1997). "American hegemony in packaged software trade and the "culture of software"." The Information Society, 13(1): 125-142.

Chau, P. Y. K. (1995). "Factors Used in the Selection of Packaged Software in Small Businesses: Views of Owners and Managers." Information and Management, 29(2): 71-78.

Deloitte and Touche (1996). 1996 CIO Survey: Major Packages, Deloitte and Touche.

Franz, C. R. and D. Robey (1984). "An investigation of user-led systems design: rational and political perspectives." Communications of the ACM, 27(12): 1202-1209.

Grint, K. and S. Woolgar (1997). The Machine at Work: Technology, Work and Organization. Cambridge, Polity Press.

Hardy, C. (1985). "The nature of unobtrusive power." Journal of Management Studies, 22(4): 384-399.

Houghton, J. W. and G. Vickery (2004). Digital Delivery of Business Services. Paris, Organisation for Economic Co-operation and Development.

Howcroft, D. and M. Wilson (2003). "Paradoxes of Participatory Design: the End-User Perspective." Information & Organization, 13(1): 1-24.
Jasperson, J., T. Carte, et al. (2002). "Review: Power and Information Technology Research: A Metatriangulation Review." MIS Quarterly, 26(4): 397-495.
Keil, M. and E. Carmel (1995). "Customer-developer links in software development." Communications of the ACM, 38(5): 33-44.
Kunda, D. and L. Brooks (2000). "Identifying and classifying processes (traditional and soft factors) that support COTS component selection: a case study." European Journal of Information Systems, 9(4): 226-234.
Lucas, H., E. Walton, et al. (1988). "Implementing packaged software." MIS Quarterly, 12(4): 537-549.
Lukes, S. (1974). Power: a radical view. London, MacMillan.
Lynch, R. K. (1987). "The impact of packaged software on user/vendor lifecycle concepts." Journal of Information Systems Management, 4(2): 34-40.
Markus, M., L. and N. Bjorn-Andersen (1987). "Power over users: its exercise by systems professionals." Communications of the ACM, 30(6): 498-504.
Markus, M. L. (1983). "Power, Politics, and MIS Implementation." Communications of the ACM, 26(6): 430-444.
Pfeffer, J. F. (1981). Power in Organizations. Cambridge, MA, Ballinger.
PriceWaterhouse (1996). PriceWaterhouse Information Technology Review 1995/1996. London, PriceWaterhouse.
Quintas, P. (1994). "A product-process model of innovation in software development." Journal of Information Technology, 9(1): 3-17.
Raghunathan, S. (2000). "Software Editions: An Application of Segmentation Theory to the Packaged Software Market." Journal of Management Information Systems, 17(1): 87-113.
Rapoport, R. N. (1970). "Three dilemmas in action research." Human Relations, 23(6): 499-513.
Sawyer, S. (2001). "A Market-Based Perspective on Information Systems Development", Communications of the ACM, 44(11): 97-102.
Scott, J., E. and L. Kaindl (2000). "Enhancing Functionality in an Enterprise Software Package." Information and Management, 37(3): 111-122.
Stefanou, C. J. (2001). "A Framework for the Ex-ante Evaluation of ERP Software." European Journal of Information Systems, 10(4): 204-215.
Sturdy, A. J. (1997). "The consultancy process - an insecure business?" Journal of Management Studies, 34(3): 389-413.
Walsham, G. (1995). "Interpretive case studies in IS research: nature and method." European Journal of Information Systems, 4(2): 74-81.
Webster, J. and R. Williams (1993). "Mismatch and tension: standard packages and non-standard users",, in Quintas, P. (Ed), Social Dimensions of Systems Engineering: People, Processes, Policies and Software Development. Hemel Hempstead, Ellis Horwood: 179-196.
Welke, L. A. (1981). "Buying Software", in Cotterman, W. W., Enger, N. L. and Harold, F. (Eds), Systems Analysis and Design: A Foundation for the 1980's. An Invitational Conference and Workshop North Holland: Atlanta: 400-416.