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INFLUENCES ON OUTSOURCING AND OUTCOMES: INSIGHTS FROM THE TELECOMMUNICATIONS INDUSTRY

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ABSTRACT

This paper presents findings from an analysis of the experiences of three UK telecommunications companies that have embarked upon extensive outsourcing. Transaction cost economics and the resource-based view were used to derive a theoretical framework to determine the key influences on the outsourcing process and the outsourcing outcomes in the three case companies. The findings have shown that those companies that developed collaborative relationships with their suppliers achieved higher levels of success with outsourcing. The findings challenge some of the prescriptions of transaction cost economics in relation to outsourcing, particularly in the area of inter-organisational collaboration. The findings have also challenged the value of the core/non-core logic as a basis for outsourcing. Furthermore, the research has identified the influence of political motivations on outsourcing as an important area for further research.

Keywords: outsourcing, resource-based view, transaction cost economics, core competence, telecommunications.

INTRODUCTION

The drive for greater efficiencies and cost reductions has forced many organisations to increasingly specialize in a limited number of key areas. This has led organisations to outsource activities traditionally carried out in-house. Outsourcing has moved on from focusing primarily on the peripheral activities of the business such as cleaning, catering and security, to encompass more critical areas of the business such as design, manufacture, marketing, distribution and information systems. Kakabadse and Kakabadse (2002) have found that both US and European organisations consider outsourcing as a critical element of their organisational strategy. Indeed, there is evidence to suggest that well-defined

outsourcing strategies can enhance the overall strategy of the organisation (McIvor, 2005; Feeny et al., 2005). Outsourcing is regarded as a powerful vehicle to reduce costs and improve performance. For example, Quinn (1999) has argued that specialists in supply markets can develop greater knowledge depth, invest more in software and training systems, be more efficient, and therefore offer higher salaries and attract more highly trained people than all but a few integrated companies. The rapid growth in the development of supply markets for product and service functions has also precipitated the trend towards increased outsourcing across a range of industries including automotive, computer assembly, financial services, airlines and entertainment (Gottfredson et al., 2005).

One such industry that has experienced extensive outsourcing has been telecommunications. The research in this paper focuses on the UK telecommunications industry. The telecommunications industry was chosen for a number of reasons. Many of the studies of outsourcing in the telecommunications industry have focused primarily on the motives for outsourcing (Berggren and Bengtsson, 2004; Davies, 2004; McIvor, 2003; Sturgeon and Lee, 2001). These studies have failed to provide an in-depth understanding of how outsourcing is carried out and also the outcomes associated with outsourcing. Furthermore, much of the literature on outsourcing has focused on the automotive industry (Sako, 2003; Corswant and Fredriksson, 2002; Collins et al., 1997). However, the telecommunications industry is characterised by more modular product architectures and shorter product life-cycles, which has led organizations to increasingly specialize in a limited number of key areas and embark upon a greater level of outsourcing than that of other industries (Sturgeon, 2002). Therefore, there is a need for research to enhance our understanding of outsourcing in the telecommunications industry. In this paper, we determine the key influences on outsourcing by analysing the experiences of three companies in the UK telecommunications industry, which involves considering how organisations assess their capabilities, identifying influences

on the supply relationship and characteristics of successful outsourcing programmes. As part of this analysis the following research questions are answered:

- What are the key influences on outsourcing programmes?
- How is outsourcing carried out?
- Do successful outsourcing programmes have common characteristics?

A four-stage framework developed from integrating variables from transaction cost economics (TCE) and the resource-based view (RBV) is used to undertake this analysis. TCE and the RBV have been extremely influential in the study of outsourcing. Although they are often treated as independent approaches, there is an increasing body of literature supporting the need for both perspectives to understand the complexities of outsourcing (Holcomb and Hitt, 2007; Hoetker, 2005; McNally and Griffin, 2004; Madhok, 2002; Combs and Ketchen, 1999; Poppo and Zenger, 1998). TCE focuses primarily on the role of efficient governance – through transaction analysis – in determining the boundary of the firm (Bahli and Rivard, 2005; Kern et al. 2002; Barthelemy, 2001), whilst the RBV focuses on the search for competitive advantage – through analysing organisational capabilities (Barney, 1991). Therefore, superior capabilities in activities relative to competitors would explain why these activities should be performed internally. In effect, TCE theory is focusing primarily on governance skills whilst the RBV focuses primarily on production skills. Although these two theories are focusing on different issues, practitioners in the telecommunications industry are increasingly considering organizational capabilities as they specialize in a limited number of core areas, along with the potential for opportunism from suppliers associated with greater levels of outsourcing (Berggren and Bengtsson, 2004; Sturgeon, 2002).

The findings from the research reveal that successful outsourcing programmes had less to with rigorous assessments of both organizational capabilities and criticality of activities to the firms, and more to do with building mutually beneficial relationships with suppliers. Rather than adopting a short-term perspective and being primarily motivated by the search for short-term cost reductions, the findings emphasize that outsourcing can be used to cultivate and nurture linkages across internal and external boundaries to support the competitive position of the organisation. The findings in the research challenge some of the prescriptions of transaction cost economics on outsourcing. In relation to inter-organisational collaboration the findings revealed that the successful outsourcing programmes followed more closely the logic of the resource-base view than transaction cost economics. Furthermore, the findings have identified the relationship between theories based on economic rationality such as the RBV and TCE and political influences as an important area for further research.

Transaction Cost Economics

The conceptual basis for outsourcing is contained within Williamson's theory of transaction cost economics (1975). Transaction cost economics has emerged as a common framework for understanding why firms exist and how firm boundaries are determined. In TCE the unit of analysis is the discrete transaction and the properties of the transaction determine what constitute the most efficient governance structure - market, hierarchy or a hybrid (for example alliances) (Williamson, 1991). The primary factors producing transactional difficulties include bounded rationality, small numbers bargaining, information impactedness, and opportunism. These transaction difficulties and associated costs increase when transactions are characterised by asset specificity, uncertainty and infrequency (Williamson, 1985). The presence of high asset specific investments can lead to contracting problems as the contracting parties need to safeguard specific investments against the threat of

opportunism. Williamson argues that the potential or actual opportunism is the major element of transaction costs involved when monitoring and enforcing the contract. When asset specificity and uncertainty is low, and transactions are relatively frequent, transactions will be governed by markets. High asset specificity and uncertainty lead to transactional difficulties such as supplier opportunism, with the transaction held internally within the firm – hierarchical governance. Medium levels of asset specificity lead to bilateral relations in the form of co-operative alliances between the organisations – intermediate governance.

The Resourced-based View

Resource-based theorists view the firm as a unique bundle of assets and resources that if employed in distinctive ways can create competitive advantage (Barney, 1991; Peteraf, 1993). The resource-based view emphasises resources internal to the firm as the principal driver of firm profitability and strategic advantage (Barney, 1991; Conner, 1991). In the resource-based view, the unit of analysis is the attributes of the resource. According to Barney (1991), a resource with the potential to create competitive advantage must possess a number of attributes including *value*, *rarity*, *imitability* and *organisation*. Resources and capabilities are considered valuable if they allow an organisation to exploit opportunities and counter threats in the business environment. The rarity criterion is related to the number of competitors that possess a valuable resource. Clearly, where a number of competitors possess a valuable resource then it is unlikely to be a source of competitive advantage. A valuable resource that is unique amongst both current and potential competitors is likely to be a source of competitive advantage and should be held inside the organisation. The imitability criterion is concerned with considering the ease with which competitors can replicate a valuable and rare resource possessed by an organisation. In effect, analysing the imitability criterion involves determining the sustainability of the competitive advantage in the resource.

Finally, Barney (1991) argues that a firm must be organised to exploit its resources and capabilities.

The RBV is important to the study of outsourcing, as superior performance achieved in organisational activities relative to competitors would explain why such activities are internalised within the organisation (Gainey and Klaas, 2003; Roy and Aubert, 2002). Furthermore, the core competence concept developed by Hamel and Prahalad (1994) – which has evolved from the RBV - has been extremely influential in outsourcing practice with the distinction between core and non-core business firmly established in the lexicon of many practitioners (Gottfredson et al., 2005; Momme and Hvolby, 2002; Insinga and Werle, 2000; Quinn, 1999). A major concern of the resource-based view is how an organisation's capabilities develop and affect its competitive position and performance. Proponents of the resource-based view argue that heterogeneity in an organisation's knowledge-based resources and capabilities explain differences in performance and the sustainability of a competitive advantage (Barney, 1991; Teece et al., 1997).

Employing the logic of the resource-based view, Langlois and Robertson (1995) argue that firm boundaries can be determined by assessing internal capabilities with the external capabilities of competitors. This view is based on the concept of dynamic transaction costs, which Langlois and Robertson (1995) argue 'are the costs of persuading, negotiating, co-ordinating and teaching outside suppliers.' This concept is important in the context of underdeveloped capabilities in the supply market. In such a supply market the costs of persuading, negotiating, co-ordinating and teaching external suppliers can be very high, due to the lack of supplier capability. Where the supply market lacks the necessary capabilities, the firm has to depend upon its own internal capabilities. However, as the supply market

becomes more developed, suppliers will offer enhanced capabilities, which will reduce the costs of persuading, negotiating, co-ordinating and teaching suppliers and in turn lead to outsourcing.

The Relationship between the Resource-based View and Transaction Cost Economics

Some of the proponents of the resource-based view have argued that it is more appropriate in explaining the boundary of the firm than transaction cost economics. For example, in Conner's critique (1991) of transaction cost economics, she explained that transaction cost economics emphasised the existence of firms as a way of minimising the opportunistic potential that arise when asset-specific investments are made. Therefore, she argued that transaction cost economics viewed the firm as an avoider of negative opportunism, while the resource-based theory viewed the firm as a bundle of valuable strategic resources inside the firm that create competitive advantage. Reve (1990) has also proposed a resource-based critique of transaction cost economics. In Reve's approach firms have unique resources (core competences and skills) that they must use responsively and with adaptability to meet the challenges of an ever-changing environment. Reve postulates that assets of high specificity, which are necessary to attain the firm's strategic goals, represent the strategic core of the firm and should reside inside the firm. Using transaction cost analysis Reve (1990), argues that core skills or competences can be of four types including site specificity, physical asset specificity, human asset specificity and dedicated assets. A firm must defend these skills if it is to sustain its competitive advantage. Complementary skills can be dealt with through strategic alliances or co-operative relationships if they are of medium asset specificity with skills of low asset specificity being left to the market.

In some instances the prescriptions of TCE and the RBV in boundary choice can be contradictory. Essentially, each of these theories is addressing two different issues (1) why firms exist (TCE) and (2) why firms differ in performance (RBV). TCE focuses primarily on transaction costs and assumes no interaction between transaction and production costs. Some have argued that the assumptions of TCE ignore other important influences such as a firm's existing portfolio of transactions and existing capabilities. Mota and Castro (2004) found in a study of the Portuguese moulds industry that two successful firms, with similar starting points, often serving the same customers and following parallel technology paths adopted different approaches to defining their firm boundaries. Furthermore, if one compares sourcing decisions across a number of industries such as automotive, even though there may be similar transactional attributes associated with each firm, different firms chose different sourcing decisions over extended periods of time (Leiblein and Miller, 2003). Therefore, the choice of sourcing decision can be based on both the attributes of the transaction and the existing capabilities of the firm.

A further criticism of TCE has been the premise that all governance structures arise principally to reduce the potential for opportunism. According to the TCE approach, if the level of transaction-specific investment is high then the organisation should employ hierarchical governance. This will involve either developing the capability internally or acquiring an organisation that possesses the required capability. However, it may be extremely costly for an organisation to pursue either of these options. Therefore, the decision does not depend solely on the level of transaction specific investment but also on the costs of internal development or acquisition. In the case of significant transaction costs, the organisation may have no choice other than to pursue other forms of governance even if the threat of opportunism exists (Barney, 1999; Conner and Prahalad, 1996).

The prescriptions of each theoretical standpoint can also differ in relation to inter-organisational collaboration. From the resource-based perspective, collaboration allows an organisation to access complementary capabilities in a situation where there are resource constraints. Organisations with resource constraints may collaborate regardless of the presence of high asset specificity, thus indicating that accessing resources is a more prominent concern for a company than the attributes of the transaction in the context of collaboration. Doz and Prahalad (1991) argue that transaction cost analysis is limited because it focuses on single transactions as the unit of analysis. The emergence of collaborative arrangements in many industries involves repeated transactions between the same partners. TCE fails to recognise that in many industries organisations are involved in complex and collaborative relationships that involve high levels of asset specificity as well as uncertainty and opportunism. In many cases, complex contracts alone cannot guard against the risks associated with uncertainty and opportunism. Relational mechanisms such as trust, joint problem-solving, bi-directional and frequent communication are regarded as substitutes for complex, explicit contracts and hierarchical governance (Adler, 2001; Gadde and Snehota, 2000; Bensaou, 1999; Lorenzoni and Lipparini, 1999; Dyer and Singh, 1998; Poppo and Zenger, 1998; Uzzi, 1997; Sako, 1992).

Proponents of this literature – sometimes referred to as the relational view – propose that it is a means of understanding how firms can gain and sustain competitive advantage (Dyer and Singh, 1998). The relational view has evolved from the limitations of TCE in relation to potential governance structures and as an extension to the RBV. The central premise of the TCE perspective is that collaboration should be employed to minimise the cost of governing the activity (Madhok, 2002). Therefore, organisations can be confronted with conflicting prescriptions. Resource constraints may direct an organisation towards collaboration in a

situation where collaboration is not an efficient response to the exchange conditions (Combs and Ketchen, 1999).

So far, the discussion has treated TCE and the RBV as independent approaches to boundary choice. However, there is a growing body of literature arguing that TCE and RBV are complementary – which is based on the recognition that each theoretical perspective alone cannot fully explain boundary choice (Madhok, 2002; Arnold, 2000; Poppo and Zenger, 1998). In some instances, the prescriptions offered by each theoretical standpoint can be complementary. For example, in a case where an organisation has the resource required to develop a difficult-to-imitate capability and the potential for opportunism is high, the activity should be internalised. The complementary nature of each theoretical standpoint is based on the premise that specific assets and distinctive capabilities share a similar characteristic – they are difficult to trade or imitate (Peteraf, 1993). Furthermore, some have argued that neither theoretical perspective can fully explain collaboration and both perspectives are required (Gray and Wood, 1991). TCE focuses primarily on the role of efficient governance – through transaction analysis – in explaining firms as institutions for organising economic activity, whilst the RBV focuses on the search for competitive advantage – through resource analysis. In effect, TCE is focusing primarily on governance skills whilst the RBV focuses primarily on production skills. Furthermore, in practice outsourcing is being influenced by both capability considerations and TCE variables such as asset specificity (McNally and Griffin, 2004; Madhok, 2002).

Jacobides and Winter (2005) have also made an important contribution in exploring the complementary relationship between TCE and the RBV. They have developed a theoretical framework for explaining how capabilities co-evolve with transaction costs to provide a

number of choices available to a firm in an industry. In particular, they have argued that understanding the relationship between capabilities and transaction costs involves complementing the analysis at the firm level with a 'systemic' view, which takes into account all the participants in the industry. For example, they have proposed a dynamic view of the changing boundaries of the firm, in which the choices that firms make about boundaries are influenced by the evolution of the industry context. They have further argued that there are four evolutionary mechanisms, which explain both how capabilities affect vertical scope and how vertical scope affects capability. These mechanisms include: (1) the selection process, driven by capability differences; (2) transactions costs are changed as firms reshape the transaction environment in order to increase profit and market share; (3) changes in the scope of the organisation also affect the process of capability development; and (4) changes in the capability development process reshape the capability pool in the industry, thus affecting the position of companies in the industry.

Prior Research on Outsourcing in the Telecommunications Industry

A number of studies have been undertaken on outsourcing and the telecommunications industry. Sturgeon and Lee (2001) have argued that many firms have pursued modular product design and manufacturing strategies and outsourced many non-core areas to suppliers that can achieve greater economies of scale via serving the similar needs of other customers. This trend towards outsourcing has led to a deepening of competence and increase in the scale of supplier firms. Many parts of the supply base of the telecommunications industry are comprised of large, highly capable turn-key suppliers, which has further fuelled the trend towards outsourcing (Arruñada and Vázquez, 2006). Berggren and Bengtsson (2004) analysed the contrasting outsourcing strategies of Nokia and Ericsson and found that Ericsson had embarked upon an extensive outsourcing strategy driven by modular product design and

component standardisation, whilst Nokia strategy was based on integral product design and low levels of outsourcing. Other studies have revealed that many telecoms companies have extensively outsourced and become 'systems integrators', which involves designing and integrating internally or externally developed components and coordinating the activities of internal or external suppliers (Davies, 2004; McIvor, 2003; Eisenhardt and Brown, 1998).

Few of these studies provide sufficiently in-depth insights on how outsourcing is undertaken and the associated outcomes. Although Berggren and Bengtsson (2004) provide valuable insights into the outsourcing strategies of Nokia and Ericsson, their analysis fails to consider the outcome of the strategy of each company. Indeed, many studies fail to consider the success companies have had with outsourcing in the telecoms industry and focus primarily on the motives for outsourcing (Davies, 2004; Kim, 2003; Mason et al., 2002). Furthermore, a number of these outsourcing studies in the telecoms industry have employed either the RBV or TCE as theoretical frameworks to undertake their analysis. Davies (2004) and McIvor, (2003) invoked the RBV to analyse outsourcing in their studies, whilst Sturgeon (2002) employed TCE as a theoretical lens to explain how companies have codified and standardised many activities in order to reduce the level of asset specificity in the supplier relationship. Consideration of both the RBV and TCE is important in this context, as firms in a rapidly changing industry such as telecoms have to access the capabilities of suppliers despite the presence of high asset specificity, often via collaborative governance arrangements (Lambe, and Spekman, 1997; Nordberg et al., 1996; Vanhaverbeke et al., 2002). Much of the literature on outsourcing and manufacturing has focused on the automotive industry (Sako, 2003; Corswant and Fredriksson, 2002; Collins et al., 1997). Although the automotive industry shares some of the characteristics of the telecoms industry including significant cost pressures and increasing competition, there are some important differences including a more

modular product structure (Holweg and Pil, 2004) and shorter product life cycles, which has led to a greater level of outsourcing (Sturgeon, 2002). Therefore, there is a need for further research in order to enhance our understanding of outsourcing the telecoms industry.

Analytic Framework

The RBV and TCE were used to develop a framework to analyse the major influences on outsourcing within the companies studied. For purposes of analysis, the outsourcing programme was deconstructed into the following stages:

- *Decision* – this stage involves considering the motives, the forces, and the initial idea for outsourcing. For example, potential motivations for outsourcing may include the need to focus on core business and achieve cost reductions.
- *Evaluation* – this stage involves analysing the capabilities of the outsourcing organisation and the potential external providers. A key part of outsourcing evaluation involves determining the critical activities of the business i.e. those activities that are a source of competitive advantage. This involves an analysis of the relative cost position of the outsourcing organisation and suppliers and an in-depth analysis of the ability of potential suppliers to meet customer requirements.
- *Management* – this stage consists of the transfer of assets to the supplier and management of the supply relationship. In particular, the level of collaboration in the supply relationship is considered which involves issues such as approaches to problem solving, communication processes, and the level of trust between both parties. Sako (1992) proposed three types of trust to identify the characteristics of an inter-organisational relationship including contractual, competence and goodwill. In order to assess the nature of the supply relationship in each case company, the perceptions of managers were sought on whether suppliers adhered to the terms of the contract (contractual trust), were able to

perform the activity as stipulated in the contract (competence) or would go beyond the contractual terms if required (goodwill).

- *Outcome* – this stage is concerned with assessing whether the outsourcing programme was successful. This involved determining whether the contract was renewed, terminated and the activity brought back in-house, or terminated and the activity regarded as no longer required. Furthermore, this also involved considering whether each organization had met the criteria that were initially established for outsourcing and the nature of the relationship with the supplier.

These stages have been influenced by certain elements of the literature already discussed. Although this framework is presented as a number of discrete stages, there is overlap between each stage, which also reflects some of the inter-dependencies between each of the theoretical perspectives. In the *Decision* stage, companies are often motivated by the need to focus on their core business activities and outsource the rest, which is closely related to the RBV. Furthermore, companies often outsource in order to reduce costs. In making the outsourcing decision, TCE argues that organizations should minimize transaction costs and market governance is preferable when transaction costs are low. Due to economies of scale, TCE assumes that the market will always have the lowest cost of production. Therefore, when companies are outsourcing to achieve efficiencies, they are following the logic of TCE. The *Evaluation* stage is influenced by the RBV. This involves determining the resources internal to the firm that drive competitive advantage which in the context of outsourcing involves assessing the relative strength of internal capabilities with the capabilities offered by external suppliers (Langlois and Robertson, 1995). Therefore, in the context of outsourcing evaluation, activities that drive competitive advantage should not be outsourced.

The *Management* stage is influenced both by transaction costs economics and the relational view. Transaction costs economics is most useful in situations where there is a clear distinction between markets and hierarchies as suitable governance modes. For example, in a manufacturing context, governance through markets can be employed in the case of sourcing standard components from a number of suppliers. However, in some contexts such as rapidly changing industries in which organisations have to access certain capabilities in order to compete, transaction costs economics does not fully explain all the potential governance alternatives. Transaction costs economics fails to recognize that in many industries organisations are involved in complex and collaborative relationships that involve high levels of asset specificity as well as uncertainty and opportunism. In many cases, complex contracts alone cannot guard against the risks associated with uncertainty and opportunism. Therefore, adhering to the logic of the relational view, in some cases it is more appropriate to employ relational mechanisms such as trust as substitutes for complex, explicit contracts and hierarchical governance (Dyer, 1996). This contrasts with TCE, which argues that relational governance is employed primarily to minimise transaction costs.

RESEARCH STRATEGY AND METHODS

A case study approach was chosen due to the theory-testing nature of the study and the level of detail in the data required. Use of the case study approach allows an increase in the quality and quantity of data obtained (Gummesson, 1991). The case study approach allows the researcher to analyse relationships and social processes that is not possible via a quantitative approach alone (Miles and Huberman, 1994). The research focused on three companies in the UK telecommunications industry including one mobile network operator, one fixed line operator and one network equipment provider. For purposes of confidentiality, the companies are referred to as MobiTell, PhoneCom and EquipCom. These companies were

chosen for a number of reasons. Preliminary interviews with personnel in these companies had revealed that they had been involved in extensive outsourcing. In particular, these companies had been outsourcing increasingly critical areas of their operations. Furthermore, through the preliminary interviews the research team established relationships with key personnel in these organisations, which facilitated their full access and participation in the research. Gaining full access to personnel across each organisation would facilitate the collection of data from multiple informants, which would increase the quality of data collected (Eisenhardt, 1989).

Two outsourcing programmes within each company were chosen for analysis: one perceived as *core* and another perceived as *non-core*. Although the core/non-core logic can often be misinterpreted, it provides a language that can be understood by practitioners in the assessment of the relative criticality of activities. Core and non-core were chosen in order to provide concepts, which could be inferred as a continuum rather than as a dichotomous construct. Prahalad and Hamel's (1994) tests to identify core competences – including a capability to enter a variety of different markets, deliver a significant perceived benefit for the customer and difficult to copy - were used. Using these tests, groups of key informants within each company were asked to assess the area impacted by the outsourcing programme and rate its importance to the firm. A longitudinal approach was adopted to the research with each outsourcing programme being analysed over a four-year period. Although the outcome of each outsourcing programme was not fully known in the initial phase of the research, adopting a longitudinal allowed fresh recollections from personnel who were involved and allowed the research team to study on-going events and also better capture the complex reality of each outsourcing programme over a longer time period.

Data was collected from a number of sources. Archival data in the form of annual reports, trade and internal company magazine articles, memos, contracts, videos and internal reports

were collected. Furthermore, ninety-four semi-structured interviews took place over a four-year period, with interviews lasting one to three hours. Interviews were carried out with a range of personnel including directors, senior managers, managers and team leaders from purchasing, production, marketing, operations and finance. An interview protocol based on the framework developed from the literature was designed prior to undertaking the case studies and served as an interview guide. This interview guide included questions on a number of variables including the motives for outsourcing, influence of core/non-core logic, approach to evaluating organizational capabilities, transfer of physical and human assets, level of collaboration in the relationship, indicated by trust, approach to problem solving, and communications processes. Particular emphasis was placed on assessing whether these variables were present in the successful outsourcing programmes.

The success of each programme was assessed in a number of ways. Firstly, this involved considering whether the objectives set for outsourcing were met. Furthermore, the people involved in the outsourcing programme were asked whether it was a success or failure. This involved employing Lacity et al.'s (1996) seven measures for success within outsourcing relationships, which included: better than anticipated targeted cost savings; maintained or improved service levels; internal user satisfaction; few customer-supplier disputes; responsive and attentive supplier; objectives and outcomes compared favourably; and whether the contract was renewed. This method for analyzing success is supported by a number of studies (Dean and Sharfman, 1996; Pearce et al., 1987) where the decision outcome, as perceived by the managers involved in the process and based on their objectives at the beginning of the process, are used as the basis for assessing success or failure.

In relation to data analysis, case studies were developed from the archival data and interviews undertaken with the personnel involved in the outsourcing programmes. As part of this analysis, follow-up interviews were undertaken in order to discuss both their earlier responses

and those of other informants. These interviews often involved additional questions based on information obtained from earlier interviews. A key strength of this approach was that it allowed the triangulation of data from multiple informants, which was particularly valuable in the assessment of the success of each outsourcing programme. Furthermore, the longitudinal nature of the research enabled the research team to account for many of the changes that occurred in each of the companies over this time period. The interviews and validated interpretations were downloaded onto the NUDIST program where data were coded, managed using the structure developed from the literature. Using Yin's (1994) guidelines on case study analysis, within case analysis and cross-case analysis was carried out in order to determine the relationships among the variables in the framework developed from the literature. This case study analysis also compared each outsourcing programme in order to examine the presence of similar characteristics in the successful outsourcing programmes. This analysis then formed the basis of the research findings.

RESEARCH FINDINGS

Case Company 1: EquipCom

EquipCom is a network equipment supplier for both fixed and mobile network operators. The outsourcing programmes studied within EquipCom were activities outsourced within the UK region (EquipCom UK) and involved the Calibration activity and the Multi-Service Access (MSA) activity (involving the manufacture, final assembly and testing of several products, which were marketed to mobile phone network operators). The EquipCom UK senior management team had developed a clear outsourcing strategy. The primary objective of this strategy was to reduce headcount at the EquipCom UK plant whilst ensuring the employees affected would still have employment. The Managing Director explains these objectives:

'Unfortunately, one of the main share price measures is headcount [...]. [EquipCom Headquarters] would have said close it completely and move it to somewhere else, then all the people would have lost their jobs.

The first step in the strategy was to outsource the Calibration activity. This activity involved the calibration of test equipment within EquipCom and was described as 'an MOT[1] for EquipCom test equipment'. This was regarded as a straightforward activity to outsource. There was no evaluation of external suppliers with the manager of the activity in the company being asked to perform a management buy-out (MBO) of the activity. This resulted in the transfer of employees and fixed assets to the manager. The activity was situated in the EquipCom UK premises and operated from the site. The characteristics of this outsourced activity were as follows:

- *Decision* - The management team produced a strategy document with the primary aim of reducing headcount within EquipCom UK. There was a global strategy to outsource all manufacturing related activities, which were regarded as non-core to their business.
- *Evaluation* - The evaluation of the activities to be outsourced was informal and involved cost analyses and a general evaluation of the activities within EquipCom UK. Included was a discussion with the manager of the activity to determine his ability and willingness to perform a management buy-out of the activity.
- *Management* - The manager was given a 'corporate uncle' who acted as a source of information and help during, and for a time after the activity was outsourced. There

[1] "MOT" (abbr: 'Ministry of Transport') is a term colloquially given to a UK road safety test designed to ensure that all vehicles are properly maintained and examined at least once a year.

was collocation, and the activity was situated within the EquipCom UK plant. The contact between the managers was infrequent due to there being no problems and a trust that the supplier would not have any problems.

- *Outcome* - The outcome was regarded as a success by the company. The Director of Business Services for EquipCom UK explained: *'we were so successful at it; we were shown as the model of outsourcing within EquipCom worldwide'*.

The next outsource took place in November 1996, when production of printed board assemblies (PBAs) was outsourced as part of a global strategy of reducing headcount and withdrawing from manufacturing operations. EquipCom Global, based in Europe, initially chose the supplier but the decision was overturned when the Managing Director of EquipCom UK undertook site visits to the potential suppliers. The Managing Director of EquipCom UK appeared to have a certain amount of influence concerning the outsourcing decisions of EquipCom Global:

> *'The corporate strategy was that manufacturing was going to be outsourced, but [some of] the decisions I did were before these decisions came out'*.

The final outsource to take place within EquipCom UK was the 'MSA' activity. The MSA activity consisted of the manufacture, final assembly and testing of several products, which were marketed to network operators. This activity was perceived as being a core activity due to innovative design in product and process, its potential to provide entry into new markets, and the effect any disruption would have on revenue and customer satisfaction. The operation of the activity was transferred to the same company that provided the PBAs to EquipCom. Fixed assets were transferred but very few of the former EquipCom UK

employees went with them. The majority of the employees were absorbed and re-deployed within EquipCom UK. The characteristics of this outsourced activity were as follows:

- *Decision* - There were several motives given for the outsourcing of this activity. It was EquipCom Global strategy to outsource manufacturing activities. Furthermore, managers at EquipCom UK perceived this activity as not generating revenue and as demand had not been as high as expected. Also, the market where most of the MSA products were sold was not in the UK.
- *Evaluation* - The evaluation phase was described as informal and anecdotal. The company chosen appeared to be predetermined, due to the outcome of the previous PBA outsource. EquipCom Global managers wanted the manufacturing to move to BoardCo Brazil, and EquipCom UK managers wanted it to be located within the UK, at the BoardCo UK site, as BoardCo UK were also the PBA supplier.
- *Management* – the company established a formal contract with the supplier. However, any problems in the relationship with the supplier were resolved via relational mechanisms, rather than reverting to the contract to resolve disputes. The relationship with this supplier had developed as result of the prior outsourcing of PBAs with this supplier. Furthermore, there was co-location between the companies and an EquipCom team was sent to BoardCo for six months. It was considered that EquipCom Global had chosen BoardCo as a supply partner and, as such they would be an appropriate supplier for this activity.
- *Outcome* - The outsource was regarded as successful as the corporate objectives were met. Nevertheless, some of the managers of EquipCom UK were concerned about the performance of the supplier and were uncertain as to the quality and delivery of the products manufactured by BoardCo.

The outsourcing strategy was very much influenced by the strategy of the company at corporate level. For example, any manufacturing-related activities were considered to be non-core and therefore should be outsourced. The company had become an integrator of a range of activities required to deliver a final solution to the customer as explained by the Managing Director:

> *' ... our core business is to deliver a complete logistics solution to the customer. We decided that our competences are logistics and supply management, final integration and testing of the product, and final logistics and distribution of the product out to the site for the customer.'*

The supply relationships were found to be based on relational elements in both outsourcing cases. Although EquipCom Calibration was regarded as a non-core activity the relationship between the customer and supplier of the activity was characterized by a relational approach with collocation of the activity within the EquipCom UK premises in a 'shopping mall' concept. The relationship was based on a previous trusting experience, with help given to, and problems dealt with by, the manager of the activity. The EquipCom MSA relationship was also characterized by relational management methods. There was evidence that the management of the relationship included co-location, joint problem solving and that the contract was regarded as unnecessary when talking to the supplier, as outlined by the Managing Director:

> *'At [EquipCom] we don't wave contracts around, that is not the way we work. With vendors we believe in a win/win situation, so we are working together. We don't shift risk to the supplier: we share the risk.'*

Case Company 2: PhoneCom

PhoneCom was chosen as a case company for this study as it was a fixed network operator. PhoneCom had no formal outsourcing strategy. It was found that outsourcing that occurred within the company was due to a number of factors including the need to focus on their core business, speed of delivery, and lack of skills. The outsourcing programmes studied within PhoneCom involved Facilities Management (FM) and Network Implementation. The FM outsource was not part of a larger strategy but had been developed from an outsourcing programme which had occurred within the Chief Financial Officer's (CFO) previous company.

The FM activity consisted of the management of all the contracts for facilities including catering, cleaning, vending machines, security, and maintenance. This also included the facilities management for all of the head and regional offices belonging to PhoneCom, and all the regional network sites. It also included property, which consisted of the management of the current portfolio and the development of new property, within the UK. The characteristics of this outsourcing programme were as follows:

- *Decision* - The idea to outsource came from the CFO and was implemented by the Director of Purchasing. The motives for outsourcing were to reduce costs and focus on PhoneCom's core business. FM was not regarded as critical to the business. This outsource had begun in one of the pre-merger companies by the CFO, and this was regarded as a continuation of that strategy, as the senior purchasing manager stated: *'[The Purchasing Director] did it because it worked so well in [another company]'*.
- *Evaluation* - An evaluation of the activity was undertaken by one of the senior purchasing managers. It was at this stage that the outsourcing programme was halted,

not at the recommendation of the evaluator. The reasons were described by the purchasing manager:

'There was a lot of politics involved a lot of the people who had kept quiet were frightened of [The Purchasing Director] and his departure gave them the green light to go to this new financial controller.'

- *Management* - It was decided to internally reorganize FM and outsource only the property activity. This subsequent outsourcing of the property activity took place outside the time period of the research and is therefore is not included in this study.
- *Outcome* - There were a number of opinions as to why FM was not outsourced and opinions were given on the outcome of this outsourcing programme, which could not agree that the outcome had been a success.

The outsourcing of Network Implementation was based on the need to regenerate the company's network that had been based on obsolete technology. Network implementation entailed the building of a new technology network. This included the planning, purchasing and selection of equipment and the building of the new network. The new network would also provide data transmission, Internet protocol, and a management system to detect faults in the network with more accuracy and efficiency. This was driven by the board of directors and was central to the strategy for the future competitiveness of PhoneCom. The previous network had been designed, and the building of the network managed by, internal employees of PhoneCom. The initial strategy was not to outsource *per se*, but to find the most efficient way of building a network within three years. The characteristics of this outsourced programme were as follows:

- *Decision* - There were not enough engineers internally within PhoneCom who had the necessary, extensive knowledge of the new technology to enable the building of a

modern network. The main motivations for outsourcing were to remain competitive in the market, to build the network within three years, and to make the network scalable in order to ensure future capacity requirements.

- *Evaluation* - The evaluation took several months, with three suppliers bidding for the contract. At this time, there were informants who stressed a political motivation for the choice of supplier, a senior finance manager stated that: *'I think the central issue of the project was the political playing and the infighting, which went on.'* Although others downplayed the extent of political influences, for example the senior purchasing manager explained the reason for the choice of supplier was *'the competition, the two other companies, were not capable because of their size and experience in technology, they had the capability on paper but we were not prepared to take the risk'*. However, as was the case with PhoneCom FM there were significant political influences on senior management decision-making, as evidenced from the interviews with key informants in the organisation.
- *Management* - The management of the contract was described as flexible and open, and the control of the relationship was exercised through relational mechanisms.
- *Outcome* – Although there were political influences presents, the outcome of network implementation was regarded as a success based on a consensus from key informants and on the criteria employed in the decision stage.

There were differing interpretations of what core and non-core meant across the company. The network was regarded as core because the business of PhoneCom was network operation. Therefore, most of the definitions of core were related to the network. However, the director of purchasing posited that the definition of non-core was related to the effectiveness of

service provision *i.e.* if it was ineffective it was regarded as non-core and should be outsourced. For example, in the case of FM, he proposed that FM:

'... isn't working and can't be made to work and for that reason we thought of outsourcing it.'

Although the company identified more competent external providers, the outsourcing programme was discontinued due to a powerful director who championed idea, subsequently leaving the company. The management of the relationship was performed using joint problem-solving, open and honest communication, and co-location of staff. This is similar to the EquipCom relationship management as this quotation from the director of Network Implementation illustrates:

'It's having a very close relationship with the outsourcing partner and having openness and honesty on both sides so if either decide there is a problem to be able to explain it, agree it, say what is going to be done about it and go forward as a partnership.'

Case Company 3: MobiTell

MobiTell was chosen as a case company as it was a mobile network operator. The company did not appear to have a defined organisational outsourcing strategy. MobiTell's strategy was as a result of the growth in mobile network operations and the massive increase in demand for mobile phone services. This is illustrated by the Purchasing Director:

'Our strategy going forward is pretty much reactive pretty much because of the fact that we are adding in the region of 200,000 customers a month'.

The outsourcing programmes studied within MobiTell involved FM and Network Rolex activity. The decision and the evaluation of the FM programme began in November 1997 and led to the outsourcing of FM in May 1998. The FM activity within MobiTell was made up of two main operations. The first, corporate site services (CSS), was the management of the corporate buildings, including the management of the catering, security, and cleaning contracts. The characteristics of this outsourcing programme were as follows:

- *Decision* - The idea to outsource FM came from the desire of the HR director to devote more time to HR issues rather than FM issues. The main motives for outsourcing were the need to focus on the core activities of MobiTell, to improve the performance of the activity, cost concerns and the personal motive given by the HR director. There was a negative image towards FM and it was perceived that an external company would improve the performance of the activity.
- *Evaluation* - A formal evaluation took place, in which an evaluation team, consisting of one senior manager and one contracts manager, examined the external FM market, spoke to other companies who had outsourced FM for advice, and then conducted a tender process. The criteria used were qualitative and quantitative. The quantitative criteria were based around price and performance, the qualitative criteria around cultural compatibility.
- *Management* - The management of the relationship relied on contractual rather than relational controls. Any problems in relation to performance were resolved in an adversarial way, with no emphasis on solving problems jointly with the supplier. The MobiTell informants suggested this was due to the personality of the manager of the supplier company. The manager of the supplier company suggested this was due to the need to reduce costs, which he explained was the main aim of the contract.

- *Outcome* - The case was described as unsuccessful, the contract was prematurely terminated and the FM activity was brought back in-house.

The decision to outsource Network Rolex took place in late 1996. The Rolex activity consisted of three main areas: acquisition, design, and construction. The design activity consisted of planning the optimal location for the network sites within the UK. The acquisition activity dealt with the attainment of suitable sites for the construction of either a cell or switch facility, and obtaining planning permission. The final activity within the programme was the construction activity. This was the physical build of the sites and acquiring the appropriate equipment for a specific site. The decision to outsource was taken for a variety of reasons including cost pressures within MobiTell, the need to increase the size and coverage of the MobiTell network quickly, and political issues. The characteristics of this outsourcing programme were as follows:

- *Decision* - There appeared to be several motives for outsourcing Network Rolex. There was a need to reduce costs within MobiTell due to budget restrictions. Also, the speed of the construction of the network had to be increased which was perceived as not achievable internally. Apart from these motives there was also political behaviour observed by several informants. The network implementation director proposed to save costs in order to advance within MobiTell and Network Rolex was not an operation that the director wanted to be responsible for.
- *Evaluation* - There was no evidence of an evaluation of the activity. There was no formal evaluation and the choice of suppliers was predetermined and was due to the existing relationship with the suppliers of network equipment.
- *Management* – There was a transfer of fixed assets to the supplier but no transfer of staff, many of whom were made redundant. The informants explained that the choice of employees who were made redundant was arbitrary and dependent on personal

animosity. There was some disagreement regarding the management of the contract. Several informants including the Director of Purchasing posited that meetings and relationships were confrontational and aggressive. One of the senior managers described the relationship: *'It was very confrontational; it really was a beat up scenario. It was doomed to failure. It was very emotive, threatening culture'.* Only one informant thought that the relationship between MobiTell and NetCom was characterized by good personal relationships.

- *Outcome* - One informant felt that the criterion of a network rolled out within an agreed time frame had been met. However, most of the informants did not agree and maintained that the outsource was a failure as the network was of poor quality and that numbers initially agreed had not been met. Furthermore, NetCom and EquipCom (the suppliers) had misled MobiTell as to the number of operational sites that had been constructed. The contract of the acquisition, design and construction of the network was not re-tendered and was brought in-house at the end of the four year contract.

MobiTell regarded the network as the core of its business. This was emphasized by the Human Resource Director who also believed that the design and development of the network was core, whereas, the building of the network was not:

> *'That was a long-term solution and a strategic decision in the sense that we would focus on our competence of designing and developing the network and we would leave the build to someone else.'*

A senior project manager who posited that the network was the only source of profit for the company further supports this. Therefore, activities not related to the network such as FM were regarded as non-core. When assessing the type of relationship management, MobiTell adopted contractual arrangements for both activities studied. In the initial decision and evaluation of the FM outsourcing programme, one of the primary objectives was to achieve improvements in the provision of the FM service. For example, when FM was outsourced, the relationship was characterized by contractual methods managed by key performance indicators founded on cost savings. However, the research revealed that during the relationship management the principal focus was on cost reduction rather than performance improvement. Consequently, this contractual relationship deteriorated into an adversarial relationship and eventually the activity was brought back in-house. The director of procurement described the nature of the relationship as follows:

> *'... what I seem to keep saying to them is read the contract, read the contract, read the contract. There are ongoing contractual commercial issues being sorted out on a daily basis.'*

In relation to MobiTell Rolex, although it was regarded as core to MobiTell the relationship with the external provider of the activity was similar to the MobiTell FM case. The relationship was contractually based and managers described animosity and an adversarial attitude towards the relationship. In fact, the research revealed that this was normal practice for MobiTell, with its supply relationships characterized by adversarial behaviour and contractual control methods.

DISCUSSION OF FINDINGS

This section discusses the findings from the research in relation to the research questions. A summary of the findings along each of the dimensions analysed in each company is given in Table 1.

Insert Table 1 about here

The findings from the research have emphasized how the general operating environment in the telecommunications industry has had a major impact upon the outsourcing strategies of the case organizations. In particular, reduced product cycles and time-to-market pressures have forced each organization to pursue strategies, which allow them to be more responsive to change. Indeed, these findings are consistent with other studies that have considered the motives for companies outsourcing in the telecommunications industry (Berggren and Bengtsson, 2004; Kim, 2003; Mason et al., 2002). Although, each company experienced differing levels of success, outsourcing was regarded as a major strategy for achieving flexibility, which they believed placed them in a better position to react rapidly to market changes and be more responsive to customer requirements. The conditions in the general operating environment were also influencing the way in which outsourcing decisions were being taken. The principles associated with the resource-based view were present in the outsourcing programmes of each company studied. The companies recognized that they were not in a position to replicate the capabilities of external suppliers in certain areas of product and service delivery. In many cases, the companies studied were experiencing increasing demand for their products and services in the face of significant pressures on cost and time-to-market.

This increasingly competitive operating environment had forced the companies to give greater responsibility to suppliers in areas such as equipment manufacture and network installation. For EquipCom this led to all operations relating to manufacture being

outsourced which was part of a global strategy of moving out of manufacturing. The company believed that it could not achieve levels of performance attained by large contract manufacturers that were achieving lower costs through supplying a range of customers. In the cases of MobiTell and PhoneCom, these companies believed outsourcing could be employed in order to improve performance through accessing the specialist capabilities of external suppliers. In the cases of PhoneCom and MobiTell, they decided to outsource network-related implementation activities due to increasing demand and a lack of sufficient capacity internally. For example, Phone-Com lacked engineers internally who possessed the necessary qualifications and knowledge of new technologies that would allow them to rapidly build a modern network. Senior management in these companies recognized that many of the capabilities carried out internally could now be sourced in external supply markets. These examples support the concept of dynamic transaction costs (Langlois and Robertson, 1995; Langlois 1992). Dynamic transaction costs are costs that arise when companies have to acquire and coordinate productive knowledge in real time. In all of the cases, we can see that dynamic transaction costs have played a part in the outsourcing decision. Furthermore, these findings support prior studies in the telecoms industry that outsourcing is being further driven by the fact that suppliers have been proactively developing an increasing range of capabilities (Sturgeon and Lee, 2001). For example, in the case of Equip-Com outsourcing PBAs, it selected a supplier that had embarked on an acquisitions strategy that would allow it to provide a range of capabilities and serve its customers on a global basis.

Although the decisions taken mirror the logic of the resource-based view, there were some differences between the predictions set out in the theory and the practices of the companies studied. In terms of the level of evaluation of organizational capabilities, none of the companies rigorously engaged in the evaluation of their own internal capabilities with those of competitors or external suppliers. The decision in many cases was made by senior

management at either local or corporate level in order to meet the challenges in the operating environment. Furthermore, although the terms 'core' and 'non-core' were used in the context of outsourcing in all the companies studied, it was not used as a basis for distinguishing between outsourced activities. The core/non-core logic assumes that core activities should be performed internally and all non-core activities should be outsourced (Gottfredson et al., 2005; Momme and Hvolby, 2002; Insinga and Werle, 2000; Quinn, 1999). However, due to the rapidly changing nature of the telecommunications industry the organizations had to access capabilities – whether deemed 'core' or 'non-core' - in order to compete. The findings here challenge the value of using the core/non-core logic as a basis for outsourcing in the context of a rapidly changing industry such as telecommunications. Both EquipCom and PhoneCom successfully outsourced areas of the business that were regarded as core. The companies studied had to keep pace with increasing customer demand, which meant outsourcing activities regarded as core in order to cope with internal resource constraints. Furthermore, the actions of suppliers were further diluting the value of defining areas of the business as 'core' or 'non-core'. As evidenced in a number of the cases, suppliers were rapidly upgrading their capabilities making possible the outsourcing of activities previously considered core.

In relation to the supply relationship management approach, one consistent characteristic of the successful outsourcing cases studied was the presence of collaborative relations between the organization and the supplier. In the cases of EquipCom Calibration, EquipCom MSA and PhoneCom Network, relational collaborative relationships were adopted with the supplier. Also, the relationships were established with suppliers due to a prior history with the suppliers. The evaluation of the outsourcing programmes for both EquipCom MSA and PhoneCom Network Implementation were based on predetermined suppliers, which had already been used to undertake activities for the company and with which the senior

management of the companies had prior relationships. This was the case with EquipCom Calibration as the supplier was predetermined as the internal provider with whom a prior relationship had existed. The relationship management approaches for each of the outsourcing cases also displayed similarities. EquipCom Calibration was managed based on the prior trusting relationship. EquipCom MSA and PhoneCom Network Implementation were characterized by co-location and joint problem solving with both senior management parties stating that contract terms were not used to exercise control the relationship. Much of the literature on the telecoms industry and outsourcing has suggested that supply relationships rely primarily on formal contractual controls (Berggren and Bengtsson, 2004; Sturgeon and Lee, 2001). However, some of the findings here have shown that collaborative mechanisms can also be an important feature of supply relationships in this industry.

Some of the findings in the case studies contradict the prescriptions of transaction cost economics. Transaction cost economics argues that boundary choice is driven largely by the specificity of assets involved in the exchange. The presence of high asset specificity would direct a company towards hierarchical governance in order to pre-empt the potential for opportunism. However, adhering strictly to this logic would suggest that a number of the companies that participated in this study have gone too far with outsourcing. For example, Equip-Com and Phone-Com were involved in outsourcing arrangements that exhibited high levels of asset specificity.

The actions of Equip-Com and Phone-Com support an often-cited criticism of TCE that it overstates the influence of opportunism arising from transaction-specific investment on outsourcing decisions (Barney, 1999). The potential for opportunism arising from high asset specificity is an important determinant in the boundary decision. As illustrated in the cases of EquipCom MSA and PhoneCom Network, opportunism is not the only determinant and must be considered along with the resource implications of replicating the capabilities possessed

by suppliers. These companies were faced with internal resource constraints with outsourcing being the only option. Furthermore, the nature of the telecommunications industry meant that these companies had to rapidly access these capabilities in order to meet growing customer demands and reduce time to market. Given the rapid degree of change and uncertainty associated with high technology industries such as telecommunications, non-hierarchical forms of governance are often chosen as a means of accessing capabilities (Eisenhardt, and Brown, 1998).

In the cases of EquipCom MSA and PhoneCom Network, both the outsourcing decision and relationship adopted was influenced by the fact that both companies had prior relationships with the chosen suppliers. Using the single transaction as the unit of analysis in which opportunism is more likely TCE does not consider other factors such as prior relationships and corporate influences (Doz and Prahalad, 1991). Furthermore, Sturgeon (2002) has argued that the modular architecture of products in the telecoms industry has allowed companies to standardise many outsourced activities and reduce the level of asset specificity. However, some of the findings here challenge this analysis. The EquipCom MSA, and PhoneCom Network Implementation programmes involved high levels of asset specificity and the adoption of collaborative arrangement with suppliers. The approach adopted by these companies is closer to the relational view proposed by Dyer and Singh (1998) who have argued that a high degree of asset specificity may be a source of competitive advantage if governed by certain types of inter-organisational relations rather than by the use of market/contractual mechanisms. The findings are consistent with a number of other studies in the telecoms industry that have found that critical resources can be developed and strengthened through the use of external suppliers rather than imitated or lost (Vanhaverbeke et al., 2002). Essentially, the actions of these companies in relation to outsourcing illustrates that they are attempting to employ internal capabilities and external collaboration as

complements as external collaboration provides access to capabilities that cannot be generated internally (Gadde and Snehota; 2000; Combs and Ketchen, 1999; Poppo and Zenger, 1998).

CONCLUSIONS AND FURTHER RESEARCH

The findings from this research make a number of important contributions. The findings have revealed the importance of collaborative relations in the context of outsourcing in the telecommunications industry. In particular, the findings have shown that those companies that developed collaborative relationships with their suppliers achieved higher levels of success with outsourcing. In the case of the successful outsourcing programmes studied, the management of the relationship was based on establishing a mutually beneficial relationship to achieve higher levels of performance than could be achieved internally. The relationships were based more on collaborative mechanisms such as trust and communication rather than being driven by the letter of the contract.

The findings have challenged the value of the core/non-core logic as a basis for outsourcing in the telecommunications industry. The core/non-core logic has dominated much of the outsourcing literature and is widely used in practice. However, the findings revealed how two companies successfully outsourced areas regarded as core. Industry developments such as rapid increasing customer demand and suppliers developing wider range of capabilities meant that organisations were outsourcing areas of the business regarded as core. Further research is required in order to examine more fully the value of the core/non-core logic on outsourcing practice.

Employing TCE and the RBV as theories for undertaking the analysis has also revealed some important findings. In particular, the research has challenged some of the prescriptions of TCE in relation to the outsourcing decision. Furthermore, in relation to inter-organisational collaboration it has been shown that the successful outsourcing programmes were closer to the logic of the RBV than TCE. However, there is a need to explore more fully the relationship between TCE and the RBV in outsourcing decisions in a wider number of research settings. Although the telecommunications industry has provided a valuable setting

for analysing outsourcing practice, undertaking a study in a wider number of settings would enable an analysis to be undertaken of how the industry setting impacts on outsourcing. This would assist in informing the debate led by Jacobides and Winter (2005), who argue that analysing transaction and capability considerations in firm boundary decisions must also consider changes at the industry level rather than primarily at the firm level.

The findings also revealed the presence of political influences on outsourcing. Organisational politics involves the strategies that individuals employ in order to obtain and use power to influence organisational goals in order to further their own interests and ambitions (McIvor, 2005). This contrasts significantly with the rational model of management decision-making in which it is assumed that managers will agree on the strategic objectives of the organisation and the strategies that should be pursued to lead to their achievement. Although, it was found that rationality and political behavior need not be part of the same dimension, one study showed that success occurred within a process characterized by high rationality and low political behavior, while failure occurred within a process characterized by high political behavior and low rationality (Dean & Sharfman, 1996). One might assume, then, that the presence of political influences may be detrimental to successful outsourcing. However, some of the findings here challenge this assumption. There were significant political influences present in the unsuccessful MobiTell Rolex outsourcing case. However, whilst there were political influences on the PhoneCom Network case, these influences did not prove detrimental to the success of outsourcing. This is an area of outsourcing research, which requires further examination. In particular, it would be valuable to carry out in-depth case study analysis to understand more fully the relationship between and the relative emphasis of economic rationale and political behaviour in explaining outsourcing decisions. Furthermore, there has been a paucity of studies that have

considered the influence of political behaviour on outsourcing decisions (Allen et al., 2002; Peled, 2001).

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