Association for Information Systems AIS Electronic Library (AISeL)

ICIS 1994 Proceedings

International Conference on Information Systems (ICIS)

12-31-1994

Contracts and Partnerships in the Outsourcing of IT

Guy Fitzgerald
University of London

Leslie Willcocks *University of Minnesota*

Follow this and additional works at: http://aisel.aisnet.org/icis1994

Recommended Citation

Fitzgerald, Guy and Willcocks, Leslie, "Contracts and Partnerships in the Outsourcing of IT" (1994). *ICIS 1994 Proceedings*. 17. http://aisel.aisnet.org/icis1994/17

This material is brought to you by the International Conference on Information Systems (ICIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in ICIS 1994 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

CONTRACTS AND PARTNERSHIPS IN THE OUTSOURCING OF IT

Guy Fitzgerald
Birkbeck College
University of London

Leslie Willcocks
Oxford Institute of Information Management
Templeton College
University of Oxford

ABSTRACT

This paper reports on a recent research study concerning the outsourcing of information technology activities in the United Kingdom. The study involved a large survey and a set of detailed case studies based on large and medium sized organizations. In particular the issues of contracts and partnerships are examined, which is identified as one of the key elements in successful outsourcing. The authors show the variety of approaches and perceptions that exist concerning these issues, and conclude that there is much misunderstanding, particularly in relation to partnership. The paper concludes by creating a framework for helping to identify and examine the interrelationship between contractual arrangements, the required degree of contractual definition, and the characteristics of the area being outsourced.

1. INTRODUCTION

In the United Kingdom (UK), the outsourcing of Information Technology (IT) and associated services is a relatively recent but rapidly growing phenomenon. The Computing Services Association suggests that has only developed in the last five years and research by the International Data Corporation (IDC 1991) indicate that the market is expanding at about 20% per annum to a predicted 1995 revenue of £1,013 million. The latest example of this continuing trend is the recent announcement by British Aerospace (BAe) of their agreement to outsource their IT to CSC (Computer Sciences Corporation) in a ten year deal worth £900 million, involving the transfer of over 1,000 IT staff (Computer Weekly, 18/11/93, p. 1). Additionally, most of the public sector IT in the UK is being opened up to market testing. The Public Sector represents a special case in the UK as the growth in outsourcing here is not simply a matter of market forces in operation but is strongly influenced by the UK Government's policies toward the sector. The Government has a policy known as Compulsory Competitive Tendering (CTC) which compels most public sector organizations to test and evaluate up to 80% of their services in the market place. This policy has had a significant impact with many organizations putting IT in the

forefront for CTC. A recent example, and the largest to date, is that of the Inland Revenue (IRS) who in November, 1993, announced that their IT operations would be outsourced to EDS in a £1 billion deal involving the transfer of up to 2,300 staff. The IRS processes 40 million records on companies and individuals, services more than 1,000 local tax offices, held on five different makes of mainframe at sixteen different sites around the UK. The public sector now accounts for more than half of the IT outsourcing market.

Outsourcing research has until recently been mainly based on US studies, for example, Lacity and Hirschheim (1992, 1993) and Loh and Venkatranam (1992a, 1992b, 1992c). There has also been work on the global outsourcing of information systems and processing services (Apte 1990; Apte and Mason 1993) and some theoretical work, among the most recent being that on the outsourcing decision structure and efficient outsourcing relationships (Clark and Zmud 1993; Klepper 1993). A number of detailed case studies have been produced on US corporations (for example, Buck-Lew 1992). Recently we have seen a number of European based case studies, for example Auwers and Deschoolmeester (1993), Griese (1993), Heinzl (1993), and Saaksjarvi (1993).

2. RESEARCH STUDY

In response to the relative lack of outsourcing research in the UK, the authors, sponsored by Business Intelligence Ltd, undertook an empirical study of outsourcing in the UK. The overall aim of the research study was to complement existing work by investigating the outsourcing of IT/IS activities in the United Kingdom. The particular objectives were to identify patterns of outsourcing in terms of resources, decisions and activities outsourced, the reasons for and risks of outsourcing, criteria for success, the difficulties being experienced, and how they are handled. A further objective was to identify where outsourcing has contributed to new forms of organization and new ways of managing those forms. The first part of the study involved a survey of experience based on a detailed postal questionnaire. The questionnaire was devised to establish the quantitative issues but also attempted to investigate a few softer issues of perception concerning success, key issues. and reflections. The questionnaire asked thirty questions in sections concerning company background and IT set-up. outsourcing strategy, costs and benefits, success and failure factors, managing the contract, and outsourcing implications. The questionnaire was eight pages in length and required responses that were predominantly factual information but with some estimates for the future. Some elements required the ticking of relevant boxes, for example, in relation to what was being outsourced; others required respondents to suggest answers without any prompting, for example, when eliciting success factors. The questionnaire was piloted on a small group of senior managers and revised as a result of the pilot. It was then dispatched to over 1,000 senior managers/directors, the majority being IT managers/directors, in both medium and large sized organizations in the UK (and a small proportion to European countries as well). The survey elicited a response of 16.2%.

The second aspect of the study comprised a series of semistructured interviews with a range of participants involved in outsourcing in organizations, including IT managers, contract managers, general managers, and user managers. Interviews were scheduled for one hour but lasted anywhere up to three hours; all interviews were recorded with the participants agreement (except one) and were transcribed for subsequent analysis. Analysis consisted of grouping together responses into subject categories and then classifying them into major areas of agreement and commonality and areas of disagreement. A more subjective analysis of why this should be and what other factors might explain situations and disagreements was then conducted. The findings from the questionnaires helped shape the analysis of the interview data. The interviews formed the basis of about twenty-five case studies which were backed up by the

collection and analysis of relevant documentation, including copies of outsourcing contracts. Finally, the study added a number of further interviews with other major players in the outsourcing arena, including outsourcing vendors and legal experts.

This paper does not discuss the overall results and findings of the study, these are reported elsewhere (Fitzgerald and Willcocks 1994), but focuses on a specific issue.

We broadly define outsourcing as the commissioning of a third party (or a number of third parties) to manage a client organization's IT assets, people and/or activities (or part thereof) to required results. Managing to required results means that the client specifies the end product or service level that is required rather than the process of achieving that result. The focus is thus upon the vendor providing the management and resources to achieve the desired results under their control. Thus a key distinction can be made between contracts that specify a service and result which the market is to provide and manage (outsourcing) and contracts which call for the market to provide resources to be deployed under the buyer's management and control. Elsewhere (Feeny et al. 1993) we have described the latter as "insourcing" contracts. For example, this means that the buying in of contract programmers or consultants to work on a project under the vendors control would be classed as insourcing, but the contracting of the development of some software (to a particular specification) to a vendor that manages and controls that development would be classified as outsourcing.

3. CONTRACTS AND OUTSOURCING RELATIONSHIPS

A clear finding from the study was the importance that was attached to the relationship between client and vendor in outsourcing. A number of different views emerged concerning relationships. These ranged from the view that outsourcing was a simple transactional relationship through to full partnership based relations. A discussion of outsourcing relationships cannot be divorced from the important topic of contracts. Outsourcing contracts are perhaps more complicated than some other business contracts as many of them also involve the transfer (or sale) of assets, such as hardware, software, buildings, sites, people, etc., to the vendor. In such cases, the contract can involve significant payments from the vendor company to the client. This may be an up-front payment by the vendor to the client and then an ongoing payment from the client to the vendor for provision of services over the period of the contract, or the initial payment may include the cost of the services over the period.

We identified six different types of contract as follows:

- · Time and materials
- Fixed fee
- · Fixed fee plus variable element
- · Cost plus management fee
- Fee plus incentive scheme
- · Share of risk and reward

These categories are not mutually exclusive and contracts are often in practice combinations of the above types.

The length of contracts based on the survey (covering 226 contracts) reveals that organizations, as of 1993, are not going in for long-term contracts. The vast majority (95%) are of less than five years in duration and 49% are of less than two years. Organizations in general appear reluctant to enter into the more highly publicized long-term relationships such as those seen in the case of Eastman Kodak and IBM in the US or BAe and CSC in the UK.

Outsourcing is also revealed by the survey as a dynamic process. Against general projections of a rising trend in outsourcing, nearly a third of organizations who have experienced outsourcing have in the past five years canceled contracts as opposed to straightforwardly renewing them. In one half of these cases, the contract was subsequently re-negotiated, but a further 28% of the cases involved a change of vendor, while the remaining 22% saw the IT work brought back in-house.

The survey identified the type of relationship that clients are adopting with vendors: 28% described this as a tightly defined service contract, 19% as a short flexible service contract, 36% as a partnership based on a formal contract, 10% as a flexible partnership based on trust, and finally just 7% as a strategic alliance. Evidence was also provided that suggests that there is a move away from partnership based relationships toward more contractually based relationships, e.g., flexible partnerships based on trust have declined from 19% two years ago to 10%.

Despite this trend toward more contractually based relationships, there is strong evidence that the contracts, and their definition, could still be improved. Legal experts on outsourcing suggest that as a minimum contracts should include four elements:

- specified service level agreement
- penalty clauses
- specific arrangements for adapting to changing circumstances in the future
- · early termination provisions

However, we found that only 26% of outsourcing organizations actually provide all four contractual items. Some 82% of organizations operate service level agreements, but then there is a fall-off with 53% including penalties and only 49% including early termination provisions. A rather surprising 78% do not include clauses in their contracts on arrangements for adapting to changing circumstances in the future, yet nearly 80% of all organizations admit to experiencing some or more difficulty in anticipating future business directions when outsourcing.

This trend to move toward a more tightly defined contract was also evident from the case research. For example in one case it took some eighteen months of vigorous contract management finally to get the performance measures right and end disputes on service. The manager described the situation as follows:

There was a contract, a legal one with our signatures on it, with various sections in it, but really it did not define what the service was going to be. And worse still when we invoked penalty clauses, the section in the contract that talked about the penalty clauses was so ambiguously written that we had a...fight for nearly 6 months over it...[but it was] the fact that they [the vendor] didn't just walk in on the following Monday and say "we screwed up last week, we were down for three days, and according to the contract this is what you are owed." I think that all of that proved to me at that stage anyway, that we needed to get out of this partnership issue and back into a proper business contractual relationship and that is what really set us off, I think, down the right road.

Thus the response of many organizations to problems with the vendors is to try and more rigorously define and specify the contract. For many, this has now become the established principle in the outsourcing business as a way of overcoming problems and has led to an increasing focus on contracts and the involvement of both internal and external legal expertise in contract negotiation. Another way that client companies are overcoming problems with vendors is to enter only short term contracts, and as we saw above this also appears an important trend.

However there is another important group of organizations which continue to advocate the establishment of partnership relationships between client and vendor. It is argued that the partnership becomes the basis of the relationship and so overcomes the nasty legal contractual wrangles associated with contracts. It means that anything not specifically mentioned in a contract will not cause problems, it means

that disputes will be discussed and resolved in a spirit of partnership, it means that the contract does not have to be a watertight document, and it means that a degree of flexibility is achieved.

There's got to be flexibility, and that comes back to trust. You can't put everything in a contract, you can't tie everything down. In fact one shouldn't aim to put everything in a contract because I wouldn't employ someone I didn't trust.

Partnership was certainly a frequently used word for describing the relationship between vendor and client and partnership is clearly a desired feature that is often looked for by client companies. This notion of partnership was often expressed as cultural understanding or cultural fit between client and vendor. This notion was not always very well explained but it sometimes appeared to manifest itself as a concern that the vendor should treat the staff to be transferred well.

We never use the word outsourcing here, we always use the word partnership, but a lot of that sensitivity is because we are transferring 100 people. We felt the key criteria was the culture and philosophy of business had to be compatible.

We were looking for partnership, for an employing organization that would take the people across and treat them fairly and give them career plans, all the training they needed, and make them into full blown employees of that business.

Another interpretation of the term partnership was the give and take that this implied, often expressed as not having to debate every issue that arose. The hope was that the vendor would just get on and do whatever was necessary and would not say that this was not in the contract and we want to be paid extra every couple of weeks. Only when there were major mismatches would extra payment be negotiated. On the other side, this would mean that if something that was supposed to be provided by the vendor was not, or there was an element of slippage, this would be overlooked, by the client, or if not overlooked it would not become a big issue and trigger penalties and damages. This give and take element was closely related to the perception that this was best achieved if the vendor was allowed to make a "fair" profit.

This was initially a rather surprising finding as it might be expected that the client would try and negotiate for the lowest possible deal. We identified two main reasons that client companies like the vendor to make a profit on the

deal. First, client companies were clearly very worried by the possibility of their vendor running into financial difficulties and failing and it is seen as counter-productive for the contract to help drive them into trouble. The second reason expressed for not driving too hard a bargain on the contract price was the effect it had on the behavior of the vendor. It was perceived that the vendor would attempt to overcome their "losses" on the initial contract by seeking every opportunity to contest the detail of what was, and what was not, included in the contract and to try and bill for every possible addition. This was certainly borne out in the research:

They had committed themselves to a fixed price and they were being stretched for that. So they became very inflexible and started over charging where the opportunity presented itself, for example on PCs....They wanted to cross charge £10,000 for a PC, and people rightly said I can go out and buy it for much less.

So the perceived wisdom was to agree a "fair and reasonable" deal for both sides.

In summary, an outsourcing partnership was usually seen as embodying the following:

- a non-reliance on the contract as the basis of the relationship
- a mutual desire to work things out and a give and take philosophy
- a fair profit for the vendor, so that they do not seek to resort to what may be an inadequate contract
- the ability to work together in personal relationship terms
- the existence of a cultural fit between the client and vendor organizations
- · good treatment of the client's transferred staff
- a perception that the vendor understands the client's business and problems

This type of partnership was often stated as an ideal and some client companies felt they had actually achieved this.

3.1 Business Based Partnership

There is, however, an alternative view of partnership. This view dismisses the viability of this give and take type of partnership in outsourcing, describing it as naiveté on the part of the client. It is argued that it is not really a business partnership at all but a cozy working relationship which relies on an overgenerous profit for the vendor to

make it work. That it is unlikely to survive severe problems and will only work when times are good; it is unlikely to survive when the vendor service declines in the later stages of the duration of the contract or when problems are encountered. Further, this use of the term partnership is not the definition that is usually used in business. In a business sense, partnership is not primarily about a cozy give and take relationship but more about the sharing of risks and rewards, and mutual incentives for success, which most of the above uses of the term partnership do not embody.

For some organizations, partnership was indeed something more akin to the business definition of partnership, where there was a more up-front, well defined, element of shared risk and reward. Some have implemented schemes that reflect some of the concepts of a business partnership, in this case an incentive based contract:

Basically they [the vendor] are rewarded on financial targets, if they beat them we share the rewards 50:50....There are also quality targets, measured through customer satisfaction surveys, if it reaches particular points this triggers additional reward for them, and again if it falls below those points it gives a reduction in the base margin. They have a very low base margin, the majority of their remuneration is made up on the risk reward calculation.

Sometimes even policy making was shared with the vendor:

We manage policy through a particular board which has representatives from each of the partners on it. We retain the right to set IT policy but generally will formulate it in collaboration with our partners through this particular board, which is valuable; you can get some good external views on what's sensible to consider achieving and what isn't sensible.

For a very few, the concept of partnership extended beyond incentives and embraced full risk reward arrangements and joint participation in potential business making ventures:

We have got a lot of data models that we built of our business, and which they [the vendor] confirm are quite good so they are putting together a marketing package to sell them.

They [the vendors] are [currently] trying to sell something to a Council, they know we have got spare space in our warehouse offices, can they look at it because they might be able to let it for us. And I thought well that's good because that just shows they have got to know our business, they have understood the distribution center, and if I pick up a hundred grand a year like that then that partnership has yielded something.

3.2 Contractual and Relationship Framework

There seems to be a number of somewhat conflicting trends in outsourcing arrangements and a significant degree of misunderstanding. First, as we have seen, the concept of partnership is not well understood; second, we believe notions of partnership cannot be divorced from that of the type of contract; and third, that the type of contract depends on the type of outsourcing under consideration.

In order to facilitate and explore these issues, we have developed a framework that is provided in Figure 1. Here we plot the degree of contractual definition along the bottom on a continuum between loose and tight. A loose contract is one where only the fundamental elements of the service requirements are outlined in the contract and where other elements of the contract such as what happens when circumstances change are absent or not fully defined. A tight contract is the opposite where all aspects of the service level required and the other elements are very specifically defined in considerable detail. Somewhere in the middle are contracts which are relatively well defined but also address aspects concerned with flexibility and changing business and technical circumstances.

The vertical dimension in the figure is the type of outsourcing under consideration and we represent this as the degree to which the requirements of the client can be fully defined and specified. This includes the initial definition, requirements over the duration of the contract, and the requirements on termination of the contract. This is also expressed as a continuum between requirements that are basically fully known and understood and those that are substantially unknown and unknowable. We characterize this in the figure as certainty/uncertainty. Typical of those that are known are the transaction processing/mainframe type of outsourcing that many companies have entered into. The client companies have a wealth of experience over a number of years of what is required and know for the duration of the contract how and in what ways these are likely to change. This does not always mean that the specification of the requirements are an easy task, they may need to be worked at in great detail, but in principle, with the necessary effort, they are definable.

Area of Concern

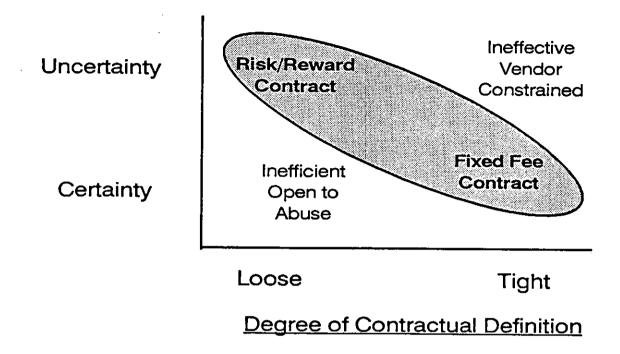


Figure 1. Type of Contract/Relationship

The other end of the continuum is the type of outsourcing that is difficult to specify because of the range of uncertainties both current and future. Typical of this type might be the move to client-server architectures, or open systems, the design and development of new business systems and functions, or business process redesign activities, etc. That is a high degree of technical or business uncertainty, or both. Elsewhere we have argued that it is unwise and risky to outsource in such situations (Feeny, et al 1993). However, it is clear that nevertheless some organizations do outsource in just such circumstances. Where they do, it is also clear that standard fixed fee type contractual arrangements are not relevant because, by definition, the full requirements cannot be specified. Such circumstances are best dealt with via a contractual arrangement that shares the risks and rewards arising from the uncertainty. There exist various intermediate positions of lesser or greater uncertainty that might involve the variety of incentive type contractual arrangements discussed earlier in the section on Contract Type.

The purpose of the diagram is to illustrate that certain positions in the diagram are more likely to lead to successful and sustainable outsourcing, while other positions are more likely to be situations of risk or inefficiency. For

example, it is argued that situations of relative certainty should be accompanied by a very tightly defined contract for best results. The tight specification means that the contract is relatively easily and accurately priceable and that vendors can be compared. Such situations are best organized via a fixed fee type of contract and the result is likely to be a keen and realistic contract price. To be in a loose contract situation exposes the client organization to unnecessary risk, i.e., where the vendor can charge extras for anything not fully specified in the contract. For the vendor not to be tempted to do this they would have to feel that they were making enough money from the contract not to wish to jeopardize the situation. This is likely to mean that the client is not getting the best deal that is potentially obtainable.

In conditions of uncertainty, a tight contract is very difficult to achieve and indeed is likely to be counter-productive. A tight contract, in uncertain situations, implies that various assumptions about the future are being made which are unlikely to be true. In extreme situations of uncertainty, there are likely to be fundamental and unpredictable changes, perhaps even quantum change, rather than incremental developments. The essence of the situation is the need for flexibility and a tight contract may constrain the

vendor from reacting in the way that the client may wish; for example, if transaction volumes fall in one area and increase in another the vendor may not be able to react and devote resources to the developing area because of the stipulations of the contract. Nevertheless, the client cannot just leave the situation open and hope that the vendor will perform in the right way simply on trust. It would be too risky. Therefore, the risk must be minimized by the use of the sharing of risk/reward type of contractual arrangement but with a looser contract definition, in terms of service levels and penalty clauses, etc., to ensure flexibility. The incentive for the vendor to do what is best for the client is for them to share the rewards resulting from the combined vendor/client performance (or to minimize the losses). almost irrespective of the original contract definition. This is perhaps closer to the normal business definition of partnership as discussed above.

The diagram attempts to illustrate that a more sophisticated view of outsourcing relationships is required than the simplistic views that abound in the outsourcing world. The notion that the way to achieve success is for client companies to move to tighter and tighter contracts is correct only in certain situations, i.e., in situations of relative certainty and stability in both the technology and the business of the area being outsourced. There is some evidence that much outsourcing is of this type. For example, a recent study (Mitchell 1994) indicates that in terms of technological maturity, the great majority of outsourcing was classified as medium or high maturity, where medium was three plus years experience and high six plus. This broadly fits with the notion that organizations should not outsource a problem and yet our study suggests that, for whatever reason, organizations sometimes do. The Mitchell study also indicated that the situation is changing and that the trend is for organizations to increasingly be outsourcing technology areas which were classified as low in technological maturity. In situations of increasing uncertainty, if companies insist on outsourcing, they should not strive for tighter and tighter contractual and service level definitions, as this is unrealistic, but to minimize the risks they should construct their contracts in a way that addresses uncertainty. This means that the contract should have some built-in flexibility, which might imply a basic fee plus incentive scheme or, in situations of high uncertainty, a full risk/reward sharing contract.

This also has implications for partnership. Outsourcing in the lower right hand side of the diagram is fundamentally a straight, well defined, purchase arrangement between buyer and service provider. This can and should be delivered without any recourse to notions of partnership. That is not to say that a good working relationship will not develop, hopefully it will, but the essence of the arrangement is specified in the contract. Outsourcing in the top left side of the diagram is not a straightforward transaction and requires the building of partnership relations in order for it to be successful. However, the partnership is not based on comfort and over-payment of the vendor but on the sharing of mutually generated rewards, the framework for which is specified in the contract.

4. CONCLUSION

This paper reports on a recent research study concerning the outsourcing of information technology activities in the United Kingdom. The focus of this paper is on the relationship between client and vendor organizations. In particular, the issues of contracts and partnerships are examined. The authors show the variety of approaches and perceptions that exist concerning these issues and conclude that there is much misunderstanding, particularly in relation to partnership. A framework for helping to identify and examine the interrelationship between contractual arrangements, the required degree of contractual definition, and the characteristics of the area being outsourced is developed. This framework is then used to suggest that there are positions which are comfortable and positions that are likely to lead to problems. In conclusion, the arguments imply that practitioners need to give more serious thought to these issues when entering into outsourcing deals, particularly those concerning partnership. Further research is clearly needed in many areas concerning outsourcing; it is a relatively new activity and is rapidly developing. Specifically, further research is needed to verify the above propositions, first to study the relatively few full risk/reward sharing contracts that exist and second to study outsourcing relationships over time. Almost all the research in the area, including this study, are snapshot studies taken at a particular time. Ideally we need some longitudinal research that attempts to track outsourcing contracts as they evolve and mature.

5. REFERENCES

Apte, U. "Global Outsourcing of Information Systems and Processing Services." *The Information Society*, Volume 7, 1990, pp. 287-303.

Apte, U., and Mason, R. "Global Disaggregation of Information Intensive Services." Paper at the Outsourcing of Information Systems Services Conference, University of Twente, The Netherlands, May 20-22, 1993.

Auwers, T., and Deschoolmeester, D. "The Dynamics of an Outsourcing Relationship: A Case in the Belgian Food Industry." Paper at the Outsourcing of Information Systems Services Conference, University of Twente, The Netherlands, May 20-22, 1993.

Buck-Lew, M. "To Outsource Or Not?" International Journal of Information Management, Volume 12, 1992, pp. 3-20.

Clark, T., and Zmud, R. "The Outsourcing Decision Structure: A Dynamic Modelling Approach." Paper at the Outsourcing of Information Systems Services Conference, University of Twente, The Netherlands, May 20-22, 1993.

Feeny, D.; Willcocks, L.; Rands, T.; and Fitzgerald, G. "Strategies for IT Management: When Outsourcing Equals Rightsourcing." In S. Rock (Editor), *Directors Guide to Outsourcing*. London: Institute of Directors/IBM, 1993.

Fitzgerald, G., and Willcocks L. Information Technology Outsourcing Practice: A UK Survey. London: Business Intelligence Ltd., 1994.

Griese, J. "Outsourcing of Information Systems Services in Switzerland: A Status Report." Paper at the Outsourcing of Information Systems Services Conference, University of Twente, The Netherlands, May 20-22, 1993.

Heinzl, A. "Outsourcing the Information Systems Function Within the Company: An Empirical Survey." Paper at the Outsourcing of Information Systems Services Conference, University of Twente, The Netherlands, May 20-22, 1993.

International Data Corporation. The Impact of Facilities Management on the IT Market. London: International Data Corporation, 1991.

Klepper, R. "Efficient Outsourcing Relationships." Paper at the Outsourcing of Information Systems Services Conference, University of Twente, The Netherlands, May 20-22, 1993.

Lacity, M., and Hirschheim, R. Information Systems Outsourcing. Chichester, England: Wiley, 1993.

Lacity, M., and Hirschheim, R. "The Information Systems Outsourcing Bandwagon: Look Before You Leap." Paper at the OXIIM/PA Conference, Templeton College, Oxford, 1993.

Loh, L., and Venkatraman, N. "Determinants of Information Technology Outsourcing: A Cross Sectional Analysis." *Journal of Management Information Systems*, Volume 9, Number 1, 1992a, pp. 7-24.

Loh, L., and Venkatraman, N. "Diffusion of Information Technology Outsourcing: Influence Sources and the Kodak Effect." CISR Working Paper No. 245, Massachusetts Institute of Technology, October 1992b.

Loh, L., and Venkatranam, N. "Stock Market Reactions to Information Technology Outsourcing: An Event Study." Working Paper No. 3499-92BPS, Massachusetts Institute of Technology, 1992c.

Mitchell, V. "IT Outsourcing: The Changing Outlook." IDC and Warwick Business School, April 1994, pp. 1-239.

Saaksjarvi, M. "Outsourcing of Information Systems: Matching Organizational Forms and Organizational Roles." Paper at the Outsourcing of Information Systems Services Conference, University of Twente, The Netherlands, May 20-22, 1993.