International outsourcing of information technology services: review and future directions

International outsourcing of IT services

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Received August 2008 Revised November 2008, January 2009

Accepted February 2009

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Abstract

Purpose – The purpose of this paper is to review the development of the empirical literature on international outsourcing of information technology services (ITS) over the 1992-2007 period and to identify future research areas.

Design/methodology/approach – A sample of 78 empirical academic publications on international outsourcing of ITS conducted between 1992 and 2007 across 46 scholarly journals constitutes the main data for analytical purposes. The sample is compiled following extensive electronic searches of the main academic databases. After clustering the studies in the sample according to their main research areas, a narrative approach is used to review developments in each cluster and to identify emerging research areas.

Findings – Four main areas of research are identified, namely outsourcing decision, outsourcing management (OSM), outsourcing outcome and the role of offshore service providers (OSPs). The review suggests that research efforts to date have been predominantly on outsourcing decision and OSM, mostly from the perspective of clients. Future research opportunities exist in the areas of outsourcing strategy and performance, the behaviour and performance of OSPs particularly within the context of firms from less-developed countries competing globally, and the nature of competition among OSPs both within and among countries.

Originality/value – This is the first review which focuses on empirical studies of outsourcing for ITS. This paper identifies several gaps in the literature and points to the need for more research on outsourcing from the perspective of OSPs.

Keywords Outsourcing, Servicing, Off shore investments, Communication technologies

Paper type Literature review

Introduction

The continuous decline in cross border trade barriers over the last two decades and the development of more affordable advanced information and communication technologies have made international outsourcing, in general, increasingly feasible and financially viable to a greater number of firms. The international outsourcing of information technology services (ITS)[1] has grown rapidly in recent years to become one of the fastest growing international businesses (IBs) in the world. The ITS market is predicted to grow to approximately US\$800 billion by 2009 (Gartner, 2005), with global ITS outsourcing growing from US\$40 billion in 2004 to over US\$90 billion in 2008 (Nasscom, 2005). The main players on the demand side in the global ITS



International Marketing Review Vol. 26 Nos 4/5, 2009 pp. 411-438 © Emerald Group Publishing Limited 0265-1335 DOI 10.1108/02651330910971988



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outsourcing market includes the triad economies which account for 87 per cent of the world market: USA 37 per cent, Western Europe 35.4 per cent, and Japan 14.2 per cent (EITO, 2006). On the supply side or the service provider's side, India and China have emerged as preferred international ITS outsourcing locations among multinationals (Kearney, 2006). Other smaller locations for offshoring ITS include Ireland, Israel, Philippines, Malaysia, and Russia.

Rapid growth in international outsourcing has also resulted in the emergence and use of numerous terms and concepts, particularly by practitioners, and this is often a source of confusion to academic researchers. Examples include terms such as outsourcing, insourcing, backsourcing, offshoring, onshoring, strategic outsourcing, offshore service providers (OSPs), offshore and onshore. What exactly do these terms mean?

Outsourcing is generally defined as "the procurement of supplies from legally independent activities" (Mol *et al.*, 2005), or "the purchase of goods or services that were previously provided internally" (Lacity and Hirschheim, 1993). Strategic outsourcing is the use of multiple vendors on short-term contracts. Other terms such as business process outsourcing (BPO) or knowledge process outsourcing relate to the functions to be outsourced such as business processes, knowledge/research and development services. Backsourcing refers to bringing the outsourced activities back into the company's home country. "Offshoring" occurs when a firm in one country outsources work to firms in another country either by setting up its own operation in the foreign country or by contracting with an outsourcing providers who then transfer work overseas (Niederman, 2005).

The terms outsourcing and offshoring are often used interchangeably and can often be a source of confusion. Figure 1 distinguishes between outsourcing and offshoring for a typical firm which can procure services from within the country (domestic outsourcing), from overseas (international outsourcing) with services supplied internally (insourcing), or by an external supplier (outsourcing). International sourcing, also commonly referred to as offshoring in the case of ITS, involves the supply of services from another country either through internal suppliers (international insourcing) or external suppliers (international outsourcing). Outsourcing involves the supply of services from external suppliers either domestically (domestic outsourcing) or internationally (international outsourcing). Thus, as can be seen from Figure 1, outsourcing can be domestic (area 1) or international (area 2), and offshoring can be from affiliated firms (area 3) or non-affiliated firms (area 2).

Another distinction between outsourcing and offshoring can be made from an ownership and location perspective[2]. Since outsourcing generally involves a firm's

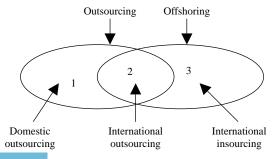


Figure 1. Outsourcing and offshoring: illustrative concepts



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Another term commonly used in the literature is selective outsourcing. This refers to outsourcing of part of a firm's activities, rather than a whole block (total outsourcing) of services such as the services of an entire IT or accounting department. Backsourcing refers to the repatriation of outsourced activities back to the company at home

Firms providing services to offshore clients are commonly referred to as OSPs. The terms onshore and offshore are used to refer to whether a service is being delivered remotely. For instance, an Indian ITS provider located in the USA and providing services to an US firm located in the USA is considered to be work done onsite or onshore (Table I). By comparison, if the US firm is being serviced remotely from India that is considered as an offshore activity. Similarly, an Indian service provider based in India servicing a US company based in India is considered to be an onshore activity.

The main purpose of this paper is to survey recent developments in the empirical literature on international outsourcing of ITS and to identify future research avenues. Despite rapid growth in research on the topic, the research landscape on international outsourcing of ITS remains confusing and disparate. The next section presents the method and data used in the study. First, we categorise the stock of research on the subject into four main streams for analytical purposes. The main developments in the literature are then discussed, followed by an identification of gaps in the literature and potential avenues for future research. The summary and conclusions are contained in the last section.

Method and data

A sample of 78 empirical academic publications on the international outsourcing of ITS across 46 scholarly journals conducted during 1992-2007 constitutes the main data for analytical purposes for the paper. The sample was compiled from an extensive electronic search using academic search engines such as Proquest and EBSCO host, and using information from the reference lists of recently published empirical studies. Different key words such as outsourcing, offshoring, ITS and OSPs were used as locators for the search. The first round of searches identified more than 20,000 publications. After narrowing down the search criteria to include only empirical

Location of US client firm	Loca	Location of Indian service provider Country close to USA	
India	Onshore	Nearshore	Offshore
USA	Offshore	Nearshore	Onshore

Table I. Onshore-offshore examples



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refereed academic journal publications since 1992, a sample of 78 studies was compiled. Further checks confirmed that this list was exhaustive and up-to-date. The information in Table II summarises the salient features of the studies in the sample.

During the 1992-2007 period, the intensity of research papers published in academic journals increased steadily and considerably (from eight in 1992-1995 to 33 in 2004-2007) as researchers became increasingly aware of the emerging importance of outsourcing on a global scale. Although research on ITS outsourcing has appeared in all classes of journals considered, 70 per cent is from medium to highly ranked academic journals based on Harzing's (2007) academic journal categorisation. This is as expected, given that the focus of this paper is on empirical studies from refereed academic journals.

This paper builds on two existing literature reviews: Costa (2001) and Mahnke *et al.* (2005). The literature review by Costa (2001) covers the why, how and what of ITS outsourcing in Australia. The literature review by Mahnke *et al.* (2005), by comparison, provides a more comprehensive survey of the outsourcing literature for ITS, which includes a consideration of theoretical issues and provides a clear agenda for future research. This paper builds on these two literature reviews in three ways: first, the paper explicitly focuses on the international outsourcing of a broader range of ITS; second, the perspective of the vendor, which so far remains a neglected area of research, is explicitly taken into consideration and, third, the review of literature covers a longer timeframe and draws from a larger sample of empirical studies. As an analytical framework, the studies are clustered according to their main areas of focus and each cluster of studies is reviewed in order to provide more focused insights into the developments that have occurred in each research area and to identify future

	1992-1995	1996-1999	2000-2003	2004-2007	Total (%)
A. Rank of journal ^a					
High	3	9	7	7	26 (33)
Medium	2	6	11	10	29 (37)
Low	3	1	2	4	10 (13)
Not rated	0	1	0	12	13 (17)
Total (%)	08 (10)	17 (22)	20 (26)	33 (42)	78 (100)
B. Research areas					
1. Outsourcing decision (why, what, where,	6	12	7	13	38 (34)
how much, with whom)	C	C	-	10	01 (00)
2. OSM (how: hard and soft side)	6	6	7	12	31 (28)
3. Outsourcing outcome (determinants and consequences)	2	5	5	5	17 (16)
4. ITS provider (location attractiveness, vendor competitiveness)	0	2	7	9	18 (16)
Cross-country comparisons	0	1	2	4	07 (06)
Total (%)	14 (13)	26 (24)	28 (26)	43 (37)	111 (100) ^b

Table II. Salient features of studies in the sample

Notes: ^aJournal categorisation based on UQ07 journal ratings accessed on 26 September 2008, available at: www.harzing.com; ^bthe total for research areas exceeds 78 because some studies focus on more than one area



research avenues. Four main research areas are identified in the sample (Table II) with outsourcing decision (34 per cent) being a dominant area, followed by outsourcing management (OSM) (28 per cent), outsourcing outcome (16 per cent) and OSP (16 per cent). There is also an increasing trend for embedding cross cultural comparisons in the studies above in recent years with 6 per cent of papers identified taking this approach. Given the diverse nature of the literature, the paper follows the narrative approach used by Madsen (1987) and Aaby and Slater (1989) to review developments in each of the four main research areas which is presented next.

Review of main research areas

Outsourcing decision (OSD)

Outsourcing decision is neither a business strategy decision (Quelin and Duhamel, 2003) nor simply a purchase or contract out decision. Rather, it is a strategic decision to reject internalisation of the activity (Gilley and Rasheed, 2000) and depends on each firm's unique requirements and circumstances (Grover and Teng, 1992). Thus, research on outsourcing decisions has tended to address the following four main questions:

RQ1. Why and why not to outsource?

Gaps in capabilities and differences in production costs compared to transaction and agency costs are among the main factors which motivate firms to consider outsourcing some of their activities (Cheon *et al.*, 1995). Firms engage in outsourcing for strategic, financial, environmental and technological reasons. Strategic motivators include a firm's decisions to concentrate on core activities while leaving "commoditized operations" to specialised service providers. Thus, outsourcing allows a firm to free scarce resources and to deploy these in other strategic aspects (McFarlan and Nolan, 1995). Additionally, outsourcing allows vendors and clients to share business risks (Quelin and Duhamel, 2003) and protect their core assets and capabilities by raising market barriers for them and commoditising the outsourced activities (Levy, 2005). Outsourcing also leads to greater flexibility and allows clients to have access to more innovative solutions from specialised vendors (Quinn, 2000).

Competitive pressures from the external markets (Pinnington and Woolcock, 1995) and strong supplier marketing efforts (McFarlan and Nolan, 1995) accompanied by management attitudes and beliefs (Pinnington and Woolcock, 1995) also drive firms to outsource. However, while attempting to gain strategic benefits, firms may also be exposed to strategic risks such as loss of core competencies and critical skills, mismatch of client vendor priorities (Quinn and Hilmer, 1994), loss of know-how and innovative capability (Earl, 1996; Hoecht and Trott, 2006), loss of flexibility with outsourcers, and the feeling of being "locked in" or "hostage" or "dependency" (Antonucci and Tucker, 1998; Quelin and Duhamel, 2003).

Cost savings have been identified as one of the main motivators for the outsourcing of ITS (Ang and Straub, 1998; Barthelemy and Geyer, 2001; Kakabadse and Kakabadse, 2002), particularly when the quality of service delivery is not affected. However, research results are mixed on the extent to which cost savings are cited as the main reasons for outsourcing. In a US-based survey, 67 per cent of companies were willing to outsource globally if they could realise cost savings (Apte *et al.*, 1997). Similarly, in a survey carried out in the USA and UK in 1996, 85 per cent of managers interviewed identified cost savings as a major motivator for international outsourcing of ITS (Lacity and Willcocks, 1996).



In his study, Serapio (2005) found that 44 per cent of firms in the USA realised cost savings of up to 40 per cent from international outsourcing; and 50 per cent of firms rated the productivity and quality of vendors to be the same as in the USA. Vendors are able to provide quality professional services at lower costs by having leaner overhead structures, using low-cost knowledge workers, and realising economies of specialization and scale (McFarlan and Nolan, 1995). More recently, a study by Lewin and Peeters (2006) found cost reduction to be the main reason for 97 per cent of firms to engage in outsourcing, followed by growth strategy (73 per cent), competitive pressure (71 per cent) and access to qualified staff (70 per cent). By contrast, research by Espino-Rodriguez and Gil-Padilla (2005) and Loebbecke and Huyskens (2006) found no significant relationship between offshoring decisions and financial factors.

Firms also have to routinely face and manage change in their external environment and, in some cases, resort to international sourcing as a response to external pressures. The imitative behaviour of firms (Loh and Venkatraman, 1992) following their competitors, is a good example of how pressure from external sources may change firm behaviour. However, Hu *et al.* (1997) found that dual internal and external influences are what influence firms to consider international sourcing. Changes in the external environment which may motivate firms to consider international outsourcing include changes in the macro economy, including changes to a country's laws (Apte *et al.*, 1997) and its economic and political landscape (Bahli and Rivard, 2003). Such changes may also act as inhibitors to outsourcing if there are uncertainties about the economic, legal and political landscape in the offshoring location.

Technological motivators include internal IT failures such as the firm's failure to meet customer service standards and the firm's inability to access the specialised IT skills of vendors (McFarlan and Nolan, 1995). Aubert *et al.* (2004) found a significant positive relationship between the levels of technical skills required in selected activities and the levels of outsourcing by firms. Difficulties in retaining skilled IT staff and relatively easy access to high-quality IT staff through outsourcing have been found to be important motivators for outsourcing in an Australian survey (Beaumont and Costa, 2002). Although vendors can be good sources of technological competencies, they can also be a source of potential risks (Antonucci and Tucker, 1998; Jennings, 2002; Quelin and Duhamel, 2003), and uncertainty has also been found to be a major deterrent to outsourcing (Aubert *et al.*, 2004):

RQ2. What and how much to outsource?

When considering outsourcing as an integral part of a firm's strategy, a critical issue relates to which of the firm's activities and how much of these to outsource. The scope and level of outsourcing depends on several factors. According to Quinn and Hilmer (1994), a firm would outsource all of its activities, except their core competencies, if suppliers' markets were totally reliable and efficient. However, suppliers' markets are not always efficient and elements of risk and uncertainties are always present. Activities which are deemed to be core business and are subject to strategic vulnerability may be better produced internally or insourced rather than outsourced. Traditional strategy models suggest that non core activities can be successfully outsourced (Grote and Taube, 2007) and the outsourcing of core activities could be risky as a firm may lose its core competencies (Prahalad and Hamel, 1990). Grote and Taube (2007) argue that outsourcing is feasible when organisational proximity is not

essential, whereas the presence of cultural and professional proximities with OSPs is essential for offshoring (international outsourcing). In a study of offshoring of research activities by investment banks, only non-core activities such as junior tasks or support type tasks were found to be strong candidates for offshoring while core research activities were kept in house (Grote and Taube, 2007).

In certain cases, the outsourcing of core activities can benefit an organisation, provided the right approach is taken (Baden-Fuller *et al.*, 2000; Saunders *et al.*, 1997). Firms can experience an erosion of core competencies as a result of rapid changes in their competitive landscape, changes in value chain or the emergence of new technologies. In instances where the core competencies of firms are eroding, outsourcing of such competencies can be successfully undertaken with tight and detailed contracts (Saunders *et al.*, 1997) and outsourcing can lead to improved performance of the firms (Baden-Fuller *et al.*, 2000).

The extent of outsourcing in the ITS sector (i.e. how much to outsource) depends on transaction attributes such as the degree of asset specificity, uncertainty and the availability of business and IT skills required to perform IT activities adequately. Aubert *et al.* (2004) found asset specificity, uncertainty and technical skills to be significant in explaining the level of outsourcing in Canadian IT companies. If more investment in specific assets is required, firms may find it more attractive to outsource such activities to locations where such assets are in abundance and relatively cheaper. For example, a recent Australian study found that firms which are constrained by the availability of skilled IT professionals benefited from outsourcing activities requiring such skills (Beaumont and Costa, 2002). Also, because outsourcing allows firms to leverage specialised knowledge and skills embedded into the service providers, firms may find it beneficial to outsource more of their activities as a way of enhancing their overall competitiveness. Uncertainty has also been found to impact on the level of outsourcing (Aubert *et al.*, 2004), and as the level of uncertainty increases, firms may prefer to insource rather than to outsource:

RQ3. How to outsource?

Once a firm decides to engage in international outsourcing, the question of whether to outsource externally to third parties or to insource through its own offshore subsidiaries becomes a major consideration. International insourcing involves firms contracting activities to their own foreign subsidiaries. Subsidiary companies which service their parent companies solely are commonly known as captive firms, although it is not uncommon for such subsidiaries to also service other companies on a commercial basis. Thus, the decision to insource or to outsource involves careful consideration of the costs and benefits of establishing subsidiaries offshore relative to contracting to third parties. Insourcing by IT firms is preferable when there is high asset specificity and where the firm's IT division is a profit centre (Barthelemy and Gever, 2005). The choice between insourcing and outsourcing also varies across countries because the costs of doing business across national boundaries vary greatly. The setting up of foreign subsidiaries can be costly and firms have to undertake cost benefit analyses of different locations. For example, it has been found that German firms prefer quasi outsourcing, whereas French firms prefer outsourcing (Barthelemy and Gever, 2001) and the difference has been attributed to the influence of labour unions in Germany. However, although cost saving is often cited as a major driver for offshoring of ITS, firms tend to locate their offshore service facilities in locations where IMR 26,4/5

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they have greater cultural similarities, high-education levels (Bunyaratavej *et al.*, 2007) and where risks and uncertainty are at acceptable levels. Thus, contrary to widespread beliefs, firms do not necessarily outsource to the cheapest offshore locations:

RQ4. Where and with whom to offshore?

The fourth question which firms have to address when considering outsourcing relates to the location and choice of OSPs. Dunning's framework for explaining the choice of location for foreign direct investment (FDI) (Dunning, 1980, 1988, 1995, 2000, 2001) can also be applied to non-FDI activities such as offshoring. Accordingly, location advantages are external to the firm and relate to the geography and location attractiveness (external environment) of a particular country and/or region. The choice of a particular location and the selection of an appropriate service provider from the chosen location for offshoring purposes is a critical decision as "one size may not fill all". The decision depends on a multiplicity of factors (Kearney, 2004), including the regulatory and political environment, factor endowments such as human capital and infrastructure (Graf and Mudambi, 2005; Kshetri, 2007; Palvia, 2004), cultural compatibility (Kshetri, 2007; Mol et al., 2004; Palvia, 2004), vendor capabilities (Beulen et al., 2005; Feeny et al., 2005) and the nature of the services to be outsourced. Firms tend to offshore as opposed to outsource (domestically) when asset specificity is high, volume uncertainty is low and clients have better coordination capability (Mol et al., 2004). In the case of high-asset specificity, firms are more likely to outsource from offshore locations with high levels of stability and consistency in the supply of services and also where OSPs have well-established and reliable coordination and management capabilities. The selection of an appropriate OSP is critical for fully realising the benefits of offshoring since the relationship between the client and the vendor often goes beyond pure contractual arrangements.

Outsourcing management

Once the strategic decision to outsource has been taken, the next issue is how to manage the outsourcing venture successfully. Numerous OSM issues need to be considered, but the initial ones are related to the nature and form of the vendor/client contract. The outsourcing venture can be managed through legal contracts and strategic partnerships (Barthelemy, 2003), psychological contracts (Koh *et al.*, 2004), or some combination of these mechanisms. Barthelemy (2003) used the terms "hard" and "soft" sides for the "development and enforcement of a good contract" and the "development of relationships based on trust" for managing offshoring relationships. Both of these are considered in the following discussion.

The hard side. A contract to offshore ITS between a vendor (OSP) and a client may take several forms. Fixed price contracts are characterised by fixed fees for the delivery of set services by the vendor. Time and material contracts involve the vendor charging a fee at a certain rate for services rendered and material supplied. A third type of contract is an incentive-based contract, which can be either a fixed price contract or a time and material contract with a performance incentive component.

The choice of the type of contract depends on the risk associated with the nature of the activities under consideration, the client's knowledge set, the bargaining power of the parties involved and overall market conditions. Generally from a risk perspective, clients prefer fixed price contracts due to higher levels of certainty attached to them,



while vendors prefer time and material contracts which allow them to minimise unforeseen and hidden risks involved in the successful delivery of ITS. In the case of software development, which is often considered to be risky, time and material contracts have been found to be more profitable for OSPs (Gopal *et al.*, 2003).

The type of contract can also impact on the level of control that the client maintains on the functions which are outsourced. It does not necessarily imply that clients lose the knowledge base of activities that they outsource. The peripheral knowledge of clients has been found to play a significant role in outcome-based formal controls, but not in process-based controls (Tiwana and Keil, 2007). Thus, client firms may still retain and develop peripheral knowledge in activities that are outsourced as this knowledge helps to better manage the international sourcing alliance while leaving the processing activities for service providers to perform independently.

The process of allocating contracts for ITS has also received some attention from researchers. Contrary to widespread belief, competitive tendering does not necessarily lead to cheaper contracts and has been found not to impact on the outsourcing outcome which is influenced more by contract specifications (Domberger *et al.*, 2000). Repeat contracts are generally cheaper than initial contracts because as vendors and clients become established they develop interactions, communication and mutual trust. Hence, it may be argued that it is not the pricing variations of contracts but rather the contract specifications that lead to better international sourcing outcomes. A detailed contract has been found to be an essential tool for the effective management of outsourcing (Barthelemy, 2001; Lacity and Hirschheim, 1993; Saunders *et al.*, 1997; Shepherd, 1999; Willcocks and Choi, 1995; Willcocks and Kern, 1998) with short term and detailed contracts leading to higher outsourcing success (Lacity and Willcocks, 1998).

The soft side. Formal legal contracts are "necessary but not sufficient" for successfully managing an outsourcing venture. This is because contracts can never be complete and unforeseen uncertainties legitimise the role of the so-called "soft side" of contracts. Unforeseen contractual complexities can have counterproductive effects on the overall outcome of the sourcing venture (Shepherd, 1999). Furthermore, relationships that go beyond contractual arrangements have been found to be particularly helpful in resolving disputes between client and OSPs (Elmuti *et al.*, 1998; Grover *et al.*, 1996; Lee, 2001; Lee and Kim, 1999). Hence, it is not surprising that research has established strong links between partnership quality and offshoring outcomes (Grover *et al.*, 1996; Lee, 2001; Lee and Kim, 1999), with partnership philosophy identified as an effective tool for managing outsourcing venture relationship (Shepherd, 1999).

Better personal relationships in a partnership can benefit all parties. In an outsourcing venture for ITS, clients can benefit from better innovative solutions as better relationships help service providers (the vendors) better understand the needs of their clients. Similarly, better relationships may help vendors retain their clients, obtain referrals to attract new clients and build on their capabilities and competencies. However, the extent of client-vendor relationships depends upon the client's needs and the purposes of offshoring and the skills and experience of the service providers (Kedia and Lahiri, 2007). The intensity of the client-vendor relationship increases as the outsourcing venture moves from one based on cost reduction as the major objective to one that focuses on core competence and enhanced flexibility and risk sharing. The degree of skills and experience of vendors also influence the degree of the relationships. Generally, clients are less likely to develop high-intensity relationships with

less-specialised vendors because higher degree relationships usually involve the sharing of more of the clients' critical knowledge with vendors.

Since the "soft side" of contracts has been recognised as being important, then an obvious question is how to improve elements of "soft side". Client-vendor relationships can be improved by active participation, better communication, information sharing, and senior management support (Lee and Kim, 1999). As mutual dependency rises and the age of the relationship between the client and the vendor grows, the dangers of opportunism also increase although this may be avoided with a clear contract in place (Williamson, 1973, 1989). Successful relationships between partners depend on carefully managing knowledge flows, mutual dependencies and organisational linkages (Willcocks and Choi, 1995). In the case of offshoring of ITS, the range of clients can be very broad and it is not unusual for a single ITS provider to have clients from a range of sectors and industries. For this reason, client-vendor relationships often experience complexities such as cultural incompatibilities at corporate, professional, organisational and national levels (Willcocks and Choi, 1995) — an area which has not received much attention in the literature.

Balancing the hard and soft sides. The fulfilling of mutual obligations by clients and vendors, termed as the psychological contract, also contributes to the success of an outsourcing venture (Koh et al., 2004). The mutual obligations of clients and vendors may be incorporated into a legal contract, or may be oral promises – or both. Successful balancing of contractual (hard) and relational (soft) aspects in an outsourcing venture is more likely to lead to better outsourcing outcomes. Outsourcing ventures with a balance of soft and hard sides are generally more successful because good contracts provide the basis for the development of trust. Tight contracts may be helpful in the case of commodity type services, while relational aspects become important in cases of innovative types of service outsourcing (Beaumont and Costa, 2002). Contractual and relational governance complement each other and have positive effects on exchange performance (Poppo and Zenger, 2002). The effective management of an outsourcing venture depends on an understanding of the partner's culture (Beaumont and Costa, 2002) and the influence of culture is often bidirectional (Nicholson and Sahay, 2001). Mutual understanding of each other's cultural and political issues also helps in better management of the offshoring relationship. High mutual dependency created by investments by both parties, results in increased opportunity costs of contract termination for all parties and, thus, reduces the opportunistic behaviour and increases the outsourcing success (Wang, 2002). Barthelemy (2003) also argues that outsourcing arrangements that are managed by soft sides do well on performance dimensions, while those focused on hard side management perform well on cost dimension.

Outsourcing outcome (OSO)

Despite rapid growth in international outsourcing of ITS and the resulting hype in the popular press about its dangers, there is little empirical evidence to support either the benefits or dangers of international outsourcing of ITS at the firm level. Through specialisation, outsourcing has the potential to add value to a client's activities, thereby enhancing its international competitiveness (Bryce and Useem, 1998). However, there is scant empirical evidence that outsourcing adds value to clients in the long run. Investigations of the outcome of outsourcing have been addressed in a few studies (Gilley and Rasheed, 2000; Gorg and Hanley, 2004; Grover *et al.*, 1996; Kotabe *et al.*, 1998;

Murray and Kotabe, 1999) with inconsistent findings, Grover et al. (1996) found that an effective sourcing strategy may lead to improved market performance. They argue that core services should be internalised because this can lead to further innovation and that non-core activities be sourced from independent suppliers. Murray and Kotabe (1999) advocate sourcing of non-core services from domestic external suppliers to reduce clients' investments, enhance operational flexibility and improve market performance. These findings may not be applicable to the ITS sector because, unlike the manufacturing sector, ITS are separable and can be stored, shipped and transferred across national boundaries in real time. Gorg and Hanley (2004) found no relationship between outsourcing and profitability for services, although they established a positive relationship for manufacturing firms. Similarly, Gilley and Rasheed (2000) found no direct effect of outsourcing on the overall performance of firms and argue that this may be the result of overstated benefits of outsourcing. They also refute the commonly held argument that outsourcing may lead to the loss of research and development competitiveness. The influence of outsourcing varies for firms operating in different environments following different strategies. Cost leadership firms and innovative differentiators have a positive relationship between outsourcing and performance, particularly in stable environments (Gilley and Rasheed, 2000). Nonetheless, it is clear that there is a lack of empirical evidence on the benefits of outsourcing in general and for international outsourcing of ITS in particular. Hence, it would be informative to comprehensively investigate how the international outsourcing of ITS impacts on the overall performance of client firms from both a financial and non-financial perspective in the short and long term.

Offshore service providers

The majority of international outsourcing research to date has addressed offshoring decisions, offshoring management and, to a lesser extent, offshoring outcomes. Much less research has been undertaken on OSPs (vendors), in particular, those from developing countries. This is despite the fact that the performance of the client is intricately linked to the success of the vendor and the behaviour and performance of the vendor is critical for the overall outsourcing venture. The success of an outsourcing venture depends not only on the client's needs and objectives, but also on the vendor's capabilities (Feeny *et al.*, 2005) because the vendor is an integral part of the value chain of its clients. Thus, it is in the best interest of clients to ensure that their vendors behave and perform well (Quinn, 2000). In this respect, greater understanding of the behaviour and performance of vendors is critical.

Although parallels can be drawn from the export performance literature (Aaby and Slater, 1989; Chetty and Hamilton, 1993; Katsikeas *et al.*, 2000; La *et al.*, 2005; Zou and Stan, 1998) and the competitiveness literature (Dunning, 1988; Porter, 1990), the international sourcing of ITS is a recent phenomenon and the nature of offshoring activities is different from standard export activities. The export performance and competitiveness literature has contributed to our understanding of why some firms are successful in international markets while others are not, and that the implicit assumption that the competitiveness of service firms is similar to that of manufacturing firms is misleading (Bunyaratavej *et al.*, 2007; Lindsay *et al.*, 2003; Chadee and Mattsson, 1998). Graf and Mudambi (2005) argue that OSPs are high-touch, high-tech firms where knowledge professionals play a key role in their competitiveness. Coviello *et al.* (1998)

identify the nature and skill of personnel, contacts and relationships in key markets, the nature of organisational structures and relationships in networks as key determinants of the international competitiveness of small and medium size service exporters. Amin and Hagen (1998) found the internal organisation of industries such as strategic alliances, good collaborative relationships with suppliers, technology, quality and customer satisfaction as highly significant contributors to competitiveness. They also identified employee skills, education system, corporate culture and foreign competition as significant determinants of competitiveness.

A few attempts to understand ITS providers have been undertaken at the industry and national level for India (Arora et al., 2001; Athreye, 2005); China (Kumar et al., 2005; Qu and Brocklehurst, 2003; Yang et al., 2005); Russia (Bardhan and Kroll, 2006; Hawk and McHenry, 2005); Ukraine (Zatolyuk and Allgood, 2004); Germany (Loebbecke and Jelassi, 1999); UK (Currie, 2000); North America (Levina and Ross, 2003); Finland (Leiponen, 2005) and multi-country comparisons (Chadee and Pang, 2007; McManus and Floyd, 2004). However, there are very few empirical studies that have investigated supply side (vendor) issues at the firm level for ITS providers. Currie (2000), for example, suggests that service providers may strengthen their strategic positioning by providing a range of services and consolidating their strengths through mergers, acquisitions and joint ventures. Another study of vendors by Hussey and Jenster (2003) identifies domain knowledge, expectations management, open communication, culture, contract structure, and relationship management as key issues for service providers. They argue that because service providers deal with different firms from various organisational and national cultures it becomes a challenge to manage all this in a comprehensive way. The performance of service providers has been found to be influenced through effective management of people and technology (Shee and Pathak, 2005), the development of IT professionals and management of client relationship (Levina and Ross, 2003). Although innovations are critical for success in knowledge intensive firms, these come mainly through human capital (Leiponen, 2005). In this respect Chadee and Pang (2007) found a significant positive relationship between technology strategy and the performance of ITS providers. They argue that technology competence of employees is a critical element of IT firms' technology strategy which can influence their financial performance because OSPs with quality people are more flexible, responsive and adaptable to a changing competitive environment.

Relationship management has also been found to be crucial for outsourcing success (Oza and Hall, 2005), particularly in cases involving cultural and linguistic differences. Cultural issues identified by Oza and Hall (2005) in their study of Indian OSPs include religious issues, food habits, the way different people perceive work, interpersonal communication and interpretation skills. Expectation mismatch between client and vendor is another difficulty often faced by service providers despite the presence of effective contracts. Other difficulties which hamper the performance of OSPs include language, managing transition and lack of client experience (Oza and Hall, 2005). Wang (2002) has also identified reputation as a critical element of the success of offshoring ventures and suggests that OSPs would benefit from investing in reputation building.

Theoretical underpinnings

A review of the theoretical dimensions of research in outsourcing is also valuable for identifying future research agendas on the subject. To date, research on various



aspects of ITS outsourcing has drawn from four main streams of theoretical literature; namely:

International outsourcing of IT services

- (1) strategic management;
- (2) economics;
- (3) economic sociology; and
- (4) IB.

The contribution of each theoretical perspective to the four main areas of outsourcing research considered in this paper is summarised in Table III. It is clear from this information that the strategic management literature has had a dominant influence on

the development of the empirical literature on international outsourcing for ITS. Surprisingly, however, researchers have been slow in applying IB theories in explaining ITS outsourcing, and the contribution of economics to this area of research has been limited to explaining outsourcing decisions.

Strategic management theories

Strategic management theories comprising the resource-based view (RBV) of the firm (Barney, 1991; Barney, 1986; Coyne, 1985; Lippman and Rumelt, 1982) and the relational and resource dependence approach (Dyer and Singh, 1998) constitute two main paradigms used to explain outsourcing. According to RBV, a firm's competitiveness depends on its specific resources and skills which are valuable, rare, imperfectly imitable and non-substitutable. Resources and capabilities are said to be valuable when they help a firm to improve its overall efficiency and performance. They are considered rare when they are not held by a large number of competitors and non-imitable when the firms not possessing the rare and valuable resources are unable to obtain them. A firm's competitiveness is sustained when there are no other strategically equivalent rare, valuable and non-imitable resources available to competitors, that is, they are non-substitutable (Barney, 1991). Thus, the firm's bundle of unique resources and dynamic capabilities constitute its main source of competitiveness and help the firm to earn above-normal profits.

A firm may use outsourcing strategically to acquire rare resources in order to fill the gaps between its desired capabilities and its actual capabilities (Cheon et al., 1995). Service providers help their clients avoid competitive disadvantage by freeing them to focus on their core competencies. Evidence of this is apparent from the results of a recent survey (Lewin and Peeters, 2006) where although cost reduction (97 per cent) was the main reason for firms to engage in offshoring, strategic objectives such as growth strategy (73 per cent), competitive pressure (71 per cent) and access to qualified staff (70 per cent) were also cited as major factors influencing decisions to outsource. With declining trade barriers and increased mobility of resources across national boundaries, firms have greater access to the global pool of rare resources regardless of their locations. Mahanke et al. (2005), however, argue that because service providers operate in an open and competitive market, their services are available to all competing firms and therefore outsourcing is unlikely to be a source of sustained competitive advantage. This argument ignores the "soft side" sources of competitiveness which can effectively create imperfect market conditions between vendors and clients for the benefit of the outsourcing ventures.



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Apte et al. (1997), Baden-Fuller et al. (2000), Barthelemy and Geyer Ang and Straub (1998), Apte et al. (1997), Aubert et al. (1996, 2004),

(2001, 2005), Espino-Rodríguez and (1994), Khan and Fitzgerald (2004), Kotabe et al. (1998), Lacity and Gil-Padilla (2005), Grover et al. Willcocks (1998), Lacity et al.

Barthelemy and Geyer (2005),

Bahli and Rivard (2003),

(2007), Grote and Taube (2007) and

Geyer (2001), Bunyaratavej et al.

Kakabadse and Kakabadse (2002)

Apte et al. (1997), Barthelemy and

International business

Economic sociology

Strategic management

Economic

research

Main areas Outsourcing

decision

(1996), Lewin and Peeters (2006), Loebbecke and Huyskens (2006), Coh and Venkatraman (1992), Murray and Kotabe (1999), Quelin Loebbecke and Huyskens (2006), and Duhamel (2003), Smith et al. Lewin and Peeters (2006),

(1996) and Watjatrakul (2005)

Mol et al. (2004), Nam et al. (1996),

Saunders et al. (1997), Smith et al. Pinnington and Woolcock (1995),

Quelin and Duhamel (2003),

(1996), Watjatrakul (2005) and Willcocks et al. (1995) Costa (2002) and Gopal et al. (2003) Aubert et al. (1996), Beaumont and

OSM

Barthelemy (2003), Kakabadse and Kakabadse and Kakabadse (2002)

(2004), Lee and Kim (1999), Poppo and Zenger (2002), Saunders et al. Willcocks (2002), Lacity et al. Kakabadse (2002), Kern and

and Miozzo and Grimshaw (2005)

(2003), Beaumont and Costa (2002), (2000), Gonzalez et al. (2005), Gopal Beulen et al. (2005), Domberger et al. et al. (2003), Gottschalk and Solli-Aubert et al. (2005), Barthelemy

Sæther (2005), Kern and Willcocks (2002), Koh et al. (2004), Lacity et al.

2004), Lacity and Willcocks (1998) ee (2001), Lee and Kim (1999),

(continued)

Table III.

Theoretical contributions to ITS outsourcing and offshoring research



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theoretical ne	tirest circuit be

Main

Strategic management

Pinnington and Woolcock (1995),

Wiozzo and Grimshaw (2005),

International business

Economic sociology

(1999), Tiwana and Keil (2007),

Saunders et al. (1997), Shepherd

Poppo and Zenger (2002) and

Willcocks et al. (1995), Willcocks Willcocks and Choi (1995),

Carmel and Nicholson (2005), and Kern (1998)

> Outsourcing outcome

Domberger et al. (2000), Gilley and Rasheed (2000), Gopal et al. (2003),

Kakabadse and Kakabadse (2002)

Grover et al. (1996), Kakabadse and Carmel and Nicholson (2005) and

Kakabadse (2002), Lacity et al. (2004) and Lee and Kim (1999)

Grover et al. (1996), Kotabe et al. Gorg and Hanley (2004), Gopal *et al.* (2003) and Murray and Kotabe (1999)

(1998), Lacity et al. (2004), Lacity Lee and Kim (1999), Misra (2004) and Willcocks (1998), Lee (2001),

Carmel and Nicholson (2005), and Shee and Pathak (2005)

Carmel and Nicholson (2005) and

Chadee and Pang (2007)

(1996), Hussey and Jenster (2003) and Kern and Willcocks (2002) Dayasindhu (2002), Grover et al.

Chadee and Pang (2007), Currie (2000), Dayasindhu (2002),

provider

Service

(1996), Hussey and Jenster (2003), Kern and Willcocks (2002), Koh Feeny et al. (2005), Grover et al.

et al. (2004), Leiponen (2005) and Levina and Ross (2003) Notes: The categorisation is based on the author's evaluation of the main theoretical framework of each paper; studies in the sample which use more than

Table III.

one theoretical perspective appear in more than one group; case base studies without theoretical frameworks are not included in the analysis

Economic

research

Main areas The relational and resource dependence approach (Dyer and Singh, 1998) provides valuable "soft side" theoretical insights in explaining the international outsourcing of ITS. Client firms may engage in outsourcing by forming alliances and entering into exchange relationships with vendors to acquire rare and inimitable resources. According to Dyer and Singh (1998), inter-firm resources and routines may expand beyond the firm's boundaries and become critical sources of competitiveness. They identify four critical elements of inter firm relationships which may constitute sources of competitiveness, namely, relation specific assets, knowledge sharing routines, complementary resources and capabilities, and effective governance. The management of client-vendor relationships and the context under which effective relationships lead to offshoring thus become critical elements for offshoring to succeed. In this context, alliance capitalism or strategic partnerships has been found to be beneficial in cases of very specific purpose collaborative arrangements (Dunning, 2000) and thus influences the management of relationships in an outsourcing venture.

Through specialisation, firms may enhance and sustain their competitive advantage by retaining their core resources and capabilities and offshore activities which require non-core resources for the client, but which constitute core activities for the vendor. It has been found that client firms do not necessarily lose control of the activities being outsourced (Tiwana and Keil, 2007) and that knowledgeable clients are more likely to work constructively with vendors to ensure the success of the outsourcing venture. Thus, through specialisation, the cost structures faced by client firms are likely to decline and, as such, offshoring has the potential to increase consumer welfare while also increasing productivity and efficiency.

Economic theories

The economics literature treats outsourcing as an economic transaction involving costs and benefits and the benefits of outsourcing come mainly through specialisation. However, according to transaction cost theory (Coase, 1937; Williamson, 1973, 1989, 1991) the benefits of specialisation are not necessarily realisable in cases where transaction costs are prohibitive. Thus, according to the economics perspective, firms should weigh the cost and benefits of outsourcing carefully, while also taking into consideration the transaction cost involved. When the transaction costs incurred in outsourcing are lower than the benefits, then outsourcing is economically feasible. Transaction cost theory has been used in a number of empirical studies to investigate outsourcing decisions and OSM (Aubert *et al.*, 2004; Carmel and Nicholson, 2005; Murray and Kotabe, 1999; Wang, 2002) with a particular focus on the impact of asset specificity, uncertainty, frequency of transactions, and post-contractual opportunism on various aspects of the outsourcing of ITS.

Agency cost theory (Mitnick, 1975; Ross, 1973) highlights the conflicting goals between agents (vendors) and principals (clients), and the intrinsic problems in such relations. Outsourcing decisions can also be explained by agency cost theory through the monitoring of costs by the client, bonding of costs by the outsourcer and the residual loss to the client. Like transaction cost theory (Williamson, 1991), agency cost theory has also been used to assess outsourcing decisions such as whether to outsource or to insource. Both transaction cost theory and agency cost theory are based on similar assumptions, including self-interest seeking behaviour, goal conflict, bounded rationality, information asymmetry and pre-eminence of efficiency (Eisenhardt, 1989).

Risk aversion and treating information as a commodity are additional assumptions underlying agency cost theory (Eisenhardt, 1989). Furthermore, since international outsourcing involves doing business across national boundaries, the economic and financial risks associated with changes in exchange rates, cross country interest rates and taxation standards can significantly increase the transaction and agency costs of an outsourcing venture and erode any competitive advantage likely to be had from such a venture.

Economic sociology theories

The economic sociology literature (Granovetter, 2005) asserts that a firm's economic behaviour is closely embedded into structures of social relations for three reasons: information, ability to punish or reward, and trust. People rely on information from the people they know and not on others and, thus, social relationships influence the flow and the quality of information. Trust emerges from such relationships and presence of rewards and punishments. However, Granovetter (1985) cautioned that social relations might be a necessary condition for trust and trustworthy behaviour, but they are not sufficient conditions. In the case of future uncertainties, human inability to foresee the future, long contracts, and self-interest seeking behaviours may provide competitiveness. The empirical literature on ITS outsourcing supports complementing contract-based OSM with relational management (Barthelemy, 2003; Lacity *et al.*, 2004; Poppo and Zenger, 2002; Willcocks and Kern, 1998) to improve the success of the outsourcing venture.

International business theories

By its very nature, international outsourcing or offshoring falls largely in the IB domain and the relatively small number of papers on the subject utilising IB as their theoretical frameworks is surprising. This may be because IB theories do not instantly lend themselves to analysing international outsourcing. The contributions of IB theories in explaining international outsourcing have been from two main sources; namely Porter's (1990) competitive advantage framework and Dunning's (1980, 1995) eclectic paradigm. Porter's competitive advantage focuses on the conditions under which firms are born and compete. Although this framework is helpful, it has some inherent limitations in explaining international outsourcing. This is because international outsourcing is often characterised by firms from small developing countries where domestic demand conditions are not relevant (Cartwright, 1993), specialise in ITS (Kapur and Ramamurti, 2001), and have global orientations (Knight *et al.*, 2000; Knight and Cavusgil, 1996). Porter's framework has been shown to be inadequate in explaining the competitiveness of firms with the characteristics above.

Dunning's (1980, 1995, 2001), Eclectic Paradigm explains the "why" (Ownership advantages), "where" (Location advantages), and "how" (Internalisation advantages) of FDI and MNE activities. OLI also helps to explain non-FDI activities such as why client firms choose outsourcing, from whom and from where services can be outsourced. Dunning (2000) argues that alliance capitalism or strategic partnership is particularly helpful in a continuous knowledge sharing relationship, in controlling and monitoring the ownership of a set of property rights and in cases of very specific purpose collaborative arrangements. Although Dunning's OLI framework adds to our understanding of various aspects of international outsourcing, its primary purpose was to explain FDI and as such remains limited in fully explaining international outsourcing. Because of the limited



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contribution of IB theories to our understanding of international outsourcing, Doh (2005) argues that offshoring has implications for IB and strategic management theories and these theories need to be re-specified in the current business environment where diversification of MNE activities has taken place at a rapid pace.

Agenda for future research

Despite the rapid growth in international outsourcing of ITS, research on the subject has not kept pace with developments in this rapidly growing IB activity. The development of empirical research on the subject has been asymmetrical with 69 of the 78 papers in the sample focusing on outsourcing decisions and OSM. Furthermore, the majority of research on international sourcing of ITS focuses on the client. Thus, an opportunity exists to study offshoring with a particular focus on the OSPs (vendors). OSPs are integral partners in any ITS offshoring venture and, as strategic partners, their performance is critical to the success of the venture. Based on the review of the empirical literature in this paper, several areas of research are shown in Figure 2 that may be further explored by researchers to increase our understanding of international sourcing. These areas are not exhaustive but, rather, provide an illustrative guide for future researchers to explore.

The first area of research relates to international sourcing decisions. Although several motivators and barriers to outsourcing have been identified in the literature, there are no empirical investigations of their influence on the outsourcing ventures' performance. Which of the motivators result into benefits in real forms, and to what extent? Which of the barriers are real and how can the associated risks be minimised? What are the sources of risks and how can they be managed? From a theoretical standpoint, it is still unclear how different theories explain outsourcing decisions and their limitations. Furthermore, how do firms decide on the extent or level of offshoring, from where, and from whom?

A substantial amount of research exists in the area of OSM which focuses largely on various forms of contracts, relationships and a combination of both. This area of research may be further extended to investigate the implications of incentive and non-incentive based contracts, comparisons of contract types, evolution of client and vendor relationships, the possible risk factors in such relationships and how these can be minimised. How and to what extent do cross cultural differences influence OSM? How do local and global players interact and influence each other? The influence of the

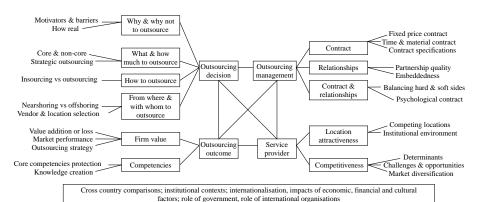


Figure 2. International outsourcing of ITS: research gaps



depth of relationships on the effective management of offshoring ventures is also not well understood. Which governance mode (legal contracts, relational governance or psychological contracts) is more suitable for managing outsourcing ventures? Are these governance modes complementary? How does their significance change over time as the vendor-client relationships evolve? How do they affect the overall outcome of the outsourcing venture? What causes failure in an outsourcing venture and how can this be managed and avoided? What is the impact of asymmetrical resources, dependency and power relations in strategic outsourcing venture alliances on the overall performance of the venture? Answers to these questions should improve our understanding of the dynamics between outsourcing partners and the management of outsourcing ventures.

Empirical investigation of the impact of outsourcing strategy on firm performance is another neglected area of research. Further research could address the following questions: how does the scope, depth and level of outsourcing affect the performance of clients? What are the moderators of outsourcing strategy and performance relationships? How do various strategies such as total sourcing vs selective sourcing, core vs non-core sourcing, near vs offshore sourcing affect the performance of client firms? Furthermore, there is an opportunity to develop and test a comprehensive outsourcing strategy taxonomy on performance. Do firms which outsource perform differently from those which do not? Other questions worthy of investigation include: Does outsourcing success vary across cultures or countries and why? Does outsourcing enhance or reduce a client firm's value in the long run? How can firms sustain their competitiveness through outsourcing part of their activities?

The OSP's perspectives in outsourcing ventures remain an underdeveloped area of research despite the fact that they are integral parts of the value chain of their clients. Given that outsourcing of ITS to offshore vendors is a relatively recent phenomenon involving firms from less developed countries quickly becoming global players, an interesting question arises as to how these firms develop and compete in international markets. The literature on international outsourcing to date has tended to focus mostly on, or draw from, the experience of manufacturing firms from advanced industrialised countries. Generally, these firms are well endowed in resources and have developed within more or less similar institutional environments. However, firms from developing countries are generally resource poor and their establishment, development and international expansion have taken place within an environment different from those found in western economies. As OSPs are mostly and increasingly from developing countries, opportunities exist to address the following questions: What are the sources of competitiveness of OSPs from developing countries? How do OSPs internationalise and become global leaders? How does the performance and behaviour of OSPs from developing countries vary across countries and cultures? What competitive strategies do they follow in order to grow and sustain their business? What theories explain the emergence of firms from developing countries rapidly establishing themselves as global leaders? What role do governments and institutions play in the development and growth of OSPs from developing countries? Answers to these questions may also help improve our understanding of the internationalisation of firms from developing countries in general.

Summary and conclusions

The outsourcing of ITS is the result of visible shifts in the strategy of multinational firms from the diversification of production activities during the 1960s to outsourcing



during the 1990s. The widespread availability and use of more affordable advanced information and communication technologies has made outsourcing more viable for a larger number of firms. Furthermore, the progressive liberalisation of services trade under the World Trade Organisation's General Agreement on Trade in Services is likely to accelerate the intensity of international outsourcing activities across national borders. An interesting feature of outsourcing for ITS is that a growing number of firms from advanced industrialised countries outsource an increasing range and variety of IT functions to firms mostly located in developing countries. India, China, the Philippines and Malaysia have established themselves as leading offshore service centres. The scale of international outsourcing of ITS, its rapid growth, and development has also been controversial, particularly on implications for the economies of client firms. Thus, more research on the subject should improve our understanding of this complex phenomenon and assist policy makers with the design and implementation of appropriate policies for the sound development and growth of the sector.

The review of the empirical literature suggests that in its initial stages of development, international outsourcing research has focused on four main areas, namely, outsourcing decision, OSM, outsourcing outcome and, to a lesser extent, on OSPs. From a theoretical perspective, studies to date have tended to draw primarily from four main streams, namely, economics, strategic management, IB and, to a lesser extent, economic sociology.

As the practice of outsourcing becomes more intense, it is likely to give rise to new issues and challenges for researchers to address. The paper identifies a number of unanswered questions which provide valuable avenues for future research. As new problems arise, researchers will also need to explore how new theoretical lenses from areas such as international management, economic geography, finance and accounting can complement strategic management and IB theories to improve our understanding of international outsourcing.

The studies included in this paper constitute a representative sample of empirical investigations on the subject to date. While care was taken to ensure that the list is complete, it is important to stress that the objective was to limit our review to empirical refereed published journal articles only. As such, it is acknowledged that the list may not be exhaustive as industry and government reports are not taken into consideration. International organisations such as the OECD, UNCTAD, IMF and numerous government agencies have valuable research reports on the subject and insights from these reports would add to our understanding of the emerging research landscape on international outsourcing for ITS.

Notes

- For the purpose of this paper, ITS include software development services, system services and a broader range of IT-supported business services commonly referred to as IT-enabled services or BPO services.
- 2. We are grateful to one reviewer for providing us with this perspective.

References

Aaby, N.E. and Slater, S.F. (1989), "Management influences on export performance: a review of the empirical literature 1978-88", *International Marketing Review*, Vol. 6 No. 4, pp. 7-26.



International

- Amin, S.G. and Hagen, A.F. (1998), "Strengthening American international competitiveness: a recommended strategy", *American Business Review*, Vol. 16 No. 1, pp. 94-104.
- Ang, S. and Straub, D.W. (1998), "Production and transaction economies and IS outsourcing: a study of the US banking industry", MIS Quarterly, Vol. 22 No. 4, pp. 535-52.
- Antonucci, Y.L. and Tucker, J.J.I. (1998), "The pros and cons of IT outsourcing", *Journal of Accountancy*, Vol. 185 No. 6, pp. 26-31.
- Apte, U.M., Sobol, M.G., Hanaoka, S., Shimada, T., Saarinen, T., Salmela, T. and Vepsalainen, A.P.J. (1997), "IS outsourcing practices in the USA, Japan and Finland: a comparative study", *Journal of Information Technology*, Vol. 12 No. 4, pp. 289-304.
- Arora, A., Arunachalam, V.S., Asundi, J. and Fernandes, R. (2001), "The Indian software services industry", Research Policy, Vol. 30 No. 8, pp. 1267-87.
- Athreye, S.S. (2005), "The Indian software industry and its evolving service capability", *Industrial and Corporate Change*, Vol. 14 No. 3, pp. 393-419.
- Aubert, B.A., Patry, M. and Rivard, S. (2005), "A framework for information technology outsourcing risk management", *Database for Advances in Information Systems*, Vol. 36 No. 4, pp. 9-28.
- Aubert, B.A., Rivard, S. and Patry, M. (1996), "A transaction cost approach to outsourcing behavior: some empirical evidence", *Information & Management*, Vol. 30 No. 2, pp. 51-64.
- Aubert, B.A., Rivard, S. and Patry, M. (2004), "A transaction cost model of IT outsourcing", Information & Management, Vol. 41 No. 7, pp. 921-32.
- Baden-Fuller, C., Targett, D. and Hunt, B. (2000), "Outsourcing to outmanoeuvre: outsourcing re-defines competitive strategy and structure", *European Management Journal*, Vol. 18 No. 3, pp. 285-95.
- Bahli, B. and Rivard, S. (2003), "The information technology outsourcing risk: a transaction cost and agency theory-based perspective", *Journal of Information Technology*, Vol. 18 No. 3, pp. 211-21.
- Bardhan, A.D. and Kroll, C.A. (2006), "Competitiveness and an emerging sector: the Russian software industry and its global linkages", *Industry and Innovation*, Vol. 13 No. 1, pp. 69-95.
- Barney, J.B. (1986), "Types of competition and the theory of strategy: toward an integrative framework", *Academy of Management Review*, Vol. 11 No. 4, pp. 791-800.
- Barney, J.B. (1991), "Firm resources and sustained competitive advantage", *Journal of Management*, Vol. 17 No. 1, pp. 99-120.
- Barthelemy, J. (2001), "The hidden costs of IT outsourcing", MIT Sloan Management Review, Vol. 42 No. 3, pp. 60-9.
- Barthelemy, J. (2003), "The hard and soft sides of IT outsourcing management", *European Management Journal*, Vol. 21 No. 5, pp. 539-48.
- Barthelemy, J. and Geyer, D. (2001), "IT outsourcing: evidence from France and Germany", European Management Journal, Vol. 19 No. 2, pp. 195-202.
- Barthelemy, J. and Geyer, D. (2005), "An empirical investigation of IT outsourcing versus quasi-outsourcing in France and Germany", *Information & Management*, Vol. 42 No. 4, pp. 533-42.
- Beaumont, N. and Costa, C. (2002), "Information technology outsourcing in Australia", Information Resources Management Journal, Vol. 15 No. 3, pp. 14-31.
- Beulen, E., Fenema, P.V. and Currie, W. (2005), "From application outsourcing to infrastructure management: extending the offshore outsourcing service portfolio", *European Management Journal*, Vol. 23 No. 2, pp. 133-44.



- Bryce, D.J. and Useem, M. (1998), "The impact of corporate outsourcing on company value", European Management Journal, Vol. 16 No. 6, pp. 635-43.
- Bunyaratavej, K., Hahn, E.D. and Doh, J.P. (2007), "International offshoring of services: a parity study", *Journal of International Management*, Vol. 13 No. 1, pp. 7-21.
- Carmel, E. and Nicholson, B. (2005), "Small firms and offshore software outsourcing: high transaction costs and their mitigation", *Journal of Global Information Management*, Vol. 13 No. 3, pp. 33-54.
- Cartwright, W.R. (1993), "Multiple linked diamonds and the international competitiveness of export-dependent industries: the New Zealand experience", *Management International Review*, Vol. 33 No. 2, pp. 55-70.
- Chadee, D. and Mattsson, J. (1998), "Do service and merchandise exporters behave and perform differently? A New Zealand investigation", European Journal of Marketing, Vol. 32 Nos 9/10, pp. 830-42.
- Chadee, D. and Pang, B. (2007), "Technology strategy and performance: a study of information technology service providers from selected Asian countries", *Service Business*, Vol. 2 No. 2, pp. 109-26.
- Cheon, M.J., Grover, V. and Teng, J.T.C. (1995), "Theoretical perspectives on the outsourcing of information systems", *Journal of Information Technology*, Vol. 10 No. 4, pp. 209-19.
- Chetty, S.K. and Hamilton, R.T. (1993), "Firm-level determinants of export performance: a meta-analysis", *International Marketing Review*, Vol. 10 No. 3, pp. 26-35.
- Coase, R.H. (1937), "The nature of firm", *Economica*, Vol. 4 No. 16, pp. 386-405.
- Costa, C. (2001), "Information technology outsourcing in Australia: a literature review", Information Management & Computer Security, Vol. 9 No. 5, pp. 213-24.
- Coviello, N.E., Ghauri, P.N. and Martin, K.A.-M. (1998), "International competitiveness: empirical findings from SME service firms", *Journal of International Marketing*, Vol. 6 No. 2, pp. 8-27.
- Coyne, K.P. (1985), "Sustainable competitive advantage what it is, what it isn't", *Business Horizons*, Vol. 29, pp. 54-61.
- Currie, W. (2000), "The supply-side of IT outsourcing: the trend towards mergers, acquisitions and joint ventures", *International Journal of Physical Distribution & Logistics Management*, Vol. 30 Nos 3/4, pp. 238-54.
- Dayasindhu, N. (2002), "Embeddedness, knowledge transfer, industry clusters and global competitiveness: a case study of the Indian software industry", *Technovation*, Vol. 22 No. 9, pp. 551-60.
- Doh, J.P. (2005), "Offshore outsourcing: implications for international business and strategic management theory and practice", *The Journal of Management Studies*, Vol. 42 No. 3, pp. 695-704.
- Domberger, S., Fernandez, P. and Fiebig, D.G. (2000), "Modelling the price, performance and contract characteristics of IT outsourcing", *Journal of Information Technology*, Vol. 15 No. 2, pp. 107-18.
- Dunning, J.H. (1980), "Toward an eclectic theory of international production: some empirical tests", *Journal of International Business Studies*, Vol. 11 No. 1, pp. 9-31.
- Dunning, J.H. (1988), "The electric paradigm of international production: a restatement and some possible extensions", *Journal of International Business Studies*, Vol. 19 No. 1, pp. 1-32.
- Dunning, J.H. (1995), "Reappraising the eclectic paradigm in an age of alliance capitalism", *Journal of International Business Studies*, Vol. 26 No. 3, pp. 461-92.

International

of MNE activity", *International Business Review*, Vol. 9 No. 2, pp. 163-90.

Dunning, J.H. (2001), "The eclectic (OLI) paradigm of international production: past, present and future", *International Journal of the Economics of Business*, Vol. 8 No. 2, pp. 173-90.

- Dyer, J.H. and Singh, H. (1998), "The relational view: cooperative strategy and sources of interorganizational competitive advantage", *The Academy of Management Review*, Vol. 23 No. 4, pp. 660-79.
- Earl, M.J. (1996), "The risks of outsourcing IT", Sloan Management Review, Vol. 37 No. 3, pp. 26-32.
- Eisenhardt, K.M. (1989), "Agency theory: an assessment and review", *Academy of Management Review*, Vol. 14 No. 1, pp. 57-74.
- EITO (2006), "ICT markets, March 2006", available at: www.eito.com/download/ EITO%202006%20-%20ICT%20market%20March%202006.pdf (accessed 11 April 2006).
- Elmuti, D., Kathawala, Y. and Monippallil, M. (1998), "Outsourcing to gain a competitive advantage", *Industrial Management*, Vol. 40 No. 3, pp. 20-4.
- Espino-Rodríguez, T.F. and Gil-Padilla, A.M. (2005), "Determinants of information systems outsourcing in hotels from the resource-based view: an empirical study", *The International Journal of Tourism Research*, Vol. 7 No. 1, pp. 35-47.
- Feeny, D., Lacity, M. and Willcocks, L.P. (2005), "Taking the measure of outsourcing providers", MIT Sloan Management Review, Vol. 46 No. 3, pp. 41-8.
- Gartner (2005), "Forecast: IT services, worldwide, 2003-2009", available at: http://gartner.lbr.auckland.ac.nz/research/130900/130990/130990.pdf (accessed 30 September 2005).
- Gilley, K.M. and Rasheed, A. (2000), "Making more by doing less: an analysis of outsourcing and its effects on firm performance", *Journal of Management*, Vol. 26 No. 4, pp. 763-90.
- Gonzalez, R., Gasco, J. and Llopis, J. (2005), "Information systems outsourcing success factors: a review and some results", *Information Management & Computer Security*, Vol. 13 No. 5, pp. 399-418.
- Gopal, A., Sivaramakrishnan, K., Krishnan, M.S. and Mukhopadhyay, T. (2003), "Contracts in offshore software development: an empirical analysis", *Management Science*, Vol. 49 No. 12, pp. 1671-83.
- Gorg, H. and Hanley, A. (2004), "Does outsourcing increase profitability?", Economic and Social Review, Vol. 35 No. 3, pp. 267-87.
- Gottschalk, P. and Solli-Sæther, H. (2005), "Critical success factors from IT outsourcing theories: an empirical study", *Industrial Management + Data Systems*, Vol. 105 Nos 5/6, pp. 685-702.
- Graf, M. and Mudambi, S.M. (2005), "The outsourcing of IT-enabled business processes: a conceptual model of the location decision", *Journal of International Management*, Vol. 11 No. 2, pp. 253-68.
- Granovetter, M. (1985), "Economic action and social structure: the problem of embeddedness", The American Journal of Sociology, Vol. 91 No. 3, pp. 481-510.
- Granovetter, M. (2005), "The impact of social structure on economic outcomes", *The Journal of Economic Perspectives*, Vol. 19 No. 1, pp. 33-50.
- Grote, M.H. and Taube, F.A. (2007), "When outsourcing is not an option: international relocation of investment bank research- or isn't it?", *Journal of International Management*, Vol. 13 No. 1, pp. 57-77.
- Grover, V. and Teng, J.T.C. (1992), "The decision to outsource information systems functions", Journal of Systems Management, Vol. 44 No. 11, pp. 34-8.



- Grover, V., Cheon, M.J. and Teng, J.T.C. (1994), "A descriptive study on the outsourcing of information systems functions", *Information & Management*, Vol. 27 No. 1, pp. 33-44.
- Grover, V., Cheon, M.J. and Teng, J.T.C. (1996), "The effect of service quality and partnership on the outsourcing of information systems functions", *Journal of Management Information Systems*, Vol. 12 No. 4, pp. 89-116.
- Harzing, A.W.K. (2007), Journal Quality List, 32nd ed., available at: www.Harzing.com. (accessed 26 September 2008).
- Hawk, S. and McHenry, W. (2005), "The maturation of the Russian offshore software industry", Information Technology for Development, Vol. 11 No. 1, pp. 31-57.
- Hoecht, A. and Trott, P. (2006), "Innovation risks of strategic outsourcing", *Technovation*, Vol. 26 Nos 5/6, pp. 672-81.
- Hu, Q., Saunders, C. and Gebelt, M. (1997), "Research report: diffusion of information systems outsourcing: a re-evaluation of influence sources", *Information Systems Research*, Vol. 8 No. 3, pp. 288-301.
- Hussey, D. and Jenster, P. (2003), "Outsourcing: the supplier viewpoint", Strategic Change, Vol. 12 No. 1, pp. 7-20.
- Jennings, D. (2002), "Strategic sourcing: benefits, problems and a contextual model", Management Decision, Vol. 40 Nos 1/2, pp. 26-34.
- Kakabadse, A. and Kakabadse, N. (2002), "Trends in outsourcing: contrasting USA and Europe", European Management Journal, Vol. 20 No. 2, pp. 189-98.
- Kapur, D. and Ramamurti, R. (2001), "India's emerging competitive advantage in services", The Academy of Management Executive, Vol. 15 No. 2, pp. 20-33.
- Katsikeas, C.S., Leonidou, L.C. and Morgan, N.A. (2000), "Firm-level export performance assessment: review, evaluation, and development", Academy of Marketing Science. Journal, Vol. 28 No. 4, pp. 493-511.
- Kearney, A.T. (2004), "Making offshore decisions: A.T. Kearney's 2004 offshore location attractiveness index", available at: www.atkearney.com/main.taf?p=5,3,1,75 (accessed 10 September 2005).
- Kearney, A.T. (2006), "Building the optimal global footprint: A.T. Kearney's global services location index", available at: www.atkearney.com/shared_res/pdf/GSLI-2006_S.pdf (accessed 2 March 2007).
- Kedia, B.L. and Lahiri, S. (2007), "International outsourcing of services: a partnership model", Journal of International Management, Vol. 13 No. 1, pp. 22-37.
- Kern, T. and Willcocks, L. (2002), "Exploring relationships in information technology outsourcing: the interaction approach", European Journal of Information Systems, Vol. 11 No. 1, pp. 3-19.
- Khan, N. and Fitzgerald, G. (2004), "Dimensions of offshore outsourcing business models", Journal of Information Technology Cases and Applications, Vol. 6 No. 3, pp. 35-50.
- Knight, G.A. and Cavusgil, S.T. (1996), "The born global firm: a challenge to traditional internationalization theory", *Advances in International Marketing*, Vol. 8, pp. 11-26.
- Knight, G.A., Madsen, T.K., Servais, P. and Rasmussen, E. (1999), "The born global firm: description and empirical investigation in Europe and the United States", Winter Conference, American Marketing Association, San Diego, CA.
- Koh, C., Ang, S. and Straub, D.W. (2004), "IT outsourcing success: a psychological contract perspective", *Information Systems Research*, Vol. 15 No. 4, pp. 356-73.

- Kotabe, M., Murray, J.Y. and Javalgi, R.G. (1998), "Global sourcing of services and market performance: an empirical investigation", *Journal of International Marketing*, Vol. 6 No. 4, pp. 10-31.
- Kshetri, N. (2007), "Institutional factors affecting offshore business process and information technology outsourcing", Journal of International Management, Vol. 13 No. 1, pp. 38-56.
- Kumar, S., Jamieson, J. and Sweetman, M. (2005), "Software industry in the fastest emerging market: challenges and opportunities", *International Journal of Technology Management*, Vol. 29 Nos 3/4, pp. 263-79.
- La, V.Q., Patterson, P.G. and Styles, C.W. (2005), "Determinants of export performance across service types: a conceptual model", *Journal of Services Marketing*, Vol. 19 No. 6, pp. 379-91.
- Lacity, M.C. and Hirschheim, R. (1993), "The information systems outsourcing bandwagon", Sloan Management Review, Vol. 35 No. 1, pp. 73-86.
- Lacity, M.C. and Willcocks, L.P. (1996), "The value of selective IT sourcing", Sloan Management Review, Vol. 37 No. 3, pp. 13-25.
- Lacity, M.C. and Willcocks, L.P. (1998), "An empirical investigation of information technology sourcing practices: lessons from experience", MIS Quarterly, Vol. 22 No. 3, pp. 363-408.
- Lacity, M.C., Willcocks, L.P. and Feeny, D.F. (1996), "The value of selective IT sourcing", Sloan Management Review, Vol. 37 No. 3, pp. 13-25.
- Lacity, M.C., Willcocks, L.P. and Feeny, D.F. (2004), "Commercializing the back office at Lloyds of London: outsourcing and strategic partnerships revisited", *European Management Journal*, Vol. 22 No. 2, pp. 127-40.
- Lee, J.-N. (2001), "The impact of knowledge sharing, organizational capability and partnership quality on is outsourcing success", *Information & Management*, Vol. 38 No. 5, pp. 323-35.
- Lee, J.-N. and Kim, Y.-G. (1999), "Effect of partnership quality on IS outsourcing: conceptual framework and empirical validation", *Journal of Management Information Systems*, Vol. 15 No. 4, pp. 29-61.
- Leiponen, A. (2005), "Organization of knowledge and innovation: the case of Finnish business services", *Industry and Innovation*, Vol. 12 No. 2, pp. 185-203.
- Levina, N. and Ross, J.W. (2003), "From the vendor's perspective: exploring the value proposition in information technology outsourcing", MIS Quarterly, Vol. 27 No. 3, pp. 331-64.
- Levy, D.L. (2005), "Offshoring in the new global political economy", *The Journal of Management Studies*, Vol. 42 No. 3, pp. 685-93.
- Lewin, A.Y. and Peeters, C. (2006), "The top-line allure of offshoring", *Harvard Business Review*, Vol. 84 No. 3, pp. 22-5.
- Lindsay, V., Chadee, D., Mattsson, J., Johnston, R. and Millett, B. (2003), "Relationships, the role of individuals and knowledge flows in the internationalisation of service firms", *International Journal of Service Industry Management*, Vol. 14 No. 1, pp. 7-35.
- Lippman, S. and Rumelt, R. (1982), "Uncertain imitability: an analysis of interfirm differences in efficiency under competition", *Bell Journal of Economics*, Vol. 13 No. 2, pp. 418-38.
- Loebbecke, C. and Huyskens, C. (2006), "What drives netsourcing decisions? An empirical analysis", European Journal of Information Systems, Vol. 15 No. 4, pp. 415-23.
- Loebbecke, C. and Jelassi, T. (1999), "Business strategies and IT outsourcing: the case of Compunet", *European Management Journal*, Vol. 17 No. 6, pp. 615-24.
- Loh, L. and Venkatraman, N. (1992), "Diffusion of information technology outsourcing: influence sources and the Kodak effect", *Information Systems Research*, Vol. 3 No. 4, pp. 334-58.



- McFarlan, F.W. and Nolan, R.L. (1995), "How to manage an IT outsourcing alliance", *Sloan Management Review*, Vol. 36 No. 2, pp. 9-23.
- McManus, J. and Floyd, D. (2004), "A macro and micro perspective of the global software industry with specific orientation to India, China and the Philippines", *Asia Pacific Journal of Marketing and Logistics*, Vol. 16 No. 4, pp. 52-64.
- Madsen, T.K. (1987), "Empirical export performance studies: a review of conceptualizations and findings", in Cavusgil, S.T. and Axinn, C. (Eds), Advances in International Marketing, Vol. 2, JAI Press, Greenwich, CT, pp. 177-98.
- Mahnke, V., Overby, M.L. and Vang, J. (2005), "Strategic outsourcing of IT services: theoretical stocktaking and empirical challenges", *Industry and Innovation*, Vol. 12, pp. 205-53.
- Miozzo, M. and Grimshaw, D. (2005), "Modularity and innovation in knowledge-intensive business services: IT outsourcing in Germany and the UK", *Research Policy*, Vol. 34 No. 9, pp. 1419-39.
- Misra, R.B. (2004), "Global IT outsourcing: metrics for success of all parties", *Journal of Information Technology Cases and Applications*, Vol. 6 No. 3, pp. 21-34.
- Mitnick, B. (1975), "The theory of agency: the policing 'paradox' and regulatory behaviour", *Public Choice*, Vol. 24, pp. 27-42.
- Mol, M.J., van Tulder, R.J.M. and Beije, P.R. (2005), "Antecedents and performance consequences of international outsourcing", *International Business Review*, Vol. 14 No. 5, pp. 599-617.
- Mol, M.J., Pauwels, P., Matthyssens, P. and Quintens, L. (2004), "A technological contingency perspective on the depth and scope of international outsourcing", *Journal of International Management*, Vol. 10 No. 2, pp. 287-305.
- Murray, J.Y. and Kotabe, M. (1999), "Sourcing strategies of US service companies: a modified transaction-cost analysis", *Strategic Management Journal*, Vol. 20 No. 9, pp. 791-809.
- Nam, K., Rajagopalan, S., Rao, H.R. and Chaudhury, A. (1996), "A two-level investigation of information systems outsourcing", *Association for Computing Machinery. Communications of the ACM*, Vol. 39 No. 7, pp. 36-44.
- Nasscom (2005), "The strategic review", available at: www.nasscom.org/strategic2005.asp
- Nicholson, B. and Sahay, S. (2001), "Some political and cultural issues in the globalisation of software development: case experience from Britain and India", *Information and Organization*, Vol. 11 No. 1, pp. 25-43.
- Niederman, F. (2005), "International business and MIS approaches to multinational organizational research: the cases of knowledge transfer and IT workforce outsourcing", *Journal of International Management*, Vol. 11 No. 2, pp. 187-200.
- Oza, N.V. and Hall, T. (2005), "Difficulties in managing offshore software outsourcing relationships: an empirical analysis of 18 high maturity Indian software companies", *Journal of Information and Software Technology*, Vol. 48, pp. 345-54.
- Palvia, S.C.J. (2004), "Global outsourcing of IT and IT enabled services: a framework for choosing an (outsourcee) country", *Journal of Information Technology Cases and Applications*, Vol. 6 No. 3, pp. 1-20.
- Pinnington, A. and Woolcock, P. (1995), "How far is IS/IT outsourcing enabling new organizational structure and competences?", *International Journal of Information Management*, Vol. 15 No. 5, pp. 353-65.
- Poppo, L. and Zenger, T. (2002), "Do formal contracts and relational governance function as substitutes or complements?", *Strategic Management Journal*, Vol. 23 No. 8, pp. 707-25.
- Porter, M.E. (1990), "The competitive advantage revisited", *Harvard Business Review*, Vol. 65 No. 3, pp. 43-59.



International

- Prahalad, C.K. and Hamel, G. (1990), "The core competence of the corporation", *Harvard Business Review*, Vol. 68 No. 3, pp. 79-91.
- Qu, Z. and Brocklehurst, M. (2003), "What will it take for China to become a competitive force in offshore outsourcing? An analysis of the role of transaction costs in supplier selection", *Journal of Information Technology*, Vol. 18 No. 1, pp. 53-67.
- Quelin, B. and Duhamel, F. (2003), "Bringing together strategic outsourcing and corporate strategy: outsourcing motives and risks", *European Management Journal*, Vol. 21 No. 5, pp. 647-61.
- Quinn, J.B. (2000), "Outsourcing innovation: the new engine of growth", Sloan Management Review, Vol. 41 No. 4, pp. 13-28.
- Quinn, J.B. and Hilmer, F.G. (1994), "Strategic outsourcing", Sloan Management Review, Vol. 35 No. 4, pp. 43-55.
- Ross, S. (1973), "Economic theory of agency: the principal's problem", *American Economic Review*, Vol. 63, pp. 134-9.
- Saunders, C., Gebelt, M. and Hu, Q. (1997), "Achieving success in information systems outsourcing", *California Management Review*, Vol. 39 No. 2, pp. 63-79.
- Serapio, M.G. (2005), "International outsourcing in information technology", Research Technology Management, Vol. 48 No. 4, pp. 6-26.
- Shee, H.K. and Pathak, R.D. (2006), "Managing people and technology for enhancing competitiveness: software industry perspective", *Journal of Transnational Management*, Vol. 11 No. 1, p. 65.
- Shepherd, A. (1999), "Outsourcing IT in a changing world", European Management Journal, Vol. 17 No. 1, pp. 64-84.
- Smith, M.A., Mitra, S. and Narasimhan, S. (1996), "Offshore outsourcing of software development and maintenance: a framework for issues", *Information & Management*, Vol. 31 No. 3, pp. 165-75.
- Tiwana, A. and Keil, M. (2007), "Does peripheral knowledge complement control? An empirical test in technology outsourcing alliances", *Strategic Management Journal*, Vol. 28 No. 6, pp. 623-43.
- Wang, E.T.G. (2002), "Transaction attributes and software outsourcing success: an empirical investigation of transaction cost theory", *Information Systems Journal*, Vol. 12 No. 2, pp. 153-81.
- Watjatrakul, B. (2005), "Determinants of IS sourcing decisions: a comparative study of transaction cost theory versus the resource-based view", *The Journal of Strategic Information Systems*, Vol. 14 No. 4, pp. 389-415.
- Willcocks, L.P. and Choi, C.J. (1995), "Co-operative partnership and total IT outsourcing: from contractual obligation to strategic alliance?", *European Management Journal*, Vol. 13 No. 1, pp. 67-78.
- Willcocks, L.P. and Kern, T. (1998), "IT outsourcing as strategic partnering: the case of the UK inland revenue", *European Journal of Information Systems*, Vol. 7, pp. 29-45.
- Willcocks, L., Lacity, M. and Fitzgerald, G. (1995), "Information technology outsourcing in Europe and the USA: assessment issues", *International Journal of Information Management*, Vol. 15 No. 5, pp. 333-51.
- Williamson, O.E. (1973), "Markets and hierarchies: some elementary considerations", *American Economic Review*, Vol. 63 No. 2, pp. 316-25.
- Williamson, O.E. (1989), "Transaction cost economics", in Schmalensee, R. and Willig, R.D. (Eds), Handbook of Industrial Organisation, Elsevier Science Publishers, Amsterdam, pp. 136-78.



- Williamson, O.E. (1991), "Strategizing, economizing, and economic organization", Strategic Management Journal, Vol. 12, pp. 75-94.
- Yang, D., Ghauri, P. and Sonmez, M. (2005), "Competitive analysis of the software industry in China", *International Journal of Technology Management*, Vol. 29 Nos 1/2, pp. 64-91.
- Zatolyuk, S. and Allgood, B. (2004), "Evaluating a country for offshore outsourcing: software development providers in Ukraine", *Information Systems Management*, Vol. 21 No. 3, pp. 28-33.
- Zou, S. and Stan, S. (1998), "The determinants of export performance: a review of the empirical literature between 1987 and 1997", *International Marketing Review*, Vol. 15 No. 5, pp. 333-56.

Further reading

- Barney, J., Wright, M. and Ketchen, D.J. Jr (2001), "The resource-based view of the firm: ten years after 1991", *Journal of Management*, Vol. 27 No. 6, pp. 625-41.
- McKinsey (2005), "Extending India's leadership of the global IT and BPO industries", available at: www.nasscom.org/download/Mckinsey_study_2005_Executive_summary.pdf (accessed 30 March 2006).
- Madsen, T.K. (1998), "Executive insights: managerial judgement of export performance", *Journal of International Marketing*, Vol. 6 No. 3, pp. 82-93.

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