I.T. OUTSOURCING AS STRATEGIC PARTNERING: THE CASE OF THE UK INLAND REVENUE

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ABSTRACT

The Information Systems (IS) literature, and the industry sectors confronted with Information Technology (IT) outsourcing, are beginning to perceive IT outsourcing as more than just a necessary organizational resource-acquisition venture. Instead organizations have begun to consider vendors as their partners, causing many companies to enter into more intricate deals that include both contractual and informal issues. In light of these developments, a growing concern with forming closer client-vendor relationships has evolved for both vendors and clients. The paper explores in the context of a case study three critical dimensions emerging from previous studies. These are: what is outsourced; the contract; and the relationship dimension. We also explore the process and management issues underlying these dimensions. The investigation is enabled through two analytical frameworks, one proven in previous research, one exploratory, but both specifically developed for studying IT outsourcing arrangements.

1. INTRODUCTION

Information Technology (IT) outsourcing is not a new concept, as it has been in existence in the form of application development contracts, in facilities management agreements and time sharing deals for several decades [Earl, 1991;1996). Nevertheless, the rapid growth of outsourcing to an estimated global market share of $50 billion with an annual growth rate of 15% (Blackall, 1995;Walker, 1996;Willcocks et al., 1995), has ensured that it attains extensive world-wide business attention (see for example Applegate and Montealegre, 1991; Bicknell, 1996; Clement, 1996; Cross, 1995; Huber, 1993; Moad, 1993; Vowler, 1995). IT outsourcing is here defined as a decision taken by an organization to contract-out or sell the organization's IT assets, people and/or activities to a third party vendor, who in return provides the services for a certain time period and monetary fee (Lacity and Hirschheim, 1993; Loh and Venkatraman, 1992).

The growth in significance has resulted in an increased concern with the actual management of an outsourcing venture, and in particular with the issue of risk mitigation. This has received considerable attention already in two areas we will investigate further in the case study, namely decision-making frameworks and contracting. But additionally we will argue that what critically demands managing, especially in the long-term 'total' outsourcing context, is the client-vendor relationship. As already explicated in academic research, IT outsourcing agreements eventuate in inter-organizational relationships due to the resulting dependency that arises (Grover et al., 1995;Kern and Willcocks, 1996; Kirkpatrick, 1991; McFarlan and Nolan, 1995). Paradoxically though, with a few notable exceptions (Klepper, 1994, 1995; McFarlan andd Nolan, 1995; Willcocks and Choi, 1995), the area in IT outsourcing that has received the least research attention so far is this relationship issue, and more precisely the characteristics that determine an outsourcing relationship. The importance of this research has in the past already been highlighted by EDS's CoSourcing© (cooperative sourcing) framework, an early attempt at demarcating an outsourcing relationship (Alberthal, 1994). The case study offers an opportunity to investigate the content of a specific large-scale outsourcing arrangement, its contractual elements and how these interrelate and are influenced by client-vendor relationships over time.

The paper starts by outlining the genesis and detailing the frameworks to be utilized in analysing the case history. The decision-making framework was developed in the context of previous research (Lacity et al., 1996). The additional, complementary 'relationship' framework, however is derived from reviewing inter-organizational relationship theory, marketing theory, organization theory and the IS literature. Following the review common elements are elicited, which combined define the theoretical base of our relationship framework. We then detail and explore the case study in the light of these frameworks.

2. ANALYTICAL FRAMEWORKS

2.1 Decision-Making

In order to create frameworks against which the case experiences can be analysed in a structured manner, we refer initially to our earlier work in 30 private and public sector organizations showing decisions on six major factors having a primary influence on the effectiveness of subsequent IT sourcing arrangements (Willcocks et al., 1995). These factors are:

- **Differentiator or Commodity**. An IT activity/ service is a differentiator where it provides a basis for competitive advantage or, in the public sector represents a leading competence advantage [12]. A commodity activity does not distinguish the organization, and has to be done competently, and no more. An example, typically, would be payroll.
- **Critical or Useful**. 'Critical' activites are integral to the organization's achievement of goals and critical to its existing and future business direction. 'Useful' activities make incremental contributions but do not affect strategic direction or competitive positioning.
  Degree Of Uncertainty - about future business environment and business needs and hence longer term IT needs.
  Degree of Technology Maturity Associated with the IT Activity/Service. Maturity is low when the technology is new and unstable, or where an existing technology is being used in a radically new application and/or where the organization has little in-house experience in implementing the technology in the current application.
  Level of IT Integration. Highly integrated systems have complex and extensive interactions with other technical systems and interface in complex ways with multiple business users.
- **In-house Capability Relative To That Of the Market.** This factor relates both to relative capability and also the in-house cost relative to what external suppliers will charge.

We found the lowest risk route to using the market was to outsource useful commodities in conditions of low uncertainty. On the technical front, additionally it was important to reduce risk by outsourcing discrete, as opposed to integrated systems, in situations of high technology maturity where the market could provide comparable service at a more efficient price. In practice there will be trade-offs between these factors. Additionally, we found the following questions needed to be answered positively if the outsourcing was to be effective:

- is there an economic rationale? This may not be straightforward. In the public sector, for example, outsourcing can be a way of avoiding capital expenditure and large outlays on IT updating that can hit annual budgets hard.
- is there a low rate of technological change relevant to the content and length of the contract.
  can we manage ownership issues around asset and people transfers?
- is a suitable vendor available?
- is there sufficient in-house management capability to make and deliver on the decision? One aspect of this may be the need to separate out IT planners/strategists from providers of IT services to ensure objective advice.
- can we handle any significant human resource issues that will arise?

Clearly also much depends on a tailored detailed contract and adequate evaluation systems in place to monitor vendor performance (Willcocks et al., 1996).

2.2 Contract And Relationships: Towards A Framework

Research into dyadic business-to-business and buyer-seller relationship formation, evolution, and structure, identified inter-organizational relationship (IOR) theory (Oliver, 1990; Van De Ven, 1976;Van de Ven and Ring, 1994;White and Levine, 1961), marketing theory (Andersen and Narus, 1990; Cunningham, 1980; Dwyer et al., 1987;Ford, 1980), organization theory (Faulkner, 1995; Musgrave and Anniss, 1996), and IS literature (Bensaou and Venkatraman, 1996; Henderson, 1990;Konsynski and McFarlan, 1990;Lasher et al., 1988) as the predominant areas for explanatory concepts and approaches. Detailed analysis of these literatures elicited a list of recurring key properties in an outsourcing relationship. In-depth analysis of the various approaches also revealed a set of common determinants underlying most inter-organizational relationships and business relationships in general. Thus most approaches repeatedly stressed cooperation and intertwined economic/social exchange as pervading the relationship, heavily influenced by the level of commitment and trust (Axelrod, 1984; Blau, 1964; Cook, 1977; Emerson, 1972; Hakansson, 1982; Homans, 1961; Thibaut and Kelley, 1959). Building these, it emerged, takes time and largely depends on personal experience, which comes about through the repetitive cycles of exchanges (Hakansson, 1982).

Generally, following the interaction approach of Hakansson, we can infer that the more the parties interact and adapt to each other, the stronger the relationship will become. More specifically, exchanges of information and hence communication play the key role in building trust, while trust depends on the level of commitment invested by the individuals. Commitment to the relation then becomes evident through the investments of time and resources made.

From this review and our previous research we were able to develop an exploratory model designed to map the determinants of an IT outsourcing relationship (see Figure 1). Applicable to both vendor and client, the model elucidates those factors that characterise the nature of a sourcing relationship and the likely behavioural traits of the parties involved. The two level arrangement of the model emerges from the nature of an outsourcing venture, which, de-structured, can be characterised as consisting of a ❶ contractual level and a ❷ cooperative level between company A (vendor) and B (client).

❶Contractual Level

The starting point of the model is the initial contract stage, which specifies in detail the exchanges of services and/or products, financial matters, assets and/or staff transfers, information exchanges and other formal issues (e.g. assessment and monitoring phases). The exchanges can be characterised by such dimensions as timeliness, value, regularity, quality and content, and are extensively detailed in the contract. They will also vary considerably in their degree of formality (Eason, 1992).

Macneil (1978) postulates that the agreement regulates the contractual relation along several key dimensions. The most important dimension is that relational exchanges tend to take place over time, so that each exchange must be assessed on its initiation and resulting effect. Furthermore: 'Relational exchange participants can be expected to derive complex, personal,

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FIGURE 1 ABOUT HERE

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non-economic satisfactions and engage in social exchange' with their partners (Dwyer et al., 1987). Macneil's contractual dimensions are built into our framework (Figure 1).

Realisation of the stipulated elements in the contract is largely dependent on the continuous exchange of information between the participants, as only through continual communication can either side fulfil its legal obligations, achieve expectations and satisfaction, and avoid conflicts. Thus flexibility at the contractual level is absolutely fundamental, since adjustments, changes and investments not foreseeable in the initial agreement have to be made to continue the evolution of the relationship. Since the initial agreement will, in general, be neither self-enforcing nor self-adjusting, there has to be an informal element of flexibility inherent in any relational exchange contract (Goldberg, 1980).

A contractual or legalistic aura pervades the formal level, as service level agreements, product provisions, asset and/or staff exchanges, payments, and other stipulated terms are met. In parallel, social adaptations will be initiated by both the client and vendor to smooth the outsourcing transition to a working relationship. Social adaptations are a vital process as they guarantee the integration of the formal contractual level with the informal cooperative factors. Social adaptation will evolve gradually as/if the cultural distances between the participating organizations narrow (Ford, 1980). According to Forsgen et al. (1995) adaptations need to take place in attitudes, rules, norms, knowledge and corporate strategies. These can be manifested most clearly where a common language is developed between the parties.

❷ Cooperative Level

The cooperative level depends on frequent and continuous exchanges of information; communication mechanisms underpin the majority of exchanges and processes occurring at this level. The communication mechanisms commonly employed in an outsourcing venture are daily interactions withthe vendor, and possibly weekly, monthly or yearly meetings with the steering committee overseeing the whole outsourcing venture. Formal communication in this context is characterised by hard facts such as technical, legal or commercial data, whereas informal is more likely to be personal, supportive or soft data (Hakansson and Snehota, 1995). As elucidated earlier, communication might lead to greater trust, and contrastingly greater trustworthiness can cause improved formal and informal communication levels (Anderson and Narus, 1990; Dwyer et al., 1987). Therefore meaningful communication is a necessary antecedent to trust. Frequent communication may also help to avoid conflicts, facilitate solutions to problems, and reduce uncertainty levels (Aiken and Hague, 1968; Easton, 1992).

Information exchanges also assist vendors and clients with managing each others' expectations by taking care that dissatisfaction is kept at a minimum (Lacity et al., 1994). Misalignment of ambitions and expectations is often found to be the root cause of problems (Vowler, 1996). To avoid such mishaps both parties need to develop mutual goals and/or objectives that guide the relationship. Mutuality will improve cooperation by equally sharing the risks and rewards of the venture (Shepherd, 1995). We thus infer that complementarity and commitment in outsourcing evolves naturally through the pursuit of success (McFarlan and Nolan, 1995).

Both the client and vendor show their level of commitment through the investments of resources, knowledge, and time made (Johanson, 1994). These investments are specific to the relationship, but typical returns include the rendering of current transactions, the accumulation of knowledge, and improved control. The knowledge acquired may for example cover the level of technical, administrative or logistical competence of the partner (Easton, 1992).

However, commitment and responsiveness by either party to the venture demands a process of social and cultural adaptation. Fitzgerald and Willcocks found that a degree of cultural understanding, an element of flexibility regarding the contract, and a notion of fair deal has to exist in outsourcing relations (Fitzgerald and Willcocks, 1994). Problems in ventures tend to arise, though, where the parties do not share the same social and cultural traits/norms (Mills and Murgatroyd, 1991). These complex 'rites and rituals of corporate life' pose difficulties during change initiatives, since changes to these values requires time for adaptation (Deal and Kennedy, 1982). In various cases the differences in culture cause a level of anxiety in employees as both sides flex their power to remain in charge.

Power-play in outsourcing relations is mainly caused by dependency and leads to a power-control dilemma (Easton, 1982). Power-dependency becomes evident through the influence one party can exert over the other (Cunningham and Tynan, 1993). This power though is dependent on the interests of the parties in the exchange relationship. Generally, in large-scale IT outsourcing, a structural feature influences power play over time with an asymmetric dependency taking shape once an organization has transferred a significant amount of assets and/or staff (Willcocks, 1994b; Willcocks and Choi, 1995).

Finally, at the lowest level of formality individuals from the client and vendor side form social and personal bonds. A bond between two firms implies tying together of relations between partners (Easton, 1982). Therefore, strong bonding is dependent upon the satisfaction of each partner. Hence, the development of the relationship depends on social and personal bonds, so much so that alleviation of conflicts, ensuring satisfaction, and continuing adaptation all depend to a certain extent on the closeness of the bonds between the individuals. Personal bonds established between individuals in the organisations further increases familiarity and trustworthiness. Moreover, in certain cases the strength of the personal and social bond transcends and even replaces the economic bond, thus determining the *raison d'être* for the flourishing of the relationship.

3. RESEARCH APPROACH

In order to investigate these issues and the applicability of these frameworks in a distinctive context we selected the Inland Revenue/EDS outsourcing arrangement, signed in May 1994. The case was chosen because 1) it represents one of the few large-scale IT outsourcing deals in the UK and is commonly referred to in 'strategic partnering' terms by participants and observers alike; 2) it is a long-term, ten year deal where risk mitigation through contractual and, especially, relationship means are widely regarded as critical issues; and 3) we could gain access to major participants and stakeholders throughout the 1993-96 period thus allowing us to conduct a longitudinal study. For the case we interviewed eight participants drawn from Inland Revenue senior managers with IT, general business or Board responsibilities, employee representatives, vendor management, and external consultants. Some respondents were interviewed multiple times across the 1993-1996 research period. Interviews varied from 40 minutes to 90 minutes in length and were conducted using a semi-structured questionnaire with many open-ended questions. All interviewees were assured of anonymity so as to promote open discussions. Interviews proceeded from an unstructured to a structured format, with a common protocol. Interviews were then transcribed, and the text confirmed with the relevant respondents. We then developed a higher level of abstraction and interpretation by applying the precepts of intentional analysis to the transcripts (Sanders, 1982). Additionally we sought supporting documentation in order to construct the case histories. This included annual reports, internal financial documents, public reports by the National Audit Office, details/summaries of outsourcing contracts, and some internal memos and reports. These sources and procedures allowed us to develop a qualitative, interpretative approach to case study construction (Walsham, 1995). So constructed, the case history will now be detailed in the next section.

4. I.T. OUTSOURCING AT THE INLAND REVENUE: CASE STUDY

4.1 Context And Overview

In line with government policy in the early 1990s the Inland Revenue, in common with all central government departments, sought to test the cost-efficiency of 25 per cent of all its activities against external suppliers by 1994. By mid-1992 the idea was to outsource IT operations on a five to ten year contract. At that time IT operations cost £100 million a year and involved 1200 staff. There were 2400 IT staff in all, 13 data centres, and an annual IT budget including capital investment of £250 million. By January 1993 three vendor consortia and three single bidders - EDS, Hoskyns and Sema Group - were pursuing the contract, planned to commence in 1994. It was clear that the contract needed a very big supplier. In the event in November 1993 a £1 billion ten year contract was awarded to US computer supplier EDS. At the time this represented the biggest outsourcing contract ever awarded in Europe. At this stage the estimated cost savings from handing over IT assets, staff and management of activities were £225 million over the life of the contract. EDS would pay the Inland Revenue (IR) £70 million for its mainframe assets. IT staff would be transferred to EDS in two tranches: the computer operations staff at the commencement of the contract in mid-1994, and the remaining 800 key development people 18 months later in early 1996. Some 300 staff would stay in-house, while it was estimated that 200 would leave through natural wastage.

4.2 Early Days: 1993-1994

Early on there were some industrial relations difficulties over possibilities of job loss, and terms and conditions of transfer. In 1993 an internal job evaluation scheme seemed to threaten pay cuts before transfer to EDS. A further issue was whether staff would retain their public sector redundancy terms when transferring to EDS. April 1993 saw a one-day strike over these issues. Another bone of contention was who would pay for any staff redundancy. The Revenue wanted all staff who refused to relocate to EDS's data centre or refused alternative offers of work to nevertheless receive redundancy payments. EDS wanted to levy extra fees of up to £50 million to cover these unanticipated payments. The Revenue argued that EDS won the bid on a set price. By the end of 1994 these issues were largely settled, with the Inland Revenue Staff Federation seemingly satisfied with the transfer arrangements (Pickard, 1994).

According to the IT Director in 1993, Geoff Bush, the rationale for total outsourcing was: to gain rapid access to new technologies; enhance the capability of IT to meet business needs, and especially to reduce development time; optimise IT staff career opportunities and achieve step improvements in efficiency, including cost efficiency. Senior managers also indicated that privatisation would increase flexibility within IT - in terms of pay, conditions and promotion policies, in terms of escaping public spending constraints, and also increasing the capability to respond to change by re-engineering activities or re-equipping staff as needed. It would also lead to the possibility of selling on of spare capacity - not previously an option in the public sector.

In practice the Inland Revenue had set up a contract management team, that varied in size between 6-20 people at different times, and that worked together for two years on the tender, evaluation and negotiation processes leading up to contract signing in May 1994. The team was a mixed group of professionals with expertise drawn from legal, human resource, outsourcing, IT, civil service, property and contract management areas as needed. A senior IR manager worked full time at making the high level decisions, providing the resources, protecting the team and its progress, and managing relationships with other senior IR managers and government ministers. There was also administrative support to establish a critical audit trail. The person who was going to manage the contract for the IR also joined the team and took part in the 1994 negotiating phase. The role of the contract team was to make a market, that is attract bidders and vet the bids. Respondents stressed that how this was handled had implications for the relationship with the eventual vendor. As one respondent said:

'People thinking of outsourcing rarely take into account the cost of actually responding to their requirements. If the potential customer is not thinking laterally, and does not see the issue, they are already doing something to the relationship... because that cost has got to be recovered and there's only one place it comes from....(but) if you are minimising the bid cost, you really are doing something really rather helpful to the potential deal down stream.'

The team also used ex-vendor consultants to predict with great accuracy and provide the information the vendors would need to make a bid. This included, for example details of current performance measurement, costs, budgets, human resource policies and pension arrangements. Coupling this with an analysis of the slack in the systems in terms of IT performance and cost also enabled the team to calculate a price at which a vendor could agree the deal while still making a reasonable profit. This again was felt to have relationship implications:

'It's terribly hard to get across this notion that the supplier absolutely has to make a reasonable return if your objective is to have some kind of strategic relationship, and some real power being pushed into your business by the vendor to achieve your business objectives' (Robert White - Lucidus).

It was widely recognised amongst the team that with 134 risks of varying severity identified, risk mitigation was critical and depended upon the quality of what one respondent termed the 'up-front thinking'. One element was tranching the contract, that is dividing the IT activity/asset transfers into four separate parts. This eventually was reduced to two, with the standard services and processing being transferred first, and the major development work transferred over later, provided the first tranche was working out. The service work was all carefully monitored for service quality and timeliness, and a built-in cost reduction was operationalised annually. The contract included penalty clauses which included financial remedies. For development and future work a charging approach was also developed that combined pricing certainty within flexibility in order to avoid price escalation typically found in long-term deals. This worked on the basis of a set work unit price with discounts offered where volumes of work were ordered sufficiently in advance. The contract also ensured continuity of service at the end of the contract in the event of a switch in supplier or a move back in-house. The contract also stipulated that the supplier could not bind the IR into a technology not available from a third party, and enabled a testing of prices in the market against any step shift in technology. Under the contract the IR could also market test any activity, with the possibility of another supplier taking over that activity if it could be done more cost-effectively.

The retention and development of certain in-house skills, involving about 29 people, was also designed to mitigate risk. The central group here was the contract management team, described as 'the guardians of the contract'. Here the contract management processes were deliberately re-engineered at first to ensure tight control, that could be loosened subsequently. The leader of the 6 person team had an understanding of IT at the IR, of the IR business together with experience of negotiation. The team also contained expertise in resource procurement, commercial accounting, productivity monitoring and planning, covering about 14 different tasks in all. The IR also retained three people with technical expertise to look at the overall architecture of IR systems, understand the technical issues the vendor was grappling with, work with them at a high technical level and provide advice to IR business project directors. About 20 of the latter were also retained in-house to lead all projects and work with the relevant vendor project managers. Additionally there were several staff working in the IR business with what was called 'business-related IT' experience. These would work on feasibility studies with the vendor, on developing business requirements and in testing systems for business applicability. Clearly all these retained staff would need to work closely with relevant vendor staff in order to perform their mutual roles. Additionally external outsourcing consultants from the original contract team were regularly used to review progress and developments.

4.3 Emerging Issues: 1994-1995

Senior managers in EDS and the Inland Revenue (IR) were all aware of the high profile nature of what some of them termed the 'strategic partnership' between the two organizations, and were understandably anxious to make it work. At the same time such a large contract within the context of inevitably changing government requirements and political timetables could hardly be expected to run smoothly. One area was on pricing the contract. In practice the original savings on running the base service remained protected by contract. However, after the contract was signed EDS was given a further £100,000 because it was discovered that IR did not have licences for all the software being transferred. By mid-1995 EDS and IR were negotiating over a further £200 million addition to the original bid price over the life of the contract. Inaccuracies in the original tender documents led to an increase of £5 million a year, while additional hardware maintenance was to be charged at another £15 million a year. The IR was also finding it difficult to keep to some of the contractual terms which EDS legitimately pressed it to do. For example, to get the lowest labour rates, IR needed to forecast its staff requirements 13 months in advance. This was difficult to do, as was categorisation of skills needed into 48 types, and the definition of where all equipment was.

In May 1995 some questions were raised about the fragmentation of the IR Worthing computer bureau, identified by an external benchmarking firm as more efficient, taking into account its ouput, than any private sector datacentre operation. The IR had already begun to reduce the number of datacentres before outsourcing. In the case of Worthing, EDS people argued that they could run things even more efficiently by redeploying half of the staff and relocating the mainframe equipment at EDS headquarters. The IR was also running into problems with the development of its 'Pay and File' system for handling Corporation Tax. The system collects billions of pounds annually in company taxes. There emerged problems with EDS's handling of the system, though these stemmed mainly from inadequacies in what was handed over to EDS. Flaws in the system resulted in late or non-paying companies not being reported to senior IR management for follow-up action. In practice because of the staff transfers taking place the IR found itself short of resources to develop the system.

After initial adjustment problems on both sides it also became clear in late 1994 that relationship management required more comprehensive attention. In practice outsourcing induced the IR to add two new sets of skills to what they already had available in-house: contract and relationship management. The IR IT Director assumed responsibility for relationship management, initially spending most of his time on this set of issues, though this reduced to 30% by late 1996. Another IT manager was responsible full-time for relationship management on a day-to-day basis. Partnering operated at several levels.There was a six-monthly board to board meeting between EDS and IR. There were joint partnership meetings every 6 weeks to pick up issues of concern. One innovation was a joint perceptions exercise between client and vendor managers that identified 68 different strands of activity, specificall designed to make the relationship work better, and needed to achieve the higher objectives of the EDS-IR deal. A client and vendor managerial pair responsible for delivering results from each. Additionally a jointly staffed partnership development group was set up to identify future issues that required special attention, that would not get dealt with through the normal contract management mechanisms:

'Each activity was given an EDS owner and an Inland Revenue owner. Each was charged with setting out plans... and would report monthly to me and my EDS counterpart... settlement of the issue was included in their performance agreements and pay structure..... noone could say that the reason an issue is not settled is because my counterpart won't agree.' (John Yard, IT Director, Inland Revenue).

Clearly these mechanisms and processes were designed to enhance the working relationships,motivations and focus of both vendor and IR managers. It also enabled a focus on developing mutual understandings, perceptions and goals. The objectives here were to attain the wider objectives of both parties. As one respondent put it: 'The management here is about the totality of what you get for your money, not just from the micro-level.' In addition to these mechanisms and processes, a consensus amongst senior managers was developed around over a dozen guiding principles to regulate the relationship. According to one respondent, over 1995 these became a code of behaviour: 'when people do not behave in line with them it's not uncommon for them to be challenged'.

4.4 The Self Assessment Tax Project

One of the objectives of relationship-building was to sharpen mutual responsiveness and access to resources. By mid-1995 a fundamental time-constrained development tended to be attracting the available resources. In 1995 the UK government announced its intention to save some 3000 jobs amongst tax staff by introducing a self-assessment tax scheme, to be operational from April 1997. When the IR first drew up its outsourcing plans it was not aware of this project, first announced in general terms by government in 1993. It represented probably the biggest single reform of UK tax administration for 50 years and was highly dependent on supporting information systems being in place. Not surprisingly, this systems development created considerable anxiety amongst EDS and IR senior IT staff. Neither wished to be seen to fail on such a high profile development project, now called the Computerised Environment for Self-Assessment (Cesa) project.

Senior EDS managers believed that the system should be kept as simple as possible. Off-the-shelf packages could provide the capability to record who should receive the forms and the payment history of each taxpayer. The difficulty was that two systems would have to be maintained, because the new system would not interface immdiately with the existing Cop/Coda systems holding all current records. Moreover the new 'simple' system would not facilitate spot-checks on the accuracy of taxpayers' returns. IR management therefore wanted a tailored package to meet its specific requirements but this greatly increased the risk of failing to deliver a robust system on time. Development was also shot through with uncertainties. The cost of the project was unknown as at mid-1995. An estimate that the system would have to handle 90 million transactions annually was not that dependable. EDS managers questioned whether the chosen technology was sufficiently expandable. Also the system - ICL VME mainframes linked to servers and thousands of terminals - was dependent on ICL Goldrush super-servers that had never before been used on such a large project. EDS also worried that the ICL equipment seemed to cost more than twice as much to buy and run as equivalent IBM hardware.

For EDS managers the project represented high risk in terms of short timescales, technical complexity, and a major change in the way business would be conducted. Furthermore the project was only to come under EDS control when the remaining 800 IR development staff were transferred to them in early 1996. This added a further risk, as senior managers in both organizations conceded, with management of the project being transferred in mid-flight to an outside supplier. By mid-1995 EDS managers were asking for control of the project to be handed over earlier. They felt that they could not give guarantee of delivery before they had control, and had arrived at agreement over the choice of systems. IR senior managers were willing to concede this control to maintain the 'strategic' relationship, but more importantly to give EDS an improved opportunity to deliver. Failure would reflect badly on both sets of managers, but also on the outsourcing contract as a whole.

In these circumstances, it seemed likely that the cost of the project would be less of an issue than on-time delivery of a robust system. Additional resources would be needed, either from diverting staff from other IR projects, or buying in additional resources from EDS above the original contract price, though developments in partnering were making price and quality of resource uncontentious issues. By late 1996 the first Cesa release went live, and the second release was still on track to go live in early 1997.

5. CASE ANALYSIS AND DISCUSSION

5.1 Decision-Making And Outcomes

The case demonstrates some early successes with 'total' or 'strategic' outsourcing. In terms of our check questions a suitable and motivated vendor was found - no easy matter given the scale of the contract and the commitment it represented. Moreover, significant human resource issues arose with asset and people transfers, and these seemed to have been well managed. For the first few years, at least, there seemed to be sufficient in-house management capability retained or developed to deliver on the decision. One can begin to question the original economic rationale, though the real issue here is whether the IR could have carried out many of the projects, like Cesa, in the time frames required; Also it is necessary to assess the economic rationale as part of multiple objectives, rather than in isolation.

In terms of our analytical framework, however, one interesting aspect of this case is that it involved total outsourcing of what generally had been recognised as an in-house IT function with a good record. In some respects in-house capability relative to the market was high, for example for the Worthing data centre, and in terms of in-house knowledge of IR functioning. In the light of rising costs over the 1994-96 period it is also by no means clear that in-house service costs were out of line with what the market would charge either. On the other hand, it was clear that the outsourcing evaluation enabled the identification of ways in which in-house IT could be run more efficiently. The two most economically viable options were to achieve these in-house, or point them out to the vendor and let this be reflected in the price charged. The IR chose the latter course of action. The reasons cited for outsourcing make sense but the overall mandate from government would seem to have been the dominant influence. An important driver was the desire for cost savings and the assumption that private sector suppliers could deliver IT more efficiently than public sector departments, even while making a profit. The twenty per cent cost savings regularly touted at the beginning of the project would seem to have been partly offset by the unanticipated £200 million extra cost incurred within a year of project commencement. When the self-assessment development project is then taken into account, it becomes clear that cost savings were, by 1996, becoming a much lower priority, though the original operational cost savings of 220 million pounds were still protected by contract.

The case also points to the political and technical uncertainties that can plague public sector projects. The government-mandated introduction of the self assessment scheme by April 1997 represents merely a large-scale high profile example of the additional risks engendered when having to develop new systems during an outsourcing contract. Even a 'strategic partnership' arrangement seems to come under considerable strain in such circumstances as prevailing in the Inland Revenue deal. In previous work we have pointed to examples of senior government ministers developing government policy without a real understanding of the IT implications, and the difficulties involved in providing information systems support [65]. In the Inland Revenue case this factor would seem to have a bearing both on the government commitment to tight deadlines for the delivery of the self-assessment scheme, but also to its predilection for privatising IT services wholesale. In the Inland Revenue case it may well have been looking for a domino effect with the Inland Revenue deal having managers and a supplier committed to making it a high profile success, so leading the way for other government departments, and perhaps also for local government and the NHS.

In terms of our analytical framework, this total outsourcing contract would seem to emerge as fundamentally high risk. The case already demonstrates the considerable business and technological uncertainty prevailing in just the first three years of the project, and the political/governmental overlay of actions and concerns distinctive to the public sector would seem to make no promises for this decreasing over the contract's lifetime. Moreover, in terms of outcome, there is little discrimination between whether IT/IS activities are strategic or useful, or represent leading competence advantages or are commodities. Treating IT/IS largely, in these terms, as an undifferentiated commodity the preferred contractor or 'strategic alliance' route is the only remaining way of mitigating risk, even though, historically many long-term, large-scale single supplier contracts had produced disappointing results (Lacity and Willcocks, 1996; Strassmann, 1995).

Again a range of risks in the arrangements come to the fore on the technical front. It is clear that many IT/IS activities in the Inland Revenue are highly integrated, and may become even more so if mooted plans to link activities with other government departments, particularly the Department of Social Security, are pursued. Moreover IT activities also have multiple user and customer interfaces and in many respects go to the core of the Revenue's operational functioning. Furthermore the Inland Revenue has outsourced a range of activities with

low technological maturity, as shown notably in the 'Pay and File' and Cesa projects. In practice the risks associated with outsourcing such projects were exacerbated by having to pursue political timetables and deadlines and hand over projects to EDS while part way through the development process.

The case does raise some concerns about assymmetries of dependence developing over time (Willcocks, 1994b). Contractually, if IR senior managers were unhappy with EDS performance, they could decide not to transfer the development staff in 1996. The contract was specifically set up to transfer staff over at different times in order to give IR some leverage over the supplier. However, one can already see that by mid-1995, the Inland Revenue could hardly switch supplier; it was already highly dependent on EDS. It also is clearly in the interest of the 'strategic supplier' to increase this dependence. One particularly worrying feature in other long term outsourcing deals we researched was the extent to which in-house technical capability became eroded over time (Willcocks et al., 1996). Some elements of this are in the present case. It is possible for an in-house IT function to lose control of its IT destiny over time as a supplier actively penetrates the business as well as the technical management of the client organization. Such dependence on a single supplier also means that switching costs at any point would be very prohibitive.

5.2 Contracts And Relationships

The mitigation of such risks is mainly by contractual terms, including for example penalty clauses and exit arrangements and any risk reward incentives prevailing, and by the long term relationship and the mutual dependence and commitment such a relationship assumes. On the latter, there were indications by late 1996 of both parties consciously putting in place mechanisms for relationship development. Additionally, as noted above, the high profile nature of the contract and the high concern by EDS and IR managements, for their own reasons, to demonstrate the effectiveness of the arrangements also serves to mitigate risk somewhat.

In terms of our second framework, it would seem that both parties were very secure on establishing the relationship at what we term the 'contractual' level (see Figure 1). The contract was highly detailed and designed to reduce negotiation on price to a minimum not only at the bid stage but across the lifetime of the contract. After initial staff relations problems assets and staff transfers were managed well by both vendor and client organization. Very tight performance assessment criteria and procedures were put in place and a well staffed contract management team monitored vendor performance closely and exchanged information on a regular basis with vendor counterparts. The informal social adaptations necessarily developed over time as a result of communication and contact. However, the 'atmosphere' at the 'contractual' level - the context in which 'contractual' exchanges occurred, became greatly influenced by developments at what we term the 'cooperative' level (Figure 1).

In earlier research we found notions of partnering and relationships somewhat vaguely articulated by practitioners involved in outsourcing deals (Fitzgerald and Willcocks, 1994). What is interesting in the IR case is how 'cooperative' thinking occurred at the early vendor bidding stage, with the intention at the IR of sending signals to potential 'partners' on the potential nature of the relationship. A second unusual feature is the move to relationship mechanisms and processes - essentially formal communications mechanisms - in order to ensure the development of mutual objectives, social and cultural adaptations, social and personal bonds. When this is allied with partnering behaviour being included in performance measurement and reward systems of the relevant managers from both sides, this becomes a powerful recipe for ensuring that both IR and EDS staff invest their knowledge, time and resources into relationship issues. This investment then becomes translated, partly but significantly, into how the parties work together on a range of issues, with the Cesa project being a primary example (see above).

We have touched on several aspects of structural dependency and power assymmetries in favour of the vendor developing over time in strategic partnering arrangements. But clearly much depends on the quality not just of the 'contractual' but also the 'cooperative' arrangements as they are developed over time. We have argued that the IR contractual arrangements seem to reduce risks significantly. But as one respondent commented:

'The contract is a bit like a nuclear deterrent. You need one and you have got to have a framework, but if you've got to use it you are probably in trouble'. (IT Director, Inland Revenue).

But if, additionally, mutual objectives can be identified, and higher common business objectives can be pursued, then mutual dependency can develop that offsets somewhat the structural dependence over time. However, one cardinal point made on this by all respondents was that this relationship aspect required constant attention and day-to-day management at many different levels in both organizations. For strategic partnering in IT outsourcing arrangements this tends to underline the degree of formalization needed at the 'cooperative' level as shown in Figure 1.

6. CONCLUSION

The case study reveals a complicated sets of issues being managed fairly effectively in a difficult public service context. The case raises the issue whether the UK public sector environment in the early and mid 1990s was actually appropriate for anything other than relatively short term contracts on a selective basis. At the Inland Revenue it became clear that volatility in government policy added a high risk item to an already complicated large-scale outsourcing arrangement in 'start-up' mode. The fact that this cut across attempts to develop several major new systems using new technologies that the supplier as well as the in-house IT staff were not clear on only heightened the risk. However the high profile nature of the deal, and the importance of the IR as the tax raising department for the government has probably served to mitigate many of the risks that would not be so easily offset in other strategic partnering cases.

In other strategic partnering cases we have seen asymmetries of dependence developing over time in favour of the vendor. This was not that apparent in the Inland Revenue case, at least up to 1996. A necessary protection is the identification and development of key in-house capabilities and skills to ensure the identification and delivery of business requirements, the ability to make technology work and the management of external supply (Feeny and Willcocks, 1996). There were indications that in the IR case these issues were understood and being acted upon.

One conclusion that must be drawn from the case is that, in strategic partnering for IT outsourcing, getting the 'contractual' level right is central to success but falls into the 'necessary but not sufficient' category. We developed and tested an exploratory framework for analysing the elements of a complementary, additional set of levels at which the vendor(s) and client organization need to interact. In applying it to the Inland Revenue case we found the framework to have considerable applicability in terms of coverage of issues. The framework also enabled us to elicit the key areas that the parties themselves identified as necessary to act upon, and the innovative management approaches they adopted, in order to convert the rhetoric of strategic partnering into a day-to-day reality.

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IT OUTSOURCING RELATIONSHIP MODEL (Ver 1.10.)

CONTRACTUAL LEVEL

ATMOSPHERE: Commitment & Trust; Satisfaction & Expectations; Cooperation & Conflict; Power & Dependency

CONTRACTUAL

FORMAL

COMPANY A (Vendor)

Product / Service Exchange
Financial Exchange
Asset / Staff Transfer
Information Exchange
Social Adaptations

COMPANY B (Client)

INFORMAL

Degree of Formality

❶

COOPERATIVE LEVEL

ATMOSPHERE: Commitment & Trust; Satisfaction & Expectations; Cooperation & Conflict; Power & Dependency

NORMATIVE

FORMAL

COMPANY A (Vendor)

Formal Communication Mechanism
Investments in Resources, Knowledge, & Time
Mutual Goals / Objectives
Social/Cultural Adaptation of Retained & Transferred Staff
Social & Personal Bonds

COMPANY B (Client)

INFORMAL

Degree of Formality

❷

TYPE OF RELATIONSHIP

TIME

13