

MAPPING THE AREAS OF POTENTIAL CONFLICT IN THE MANAGEMENT OF INFORMATION TECHNOLOGY OUTSOURCING

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ABSTRACT

Information Technology Outsourcing services globally are estimated to exceed a market size of \$70 billion in 1998. This explosive growth since the early nineties, meant organizations had to learn quickly how best to manage their IT outsourcing ventures. An area that has received little attention is the issue of power; even though it is apparent that power relations arise at different stages throughout the outsourcing process, i.e. selection of the IT functions to be outsourced, selection of the vendor(s), the negotiation of the contract, and the post-contract management stage. In this paper we apply an existing power theorem as an explanatory approach to analyse research findings from a survey of the top 400 United Kingdom (UK) companies and thirteen European case study interviews. Findings point to a number of power issues that future customers should be aware of and may need to consider prior to joining the outsourcing bandwagon.

1. INTRODUCTION

Information Technology (IT) outsourcing continues to grow at an explosive rate in Europe and North America. Globally, in 1998 the market share of IT outsourcing services alone is approximated to exceed \$70 billion. This overwhelming approach to Information Management (Feeny & Willcocks, 1997; Rockart, Earl, *et al.*, 1996) warrants increasing attention from both academics and practitioners. Attention must be paid to determining best management practice for outsourcing, to avoid such catastrophic situations where the only alternative is early contract termination. A compelling case is Sears (UK) recent cancellation of its 10 year, £350m contract with Andersen Consulting after less than two years (Collins, 1997). By outsourcing we mean a

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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 exchange provides and manages assets and services for monetary returns over an agreed time period (Loh & Venkatraman, 1992; Lacity & Hirschheim, 1993; Willcocks & Fitzgerald, 1993).

Crucial to management practice in IT outsourcing is the understanding and awareness of the different power issues. So far, little to no research in IT outsourcing has addressed the issue of power (exception being Lacity & Hirschheim, 1993; DeLoof, 1997; Klepper & Jones, 1998). In part, we surmise this results from managers being intuitively aware of the implicit power issues in outsourcing, and do not find it important enough to explicate them. We also find existing organizational hierarchies and the implemented IT outsourcing management structures, already determine the power holders and origin of power issues. (Emerson, 1962). In this paper we broadly define power as the means through which the client company dominates the vendor and thus assures its outsourcing destiny (Emerson, 1962).

Research revealed that power relations explicitly arise at different stages in the IT outsourcing process, i.e. during the selection of the IT functions to be outsourced and the vendor(s), in the negotiations of the contract, and throughout the post-contract management stage. In the following paper we briefly analyse each of these stages and highlight the power issues involved, as well as suggesting some implications for organisations. To begin with a conceptual power framework is discussed, which we then draw upon as an explanatory approach for analysing the research findings from a survey and case-study interviews.

2. CONCEPTUAL POWER FRAMEWORK

To explain the power issue in IT outsourcing we draw on the concepts of system and social integration, as explained by Clegg (1989) and applied to the field of information systems by Silva & Backhouse (1997) and in more detail by Silva (1997). Clegg proposes a metaphor for understanding power relations in organisations. He suggests that power circulates in circuits. In this manner the relational nature of power prevails at various levels.

There are three circuits of power: episodic, systemic and social, the latter being referred to as the circuits of social and system integration. Each circuit corresponds to a different type of power and every circuit explains power to be exercised by individuals. Clegg deems that this conception needs to be complemented with the other two. The circuit of social integration is thus formed by the rules of meaning and membership that prevail in organisations. The type of power that circulates through the circuit of social integration is called facilitative and it constitutes authorities. The circuit of system integration is constituted by the techniques of discipline and production. The power that circulates through this circuit is called facilitative power because it allows organisational actors to achieve outcomes. This implies that compliance of

organisational members to productive tasks is achieved through techniques of discipline.

In the organisational context, system integration is the technological means of control over the material and social setting and the skills associated with these means (Lockwood, 1964). Besides the material means of production, Lockwood includes in system integration the material means of surveillance. System integration deals with facilitative power because it is control over the means of production and surveillance techniques that allow organisational actors to achieve outcomes. Organisations especially when facing uncertainty introduce new techniques either of production or discipline; that is why the circuit of system integration is the major source of change in the circuits of power. Changes in the circuit of system integration may entail new agencies, techniques and practices that the circuit of social integration might find difficult to resolve. This suggests why the introduction of outsourcing in organisations, insofar as they transform the circuit of system integration, may always be contentious. Thus, success in the implementation of outsourcing may depend on the managerial ability to interpret and translate the new rules and norms generated by its introduction into pieces of discourse that the organisational members can understand and accept.

As mentioned above the circuit of system integration is constituted by technology, techniques, and methods of production, whereas the circuit of social integration, that is the core institutional order is integrated by the values, beliefs, and norms already institutionalised in the organisation. Innovations in organisations can be seen as affecting the circuits of social and system integration. This means that innovations, in this case outsourcing, are going to affect how organisations perform their work tasks, discipline their resources and actions as well as the rules of meaning of membership. Organisations will endure tension as a consequence of the 'lack of fit' between its institutional order and its material conditions, i.e. between system and social integration. The lack of fit will be characterised by a type of 'strain' stemming from the incompatibility between the institutional order and the material base (Lockwood, 1964). Consequently, this lack of fit may jeopardise the social and systemic stability of organisations. Hence the stability of organisations after an innovation will depend greatly on the success with which managers are able to cope with the uncertainties and changes introduced by new practices.

Using this framework, we will concentrate on the power issues involving the management of IT outsourcing. The emphasis will be on the relationship between system and social integration. This is how an innovation, in this case outsourcing, affects rules of meaning and membership in an organisation. It also explains how a client company might attempt to integrate the outsourced services to their system of production.

3. EMPIRICAL FINDINGS

3.1. Research Approach

We found power in IT outsourcing to be an issue that depends very much on the 'knowledge of reality as socially constructed by the individual human actors' (Walsham, 1995). It thus seemed rational to adopt an interpretivist stance, since our understanding depended on interpreting the organizations' and managers' explanation of how they handle their outsourcing deals.

Our research method is based on quantitative and qualitative research. We believe this integrative method strengthens our findings for determining the power issues. The integration of a quantitative approach such as a survey with case study research ultimately combines an objective view with a more subjective personal view.

3.2. Survey Research

In 1996 we undertook 'a exploratory survey of trends in IT outsourcing' of the top 400 United Kingdom companies. For that a questionnaire was devised covering three main areas from the customers perspective: (1) IT outsourcing and business issues, (2) vendors, and (3) environmental issues in IT outsourcing.

The mailing list was selected from the 1995 Times 1000 guide and the 1995 Financial Times UK 500. Both public and private sector organizations were selected according to their annual turnover. The addressees were IT managers, but in many cases they were completed by the IT managers deputy. A response rate of 18 per cent unusable questionnaires was achieved.

3.3. Case-Study Interviews

Using a semi-structured interview protocol we interviewed in the early months of 1997 a range of participants in both legal, customer and vendor companies (tables 1,2,3). Questions addressing the contract, post-contract management, relationship management, the nature of a working relationship and the evolution of a relationship were posed. All interviews were tape-recorded and transcribed, after which the responses from the client and the vendor companies were grouped together into subject categories by applying a 'data display' method (Miles and Huberman, 1994). The resulting checklist matrices of the subject categories were then classified into areas of agreement and commonality, and into sets of disagreement and problems. The interviews formed the basis for a number of case studies.

Table 1,2,3 about here

3.4. Survey Findings

Of the 76 UK organizations that responded 41 were public, 21 were private and 14 remained anonymous. Combined they cover 22 different industry

sectors¹, with the largest groups operating within the sectors of Stores (14%), Transport Services & Manufacturing (11%) and Food Manufacturing & Wholesale (6%). More information is provided in the table below.

Table 4 about here

The range of the annual turnover reveals the sample indeed represents some of the largest UK organizations, with substantial IT budgets. However, the average IT budget as a percentage of the annual turnover, revealed a strikingly low percentage. This large disparity is ascertained from the high percentage of organizations rating their IT function as a cost centre. Thus, the perception of IT as not adding any measurable value to the company's annual turnover, but rather costing money, seemingly has a direct influence on the IT budget allocated. Others have explained this phenomena as the IT productivity paradox.

Of the responding companies exactly half (50 %) have been involved in IT outsourcing for 3-5 years, whereas the longest for 12 years. Of these only 3 organizations have totally outsourced to a single vendor. The large majority (73 firms) have selectively outsourced a range of IT functions, the most common being: Maintenance IT/IS (70%); Implementation of new hardware (56%); Software development, maintenance, and enhancement (51%); Network management (51%); and Legacy management (51%).

Of the functions respondents had outsourced, they indicated the following as being intrinsically strategic (software development, maintenance, and enhancement), a differentiator (telecommunication management), useful (Help desks) or a commodity (Maintenance of IT/IS) for the business.

These findings combined with the five most commonly outsourced functions reveals that companies feel confident enough to hand over strategic, differentiator, and useful IT functions to a third party vendor. This might suggest the respondents had ensured when they outsourced to enforce control over their destiny, especially in light of the fact that one of the main reasons for not outsourcing is the possibility of losing control (see below).

3.4.1. Outsourcing Process

The decision to outsource was made by 90% following internal deliberations, which were impeded by the delay caused by an open competitive tender (55% undertook such a tender). This stands in stark contrast to outsourcing following an offer made by the vendor (18%) or by benchmarking the inhouse services against an external supplier's bid (12%).

It can be reasonably assumed that some of the factors that were considered by the companies prior to outsourcing are the advantages and disadvantages. A common approach is then to weight them according to the organizations outsourcing intention. The five main reasons organizations listed were for not

¹ Companies were asked to indicate their industry, which was counter checked against 'The Times 1000' (1995) listing.

outsourcing were those of: (1) No perceivable cost saving or reduction(88%); (2) Loss of control over IT function outsourced (69%); (3) Lack of flexibility (38%); (4) Potential loss of strategic control over IT (37%); and (5) Low responsiveness and little ability to supply services (37%).

Evidently, of major concern is the likely loss of control. It would thus seem prudent to assess in detail those factors that could eventuate in unforeseeable risks or changes. In this case, the most obvious aspects to evaluate in the first instance, would be the firm's internal requirements, likely external market changes, the effects of a dependency on an external resource, and the security and confidentiality requirements arising for when a third party is brought into the business. The following table presents the level of consideration these factors received by the respondents.

Table 5 about here

On average the respondents had evaluated or at least considered most of the issues. However, on closer analysis the mode and the standard deviation revealed that the external environment, the possible dependency, and the security issue was assessed less rigorously. Looking at this variance, it would seem plausible that customers felt they could enforce enough control over their vendor partner to ensure the level of dependency would not affect them. This would enable them to have enough control over the outsourcing venture to ensure flexibility to proactively counter any environmental changes that affect the business. 50 % in fact perceived outsourcing as offering reasonable flexibility.

Clearly, IT outsourcing does not hinder flexibility. We can assume that most companies feel confident in their position to influence the direction of the outsourcing deal. It would seem that companies attain this sense of confidence, through the level of understanding they have about their vendor, considering the low level of attention respondents had given the possible dependency.

All the respondents, plus those who had essentially not outsourced, revealed they evaluated the vendor(s) company extensively. Clearly, client companies spent considerable time on assuring they had the right partner. The time invested in selecting and understanding diminished the level of uncertainty and risk in selecting a specific vendor for outsourcing.

3.5. Case Study Findings

The subsequent findings from the case-study interviews detail the means through which the client affirms control, i.e. power in post-contract management. An obvious concern following the hand-over is the loss of control and the possible dependency.

3.5.1. Post-contract management

In the post-contract management stage both the client and vendor essentially aim to enforce the contractually stipulated terms. Both parties identified four

key dimensions through which they essentially the client essentially affirm its control and hence power in the venture. Those being financial control and monitoring, penalty payments, monitoring of service levels and/or products, and performance measurements

3.5.2. Financial control and monitoring

Both parties suggested that everything in the contract at the end of the day winds down to a financial consideration. "...the case where we do stick firmly to the contract primarily is when it comes to money. If we are duty bound to pay something or if we are not bound to pay for something, we either will or won't depending on what it says. ... I think we are softer on service where we are looking for flexibility, but hard-nosed on cost issues where we are very precise" (Business Support Manager, Client A). Profit margins and payments to be made are always closely monitored and scrutinised by both parties. It is one of the key areas where control is particularly critical.

To undertake such an assessment, you need complete access to the costs and pricing strategy of your vendor (Executive Director, Vendor D). You essentially need an open book arrangement. This type of arrangement then gives the client the control over where the vendor actually makes its money. After two years Client A's new objective became to enforce an arrangement that "makes it clearer how Vendor B make their money. ...we do want to understand, where they make their money, and it will be clearer with the open book arrangement." However, when the vendor suggests an open book arrangement because the problem or issue cannot be settled through a fixed price, the client subsequently gives the vendor control over large profit margins. This latter arrangement would give the vendor significant to complete control over the costs and possible services they will deliver at the end of the day.

Another means for controlling costs is through the introduction of a competitive benchmarking process (Partner, Service A). Benchmarking is an important contractual contingency (Solicitor, Service A). It protects customers against increasing prices, while the quality of services decreases. To ensure cost control "you continually set your suppliers of the commodity services at each others throat, demand that they keep to a certain international standard, and request lower and lower prices the whole time" (Group IS Manager, Client B).

In sum, cost control is essential to the client, since the motivation of the vendor is always to make a profit (Principal Consultant, Vendor E; European Strategic Director, Vendor B; Exec. Director, Vendor D; Partner, Vendor C).

3.5.3. Penalty payments

In the event a client does not receive the quality of services for the value of the money, they can enforce penalty payments or in extreme cases termination the contract early (MIS Executive, Client E). Penalty payments were described by clients as a formalised means of control, to ensure for example target deadlines are met (Management Services Manager, Client C).

However, requesting penalty payments and enforcing them unilaterally damages the overall relationship. It was suggested that a mutual understanding

of the reason for enforcing penalty payment is necessary, to avoid reoccurrence and to ensure the client-vendor relationship moves forward. It is similar to early contract termination, it is the last resort to enforce cost control over service delivery.

3.5.4. Monitoring of service levels and/or products

Services are very carefully monitored as in many cases they form key part of the deliverables for which the client contracted the vendor (Group IS Manager, Client B; Management Services Manager, Client C; Solicitor, Services A). Services are explicitly detailed in service level agreements (SLAs), outlining what client companies expect as their basic service requirements. SLAs essentially define the key (hard) measure.

The importance of service level agreements in the contract was emphasised by both client and vendor companies. The UK Managing Director from Vendor A described this importance as a level of control it gives both parties and the extent to which the SLAs define each other's responsibilities and the client's expectations. The Executive Director from Vendor D endorsed this view and further explained that "... a service level agreement really expresses what the customer wants and what's important to him. ... You actually really get down to what they want in a detailed sense." It is thus a control factor that allows both parties to assert their power.

3.5.5. Performance measure

To ensure services and/or products are delivered according to expectations and agreement, both parties operate an array of hard and soft performance measurement methods. Depending on the outsourcing intent, customers may focus their performance measures on cost reductions, services delivered, service improvement, specific projects, new technology, user satisfaction and others. In the majority of cases clients and vendors measured a range of the former, to address both business and user measures. Client B uses service delivery according to contract, step changes performance measure, return on net assets, and other business measures, such as customer responsiveness, output measures such as On Time In Full (did the customer get everything they wanted in good time) as their main measures.

Vendors use a similar array of objective and soft methods, including third party auditing. The Executive Director of Vendor D explained they measure their performance against the SLAs, perform a customer satisfaction survey, undertake an internal quality review of staff and attain an external auditors assessment of specific contracts. Similarly, the Partner from Vendor B, explained they use surveys, reviews and external audits to measure success in contracts.

The subjective measures employed are crucial as they elicit whether the services delivered satisfy the user community. Clients explained that sometimes formal measures are achieved according to agreement, but they do not actually satisfy the users' requirements. It is then a matter of adjusting them accordingly, which in many situations the vendor will not undertake without formally

increasing costs (Corporate IT Advisor, Client G). Vendor A employs in Client D a contract measurement scheme of customer values and expectations, alongside their objective indicators. “So it isn't just a matter of asking the customer are you satisfied or not, we have to understand what his expectation is rather than what his requirement is. Different people have very different expectations from us” (Programme Director, Vendor A).

User satisfaction surveys is the most common soft measure used. Although, extremely difficult to measure, it was found to be an important indicator of whether vendors achieve the users' service requirements (MIS Executive, Client E; IT Coordinator, Client F). Vendors find them fundamental, because “that's what actually is going to affect our reputation. That's what, if someone goes through a reference visit, they are not going to tell them that we achieved all these SLA's they are going to tell them whether we are good or not so good. It's going to be perception on a particular subject” (Executive Director, Vendor D).

4. DISCUSSION

Power arises at least in four stages of an outsourcing venture, i.e. selection of IT functions to be outsourced, vendor selection, contract negotiation, and post-contract management. The survey data gives some insight into pre-commencement areas of conflict, whereas the case-studies revealed four dimensions affirm control in post-contract management. To make sense of the research data, we used the power framework previously discussed as an explanatory tool.

4.1. Selection of IT functions to be outsourced

If we focus on system integration in our framework we will see that the selection of the IT functions and services that organisations decide to outsource are influenced by two factors. Those advocating outsourcing legitimise this practice on the basis that, on the one hand, client organisations will remain in control not only of those processes outsourced, but also of their core competencies and main objectives. On the other hand, outsourcing is depicted as a practice that will represent to the client organisation some reductions in cost and possible flexibility.

Organisations were found to outsource every type of IT function from strategic to commodity highlighting that the agenda driving the deal is not strongly influenced by a concern of loss of control or dependency as initially suspected. The distinction between what is core or not and the establishment of whether outsourcing represents cost reduction or not is not always clear. Therefore, the group selecting the IT functions to outsource are likely to find this process eventuates in internal conflicts and power struggles. Moreover, those organisational members that are either being relegated, transferred or made redundant by outsourcing may try to resist the company's move, by enforcing their power to collectively strike and/or involve their Union.

4.2. Vendor selection

Vendor selection presents another power and political dimension. In fact, particular organisational actors may prefer a specific vendor over others for a number of different reasons. Pettigrew (1972, 1973) illustrated the effects of such choices in his study of organisational politics and the acquisition of innovations, leading in many situations to considerable internal conflicts. Moreover, the selection of the vendor is further influenced by the manoeuvres and tactics employed by those offering IT outsourcing services. The power exercised by external consultants and vendors has been the focus of the study by Bloomfield and Danieli (1995). Suppliers of information technology and related services often tend to influence their clients by linking those services to the prevailing discourses in the organisations. For example, organisations concerned with strategic planning may be interested in buying products or services that will be instrumental to achieve their strategic goals. Thus providers of outsourcing services stress the importance of knowing in depth the rules of meaning and membership and the techniques of production of discipline of the organisations they are serving. There is not much the clients can do to counter this type of power exercised, but to be aware of it. Awareness may be the origin for strategies to counter the power of those wielding personal agendas or offering services that can be dysfunctional for the client organisation.

Another important power element at play in the selection of a vendor is the issue of resource dependency (see Kern & Willcocks, 1996), which implies clients might select their vendors according to their size and resources. According to resource dependency theorists an organisation becomes dependent on another when the latter holds a resource that the former wants (Pfeffer 1981; Pfeffer 1992; Pfeffer and Salancik 1978). By selecting a vendor for whom they represent an important account, clients ensure some control over the suppliers. Our findings reveal that when this is the case, clients obtained a prompt response from vendors. However, the dependency relation works in both directions as the vendor possesses a valuable resource the clients may lack, e.g. IT skills and knowledge. By overlooking this, clients are tempted to believe they hold unilateral power over the vendor(s), when in fact it is bilateral.

4.3. Contract negotiation

Contract negotiations is an adversarial process requiring political sensitivity. It has a twofold effect; on the one hand, it defines the future roles and terms each party needs to achieve, whereas on the other, it is a power testing process. Either side pushes to assure its objectives and expectations, but the vendor is forced to yield at times to secure the contract. Conflict assuredly arises in this negotiation process and thus possibly strains future relations between the two parties. Effects may become visible in post-contract management. The negotiation dilemma corresponds to what Callon (1986) calls the enrolment of an actor in a network of alliances. When such a network is consolidated, it becomes very difficult to break because they develop some degree of

irreversibility (Callon 1991). Once alliances have been operational for a period of time, conflicts are preferably resolved by co-operation rather than by disputes. This may explain why clients and vendors regard the actual discussion of the contract as a sign that their relationship is seriously deteriorating.

4.4. Post-contract management

The management of the post-contract stage implies for the client organisation the domination and discipline of the services offered by the vendor. The dimensions in which this occurs -financial controls, penalty payments, monitoring of services levels, performance measures - are techniques drawn on by clients to exercise power over the vendors. We discuss the implications, in terms of power, of these techniques. Firstly, the control and monitoring techniques based on finances are the most natural for both parties in an outsourcing deal, since the decision of outsourcing and the selection of IT functions is often derived from cost-benefit evaluations. The dual direction of dependency and the strength of the network of alliances between clients and customers are illustrated by the existence of an open book agreement. It is clear that clients and vendors are interdependent since financial troubles encountered by one may seriously damage the other. Client organisations may notice that although penalty payments may look as a valuable resource they are rarely made effective for the same reasons, as contracts are seldom produced during disputes. It thus seems clients may enhance their control over the vendor by establishing an open book agreement, and a comprehensive and transparent pricing policy.

Secondly, the service level agreements (SLA) are relevant not only for monitoring the quality of the services, but also to legitimatise disputes with the vendors. Vendors also draw on SLAs to explain and legitimatise their service obligations. This is why the parties in an outsourcing deal pay so much attention to the definition of the SLAs. In short, SLAs tell the client that they are achieving their primary objective, i.e. to obtain value for money, when they decided to outsource and helps the vendor to legitimatise its actions and pricing policies. Hence not only the definition of the SLAs but also its interpretations becomes a power issue. We deem it a power issue because it clarifies the role of each of the parties and specifies the rationality for the exchange of financial resources.

Finally, even though contracts and SLAs are undoubtedly valuable techniques for clients in their attempts to control vendors, we believe that the most effective technique that clients may have are the performance measures carried out by vendors. Vendors often measure their clients' cost reductions, services delivery, service improvement and user satisfaction. These measures illustrate the relationship between social and system integration as they focus not only on the techniques of production but also on how these have affected the institutional order in organisations. Vendors want to know their impact not only on the productive activities of their customers but the meaning the latter gives to their services. Vendors are concerned about this aspect, as a client's

decision to select a vendor is strongly influenced by their reputation. Clients may see the auditing and customer satisfaction surveys as an opportunity to exercise power over the vendors. We are not by any means suggesting black mailing, but we would like to stress that clients may use the customer satisfaction measures as a legitimate resource in dealing with vendors.

The findings from this paper suggest a number of power dimensions may arise at the various stages, which effectively also have a number of implications for the client companies intending to outsource. The table 7 below summarises our findings and presents some management pointers that may need consideration.

Table 6 about here

5. CONCLUSION

In this paper we attempted to outline the main power issues that arise during the selection of IT functions to be outsourced, to the actual post-contract management in an IT outsourcing venture. For that Clegg's (1989) conceptual power framework was used as an explanatory approach. Unilateral and bilateral power emanates in at least four stages of IT outsourcing, with a number of management implications for organizations.

The issue of power in IT outsourcing points to a management task that needs explicit attention, but more importantly deems awareness. Management practices suggest affirming control and there are a number of ways clients can ensure control. However, companies looking to outsource may wish to address some of the power issues and their implications prior to embarking on the bandwagon to avoid sudden surprises. In general power issues and their effects are part of an uncertainty dimension that cannot be totally predicted. But awareness of possible areas where power may impact helps to diminish the possibility of a catastrophic breakdown as occurred in Sears UK (see Collins, 1997).

Further research needs to be conducted into each individual outsourcing stage to clarify in greater depth the power issues.

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7. REFERENCES

Bloomfield, Brian P. and Ardha 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.

- Callon, Michel (1986) Some elements of a sociology of translation: domestication of the scallops and the fishermen of St Brieuc Bay. In *Power, Action and Belief*, ed. John Law, Sociological Review Monograph 32:196-233. London: Routledge & Kegan Paul.
- Callon, Michel (1991) Techno-economic networks and irreversibility. In *A Sociology of Monsters: Essays on Power, Technology and Domination*, ed. John Law, 38:132-161. London: Routledge.
- Clegg, Stuart R. (1989) Frameworks of power. London: SAGE Publications.
- Collins, T. (1997). Record FM deal hits the rocks. *Computer Weekly*, Reed Publishing: 1,4,6.
- De Looff, L. A. (1997). *Information Systems Outsourcing Decision Making: A Managerial Approach*. Hershey, PA, USA, IDEA Group Publishing.
- Emerson, R. M. (1962). "Power-Dependence Relations." *American Sociological Review* 27(1): 31-41.
- Lacity, M. C. and R. Hirschheim (1993). *Information Systems Outsourcing: Myths, Metaphors and Realities*. Chichester, John Wiley & Sons Ltd.
- Lockwood, David (1964) Social Integration and System Integration. In *Explorations in Social Change*, ed. George K. Zollschan and Walter Hirsch:244-257. London: Routledge & Kegan Paul.
- Loh, L. and N. Venkatraman (1992). "Diffusion of Information Technology Outsourcing: Influence Sources and the Kodak Effect." *Information Systems Research* 4(3): 334-358.
- Kern, T. and L. Willcocks (1996). The Enabling and Determining Environment: Neglected Issues in an IT/IS Outsourcing Strategy. European Conference on Information Systems, Lisbon, Portugal.
- Klepper, R. W. and W. O. Jones (1998). *Outsourcing Information Technology, Systems & Services*. New Jersey, Prentice Hall PTR.
- Miles, M. B. and A. M. Huberman (1994). *Qualitative Data Analysis*, 2nd Ed., California, SAGE Publications Inc.
- Pettigrew, A. M. (1972) Information control as a power resource. *Sociology* 6 (2): 187-204.
- Pettigrew, A. M. (1973) The politics of Organisational Decision Making. London: Tavistock.
- Pfeffer, Jeffrey (1981) *Power in organizations*. Marshfield, Mass: Pitman.
- Pfeffer, Jeffrey (1992) *Managing with Power*. Boston, Massachusetts: Harvard Business School Press.
- Pfeffer, J. and G. R. Salancik (1978) *The External Control of Organizations: A Resource Dependence Perspective*. NY: Harper & Row.
- Silva, Leiser (1997) *Power and politics in the adoption of information systems by organisations: The case of a research centre in Latin America*. Unpublished Ph.D. thesis, London School of Economics.
- Silva, Leiser and James Backhouse (1997) *Becoming Part of the Furniture: The Institutionalisation of Information Systems*. In *Information Systems and Qualitative Research*, ed. Allen S. Lee, Jonathan Liebenau, and Janice I. DeGross: 389-414. London: Chapman & Hall.

Walsham, G. (1995). "The Emergence of Interpretivism in IS Research." *Information Systems Research* **6**(4): 376-394.

Willcocks, L. and G. Fitzgerald (1993). "Market as opportunity? Case Studies in Outsourcing Information Technology and Services." *Journal of Strategic Information Systems* **2**(3): 223-42.