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# Information Technology Sourcing Research: Critique, Lessons and Prospects

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# **Information Technology Sourcing Research: Critique, Lessons and Prospects**

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# Paper for AMCIS

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# **Information Technology Sourcing Research: Critique, Lessons and Prospects**

#### **ABSTRACT**

The paper complements earlier reviews by further examining thirteen years of academic IT sourcing studies. It finds them rich with much empirical survey and case research findings, but still marked by inconsistencies, a plethora of concepts, research approaches, ambivalent terminology, and a lack of consistency and common focus across different research groupings. It then looks at a limited set of internally consistent research studies carried out by the authors to come to more positive conclusions about how in detail, organizations have moved up the IT sourcing learning curve. This learning is classified under four headings: assessment of the back-office portfolio; evaluation of market options; the crafting of outsourcing arrangements and the management of external relationships. The paper concludes by offering five areas for future research in IT sourcing.

#### **ABOUT THE AUTHORS**

Leslie Willcocks is Professor Of Technology, Work and Globalization at The London School Of Economics and Political Science. He is also Associate Fellow at Templeton College University of Oxford, and holds visiting chairs at Erasmus and Melbourne Universities He has published 26 books and over 160 refereed papers in the IS field, including in journals such as MISQ, Journal of Strategic Information Systems, MISQE, Harvard Business Review, Sloan Management Review, Journal of Management Studies and Public Administration. His Doctorate is from Cambridge University, and he has been co-Editor-in-Chief of the Journal of Information Technology since 1988.

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**Sara Cullen** is a former national partner at Deloitte (Australia) and the managing director of The Cullen Group. She is one of the Asia Pacific region's most experienced outsourcing experts, having advised on 115 outsourcing initiatives spanning 51 countries with contract values up to \$1.5B p.a. Her doctorate is from University of Melbourne and she is co-author of *Intelligent IT Outsourcing* (Butterworth, 2003), many articles and refereed papers and several major reports.

# **Information Technology Sourcing Research: Critique Lessons and Prospects**

#### Introduction

The information technology (ITO) and business process (BPO) outsourcing services markets, together with more recent offshore variants, have been dynamically expanding revenues, capabilities and associated rhetoric, in equal measure, for over fifteen years. Outsourcing makes up a substantial and rapidly rising part of expenditure across corporations and government agencies alike. On our estimates, ITO global revenues exceeded \$200 billion per year at the end of 2005. After, and indeed partly because of, the slowdown between 2001-2004 this figure will rise by at least 7% per annum for the next five years. Of this, offshoring (\$US 7 billion in 2004) will probably rise to \$17 billion by 2008. Additionally, mainstream BPO expenditure in areas such as the human resource function, procurement, back office administration, call centres, finance and accounting, is set to rise from \$US110 billion in 2003 to \$US 175 billion in 2008 (Willcocks and Lacity, 2006). Use of external IT/BP services combined is likely to move from a 2005 average of 12% to 20% of the corporation's total costs by 2008/9. For many organisations, then, outsourcing is well above the parapet in sheer expenditure terms. However, much of this has been happening incrementally, as a response to immediate market conditions and specific opportunities to cut costs, rather than through long-term strategic thinking. Moreover, despite the accumulated experience, learning has been painfully slow; there has been mixed success, and much conflicting advice.

This paper seeks to complement and build on previous substantial reviews of IT sourcing research by Dibbern et al (2004) and Hui and Beath (2001). Here our critical review of the academic studies from 1991-2005 is limited to identifying and discussing four major on-going problem areas, namely: defining outsourcing, defining types of outsourcing, measuring success, and clarifying the processes that lead to effective outsourcing arrangements. Thereafter, the paper focuses on a more limited, internally consistent body of academic studies with a view to identifying what can be

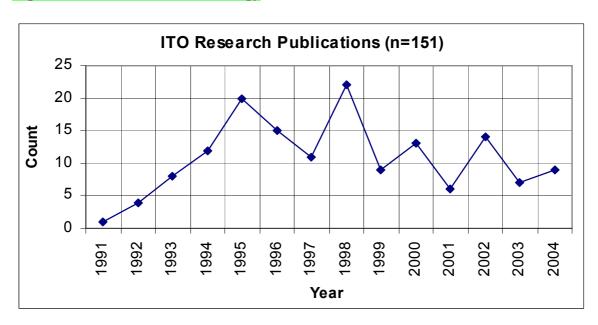
learned from the fifteen years of research these embody. Finally, the paper suggests future potentially profitable avenues for research in the IT/BP (out)sourcing space.

### **Evolution and Critique Of The Literature**

The ITO literature as a genre got its official start in 1991 with studies of Eastman Kodak's outsourcing initiative (Applegate Montealegre, 1991; Loh, and Venkatraman, 1992b), along with the first works around that time focused on software outsourcing (Whang, 1992; Ang and Beath, 1993). The early ITO studies (1992-1994) predominately concerned themselves with the identification of characteristics regarding firms that outsource (Loh and Venkatraman, 1992a; Arnett and Jones, 1994, Cullen, 1994) and this concern has continued (Oh, 2005). In addition, the tradition of empirical work that still dominates ITO research began in 1993 with Huber's (1993) classic case study on Continental Bank and Lacity and Hirschheim's case studies (1993abc); along with the first ITO survey-based research (Heinzl, 1993). The first work on success in ITO began in 1994 with Heckman, and King (1994) and Lacity, et al. (1994) both of which focused on satisfaction. Also during the period was the first of many studies on the impact of outsourcing on various variables, that of Loh and Venkatraman's (1992c) finding that stock prices in the US were positively affected by ITO announcements, still highly cited today.

There has been a steady stream of ITO research since that time, first peaking in 1995 and again in 1998. Figure 1 details the major academic studies in the 1991-2004 period appearing as books or articles published in top ranking journals. The most comprehensive review of the ITO literature by Dibbern et al (2004) list 212 references but many of these are not specifically IT outsourcing studies. We also leave out non-academic studies – of which there have been many, and the recently burgeoning parallel literature on business process outsourcing.

Figure 1: ITO Research Chronology



The years 1995 to 1998 were a defining period in ITO research growth, averaging 17 published studies a year from the sample - a period of research growth we have not experienced since, though ITO/BPO and offshore studies started (but not yet published) in the 2004/5 period seems to have experienced a real acceleration. Much of the work performed during 1995-8 remains the cornerstone of current ITO research. For example Grover et al. (1996)'s success instrument, based in part on Parsuraman et al.'s (1988) SERVQUAL instrument, is still used today unchanged from its original form (see for example Rouse, et al 2001; Lee et al. 2004).

This period began the flow of a wide variant of theories, assumptions, mixed findings, and contradictions that continues to time of writing (2006). Solutions to the many inconsistencies were a major plea to researchers from the two most comprehensive reviews of the ITO literature (Hui and Beath, 2002; Dibbern et al., 2004). Those wanting a more comprehensive analysis of the ITO literature are referred to these studies. Here we focus on the more limited aim of evaluating issues with the literature, before reporting on our own detailed findings from over twelve years of research in the area.

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<sup>&</sup>lt;sup>1</sup> Hui and Beath (2002) provide a broad review of 143 papers and books and Dibbern et al. (2004) provide a more detailed review of using 84 studies sourced from 19 journals and 2 conferences from 1988 to 2000. Both provide excellent tables summarizing the theoretical bases of the vast array of different studies.

## **Defining Outsourcing**

The most fundamental contradiction in the ITO literature is regarding what ITO actual is. Definitions of ITO abound, with little consistency or agreement in sight. The only concept in common amongst the various definitions is the recognition that a third-party is involved with IT in some manner. Why do we need to understand how each study defined outsourcing? Simply because minor variants in terminology can result in the study of different phenomenon, or of various subsets of the possible outsourcing population. Take for example, Lee, et al.'s (2004) statement that, "larger organizations are more likely to outsource" (p117) without providing the basis for this statement. In fact, early research has not found correlation to firm size (measured by firm revenue, assets, and number of employees) and the degree of outsourcing (Loh and Venkatraman, 1992a; Cullen, 1994), found to be the case again more recently (Oh, 2005), all of which used Loh and Venkatraman's definition of ITO. However, firm size (as measured by assets) showed a strong relationship with the degree of outsourcing in the US banking industry (Ang and Straub, 1998). One could easily suppose that the banking industry is different from other industries. Or perhaps the different findings are due to the study of Ang and Straub (1998) included many arguably nondifferent phenomenon. infrastructure areas in their study including IS strategy, planning, as well as applications development and maintenance.

Table 1 about here

Table 1 – The 151 case ITO study

# **Table 1 – The 151 ITO Research Sample**

1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
• Applegate &	• Whang			<ul> <li>Chaudhury,</li> </ul>	• Aubert,			• Aubert, et al.		<ul> <li>Barthélemy</li> </ul>		• Hindle,	• Dibbern
Montealegre		Venkatraman		et al.	et al.	Cummings		• Gallivan &	Timbrell	& Geyer	Agarwal	et al.	<ul> <li>Dibbern,</li> </ul>
				• Grover, et al.	• Currie	Apte & Sobol	• Ang &	Oh	• Dewire	• Goles		• Lacity &	et al.
		• Ang & Beath		• Clark, et al.	• Earl	• Elitzur			• Goo, et al.	• Kern	Heinzl		• Koh, et al.
		Heinzl			<ul> <li>Goodstein,</li> </ul>		• Aubert, et al.		Hirschheim	Willcocks	• Domberger,	(a ,b)	• Lee, at al.
		• Huber	• Heckman &	Sharp	et al.	• Hu, et al.		• Lacity &	& Lacity	• Kern et al.	et al.	• Lacity,	• Linder
		• Reponen	~	• Cross	• Grover,	• Lacity & Willcocks	Walker	Hirschheim			• Goles & Chin	et al.  • Levina	• Plant &
				• De Looff	et al.			• Lee & Kim	Willcocks	Willcocks	• Hui & Beath	& Ross	Willcocks
		Fitzgerald		• Jurison	Gurbaxani		_	• Quinn	(a, b) • King	• Rouse, et al	Willcocks	• Susarla,	• Willcocks
		• Lacity & Hirschheim		• Klepper (a, b)	Heiskanen et al.	<ul> <li>Saunders, et al.</li> </ul>		Sabherwal	Malhotra	1	(a, b)	et al.	& Plant
		(a, b, c)		• Lacity, et al.		Venkatraman	Willcocks	<ul> <li>Willcocks</li> <li>&amp; Lacity</li> </ul>	• Lacity &	2	• Kern, et al	Willcocks	Willcocks,     of al. (a. b)
		(a, b, c)	Wibbelsman	• Lacity & Hirschheim	Willcocks	Wang, et al.		• Willcocks,	Willcocks	1	• Kern, et al.	& Plant	et al. (a, b)
					(a, b)		• DiRomualdo		(a, b, c)		• Kern, et al.	cc i iuiit	
			• Willcocks &	• Lacity & Willcocks	• Lacity, e	Currie	& Gurbaxani		• Lee, et al.		Klein		
				• Loh &	al. (a, b)	Curric	Domberger		• Schultze		Knolmayer		
			• Grover, et al		<ul> <li>Nam, et al.</li> </ul>		Duncan		& Boland		• Seddon, et al.		
			(a, b)		Slaughter		• Fowler		• Useem	8	beddon, et al.		
			(, -)	Nolan	& Ang		& Jeffs		Harder				
				McLellan,	• Willcocks,		<ul> <li>Hirschheim</li> </ul>						
				et al.	et al.		<ul> <li>Hirschheim</li> </ul>						
				• Palvia			& Lacity						
				• Sobol & Apte			<ul> <li>Klepper</li> </ul>						
				<ul> <li>Teng, et al.</li> </ul>			& Jones						
				• Willcocks &			• Lacity &						
				Choi			Willcocks						
				<ul> <li>Willcocks,</li> </ul>			(a, b)						
				et al.			Marcolin &						
							McLellan						
							• Poppo &						
							Zenger • Smith, et al.						
							<ul><li>Smith, et al.</li><li>Willcocks</li></ul>						
							& Lacity						
							Willcocks						
							& Kern						
1	4	8	12	20	15	11	22	9	13	6	14	7	9

As mentioned earlier, Loh and Venkatraman (1992a) kicked off an early definition of ITO as, "a significant contribution by external venders in the physical and/or human resources associated with the entire or specific components of the *IT infrastructure* in the user organization", which is still employed today (Oh, 2005). This definition emphasizes IT infrastructure, and could be interpreted to exclude applications development to which much ITO research has been devoted (Kern, et al. 2002a, Susarla, et al. 2003; Dibbern, 2004); however, the studies that employ the infrastructure definition do not explicitly state any exclusions to this definition. Even studies that do explicitly state what the adopted ITO definition excludes in terms of potential services (for example Grover, et al. 1996) appear to unintentionally exclude other phenomenon in the outsourcing population.

Some definitions of ITO restrict it to involving a *transfer or turning over* of something to a vendor such as functions, assets, responsibilities, and/or people (Grover, et al. 1996; Apte, et al. 1997; Cheon, et al. 1995; Hirschheim and Lacity, 2000). Consequently, if a researcher uses this definition, arguably outsourcing which did not involve a transfer would be excluded although no researcher adopting this definition made this explicit. In using this definition, many non-transfer types of outsourcing would not be considered outsourcing. For example, in a survey of 235 organizations in Australia, only 27% involved staff transfers (Cullen, et al. 2001). Therefore, a transfer-based definition restricts the study to a small subsection of the possible outsourcing population – in effect under 30%. Furthermore, transfers only occur during the first generation of a contract (first time outsourcing) and subsequent generations involve either extending the contract with the incumbent, switching to a new supplier, or backsourcing (bringing outsourced services back in-house). In practice, all the above occur (Cullen and Willcocks, 2003). A transfer-based definition excludes all but the first generation of any deal, not to mention that many first generation outsourcing deals do not involve a transfer at all (Cullen, et al. 2001).

Other studies limit the definition of outsourcing to only those services or functions *previously* conducted in-house (Lacity and Hirschheim, 1993a), thereby excluding work performed by third parties which had not been conducted previously by the client organization. Again, researchers adopting this definition do not explicitly state that their intention is to exclude work not previously conducted by the client. If one does make this assumption, once again a significant portion of the possible outsourcing population would be excluded. Using the example of the Australian survey of 235 organizations (Cullen, et al. 2001), 72% of respondents outsourced to

obtain services not available in house. Once again, a prior insourced-based definition restricts the study to a small subsection, under 30% of the possible population, and a different subsection than that using the transfer-based definition.

Still others describe ITO as "commissioning", or "contracting" a vendor to *run the organization's resources* (Fitzgerald and Willcocks, 1994; Kern, 1997), inferring that the organization still owns the resources. However, as Cullen et al (2005) show, many possible variants of resource ownership occur and the client organization may not retain all or part of the resource base (assets, facilities, and staff). Researchers who adopted this definition did not explicitly state what possible form of outsourcing was intended to be excluded; however, it would be logical to deduce that if the client owns none of the resources, exclusion would occur. The use of this definition again restricts the possible outsourcing population substantially and represents a different phenomenon from definitions restricted to only infrastructure, to only work previous conducted in-house, and to only outsourcing which involved an act of a transfer.

Lastly, others merely state that outsourcing is, "the provision of services by a vendor firm to a client" (Klepper 1995b), or "third-party provision of IT products and services" (Hancox and Hackney, 1999), hence *anything a third party can do for a firm*. This definition views outsourcing more akin to Williamson's (1985) hierarchical and market governance alternatives – a firm can perform an activity or a third party can. Thus, the possible population includes all the above population subsets, in addition to all generations of a deal, those that remain with an incumbent supplier as well as those that procure new vendor/s, all deals regardless if a transfer occurred, all resource ownership possibilities, and any work an external party performs regardless if the organization had previously performed it.

Different perspectives on what outsourcing is are not the only things limiting the phenomenon under study. For example, Gallivan and Oh's (1999) foremost conclusion was that managers must be aware that there are more options than the traditional dyad (one buyer, one seller). Nonetheless, recent studies intentionally exclude all but a simple dyad from their research. For example, Lee et al.'s (2004) requested the 311 respondents to their survey to

choose a "dominant" supplier if the firm had more than one supplier. This approach would have excluded over 50% of the possible outsourcing population in Australia – all those without a dominant supplier (14% with many suppliers under individual contracts and 27% with many suppliers under panel arrangements) in Cullen et al. (2001).

#### **Defining Types of Outsourcing**

ITO researchers have not agreed definitions of different types of ITO. Thus different perspectives on the phenomenon under study fall under a common label, despite there being no common terminology set in which to take and test ideas, constructs, or theories. For example, Millar (1994) describes value-added outsourcing as where the supplier is able to add value to the activity that could not be cost effectively provided in-house. Klepper and Jones (1998) describe it as an "intermediate" relationship characterized by complex work and substantial benefits. Lacity and Willcocks (1998) define it as when the parties combine to market new products and services. No one definition has been adopted. As another example, Currie (1998) identified "facility sharing" as sharing all the key tangible resources including facility, assets, and labor which Lee, et al. (2004) identified as a "partnership". But Lacity and Hirschheim (1993) and Hackney (1999) defined partnerships as descriptors of negotiation techniques, power balancing, and a collection of intangible characteristics such as compatible cultures finding the term at odds with the actual contractual relationship, but without referring to the expression in terms of resource ownership as did Currie and Lee, et Grover et al. (1996) set up "partnership" as a mediating variable in their study. Partnership was defined as in terms of descriptive elements ranging from long-term commitment, sense of mutual cooperation, shared risk and benefits, as well as equal responsibility. Again, no one definition has been adopted. It is not surprising then, that Lacity and Willcocks (1998) found "partnerships" to be more unsuccessful, which Lee, et al. (2004) found no support.

As a last example especially indicative of the problem, equity relationships are where the parties have some form of shared equity, called "cross-equity" (Venkatraman, 1997) and

"equity-holding" (Lacity and Willcocks, 1998). Dibbern et al. (2004) only refers to a possible equity structure as a "joint ventures" defined as joint equity in an IT function spun off by the client organization. However, Ang and Cummings (1997) deemed related entities providing services to other related entities as "insourcing". "Insourcing" has been defined as by Hirschheim and Lacity (2000) as "the practice of evaluating the outsourcing option, but confirming the continued use of internal IT resources to achieve the same objectives of outsourcing". Whereas Lacity and Willcocks (1996; 1998; 2001) defined insourcing as when 20% or less of the budget is outsourced, which Lee et al. (2004) called "minimal outsourcing". This particular example covered a great deal of divergence, each term leading to a different definition, or different term for the same definition. If nothing else, ITO research needs a common dictionary.

Even more significant, studies offer conflicting advice regarding how firms should go about making outsourcing successful. For example, conflicting advice over long- versus short-term contracts abounds. Earl (1996) believes the uncertainty involving IT and the requirement to experiment in its application precludes having long-term contracts. Klepper and Jones (1998) argue that long-term contracts enable the supplier to learn about the organization and for the parties to establish mutual trust. Lee et al. (2004) note that in certain cultures, like South Korea, longer-term contracts are a reflection of the value that the culture places on long-term relationships. Lacity and Willcocks (1998) found that short-term contracts yielded greater cost savings. Lee et al. (2004) found the reverse. However, all these studies assume a singleterm, which has not been the norm for some time. Single-term deals are fixed-duration contracts that expire on a specified date and do not provide for extensions. Both Lacity and Willcocks (1998) and Lee et al. (2004) defined short-term as under four years, medium-term as four up to seven years, and long-term as seven years or more. However, Cullen (2005), for example, cites a government agency with a 3+3 arrangement - it has a three year initial term with an option to extend for another three years. Simple classifications as short versus long term do not match the current flexibility that contracts more typically incorporate.

Another example of conflicting advice regarding successful outsourcing structures is the degree of outsourcing performed. Lacity and Willcocks (1998; 2001) and Sambamurthy et al. (2001) suggest that "selective" is more successful than "total" outsourcing, the latter being where at least 80% of the IT budget is outsourced to a single supplier – the assumption being success is a function of exposed risk to a single supplier. Yet Rouse et al. (2001) report that the probabilities for those engaged in selective outsourcing were statistically no different—for cost savings or for business flexibility and Lee et al. (2004) found selective sourcing to be no more successful that other degrees of outsourcing.

How is one to interpret such contradictory findings? One possibility is that success has been measured differently (therefore incomparably) in different studies (Hui and Beath, 2002; Lee, et al. 2004; Dibbern, et al. 2004). In fact, despite over decade of research into ITO, no single model of success has emerged from the literature. Another possibility is that it is a mistake to treat all ITO arrangements as instances of the same phenomenon: outsourcing involves a variety of choices that result in widely differing types and forms of arrangements (Marcolin and McLellan, 1998; Dibbern, et al. 2004). Thus conflicting results could be due to comparing 'apples and oranges'; or quite different things as if they are the same.

There has been no definitive work on the different forms ITO takes. Many studies identify limited options, for example, Lacity and Willcocks (1998; 2001) in differentiating total outsourcing from selective outsourcing. Different functional or service scope has been well recognized with many studies on specific IT functions such as software outsourcing (Whang, 1992; Ang and Beath, 1993), ASP (Bennett and Timbrell, 2000; Dewire, 2000; Kern, et al. 2001) as well as more comprehensive studies (Ang and Straub, 1998; Oh, 2005). But all possible alternatives have not been brought together in a manner such that every study has a common base in which to refer to the type of outsourcing under study. Much generalization has occurred without giving due consideration to the different forms of outsourcing. It is apparent that research needs a common base in which to fundamentally understand ITO and norms around this understanding. This is not something attempted here but Cullen (2005)

has contributed work on how to define the configuration of outsourcing arrangements to further this aim.

#### **Defining Success**

Research established long ago that outsourcing success is hardly guaranteed (Lacity and Hirschheim, 1993b). Since then, many researchers have studied constructs of success, drivers, and management techniques. Yet, the findings between studies are often inconsistent (Hui and Beath, 2002; Lee et al. 2004; Dibbern, et al. 2004). Despite over a decade of research into ITO, no single model of ITO success has emerged from the literature, and the more popular outsourcing becomes, the more the previously accepted benefits are coming to be questioned (Byrne, 1996; Fowler and Jeffs, 1998; Rouse et al., 2001.

Each study regarding success, and advice on how to achieve it, is dependent on how the researcher defined "success", outcomes" and "benefits", used interchangeably in the research, but, in meaning, varying considerably. Grover et al. (1996) identified three categories: economic, technological, and strategic, which were further broken down into eight attributes. Domberger et al. (2000) performed a simple analysis of what drove a single attribute, "desired performance". Lacity and Willcocks (2001), in their summary of experiences of 116 organizations, used three factors: objectives against results, cost reductions, and satisfaction. Lee et al. (2004) used three dimensions: strategic competence, cost efficiency, and technology catalyst from the CIO's perspective. Not surprisingly, different perceptions of what constitutes successful outsourcing have yielded conflicting advice on the degree to which outsourcing practices have been successful.

As an example, success has often been described as the degree of cost savings (Willcocks and Fitzgerald, 1994; Domberger, 1998). Yet Rouse et al. (2001) found that although cost is an important consideration, cost savings were not significantly associated with satisfaction with outsourcing. Further, in the series of three Australian surveys (Cullen, 1994:1997; Cullen, et al. 2001), cost savings has been decreasing in importance with each study. It was the number

one reason to outsource IT in Australia in 1994, fifth in 1997, falling to ninth in 2001. Lee et al. (2004) acknowledged that metrics of success need further development, and the lack of a comprehensive model in which to determine the explanations of success limited their study. They believe the prior instruments are only a starting point: "As outsourcing grows in complexity, researchers need to develop more sophisticated metrics to assess the success of outsourcing ventures". Contradictory results, and advice, will continue until a replicable success construct is developed and accepted. Many studies identified possible outcomes (Lacity and Willcocks, 2001; Lee, et al. 2004; Dibbern, et. al 2004), but no study has attempted to encapsulate all the outcomes an organization may seek.

#### **Defining ITO Processes**

Over a decade of in-depth studies demonstrates that outsourcing cannot be contracted for and then not managed (Cullen and Willcocks, 2003; Linder 2004; Dibbern, et al. 2004). How firms go about outsourcing from concept to implementation is dispersed in many works using the universalistic perspective, where researchers attempt to identify "best practices", or processes that positively affect performance (see for example Delery and Doty, 1996). However, all the studies we have reviewed look at 'process' merely as a means to provide background information, or descriptive information – process is not the primary purpose of the study (for example, Lacity and Willcocks, 2001; Hui and Beath, 2002; Alborz, et al., 2004, Dibbern, et al. 2004). Some research has delved into specific components of the outsourcing process, predominately that being the decision as to whether and what to outsource (for example, Lacity and Hirschheim 1993abc; Ang and Cummings, 1997; DiRomualdo and Gurbaxani, 1998); selection of the vendor (Michell and Fitzgerald, 1997; Kern, et al. 2002); negotiation (Elitzur and Wensley, 1997; Kern and Willcocks, 2000a), and management of the relationship (Lacity and Willcocks, 2000c; Kern and Willcocks, 2001; Goles and Chin, 2002; Kern and Willcocks, 2002a; Alborz, et. al. 2004).

There is a great deal of practitioner literature advising clients as to the process to adopt when outsourcing (Klepper and Jones, 1998; Aalders, 2001; Hurley and Costa, 2001). But these do

not use any rigorous research methods and typically are based on a few case studies. Specifically, Klepper and Jones (1998) base their model on the experience of "a number" of CIOs and practitioners; Hurley and Costa (2001) base theirs on nine Australian cases provided by suppliers; and a 2001 report by the U.S. General Accounting Office based its model on seven U.S corporations, two suppliers, and five academic/professional authorities. Up to 2006, the only academic study that purposely set out to study the process and form a theory as to what process works best is Cullen et al. (2005), which provides a comprehensive, and granular, framework describing the key management choices regarding the outsourcing process.

# **Information Technology Sourcing: Fifteen Years of Learning**

Having identified the difficult work still needed to synthesise the diverse definitions, approaches, foci of interest and findings across ITO studies so far, this paper makes a further, more positive contribution by identifying the findings from a more limited but coherent and internally consistent stream of studies the authors have been conducting since the early 1990s. One key feature of this body of research is that we measured actual outcomes compared to expected outcomes in our 600 plus longitudinal case studies and six surveys. This enables us to draw conclusions as to the practices associated with success and failure and to analyze results over time. Based on this extensive research, the rest of the paper summarises the findings. First, we will comment on the degree of learning experienced in those fifteen years. Next we organise the research findings under four headings: assessing the portfolio, evaluating market options, crafting deals, and managing relationships. The key summary sources are Cullen (2005) Cullen and Willcocks (2003); Lacity and Willcocks (2001); Lacity, Willcocks and Cullen, 2007); Kern and Willcocks (2001); and Willcocks and Lacity (1998; 2006).

### The Outsourcing Learning Curve

Most of our participants were from large North American, European, and Australian companies and few approached outsourcing from a strategic perspective at the outset. Most organizations initially engaged in outsourcing for tactical reasons, such as seeking lower labour rates for staff augmentation on specific projects. Only after pilot tests were complete, supplier relationships established, and viability proven, did senior executives seek more radical and strategic uses of global resources. This incremental approach, we found, allowed organizations to gain experience with outsourcing options at an operational level before seeking more strategic objectives.

Figure 2 illustrates the typical customer learning curve for ITO and BPO approaches and more recent offshore variants. The learning curve is demonstrated through the typical learning of one particular outsourcing model, namely offshore outsourcing. The general mass of organizations using ITO are weighted towards phase 3 and 4, with some organization on their third or fourth generation ITO, while most BPO and offshore clients, as at 2006, were much further down the learning curve.

During Phase I, senior executives we interviewed became aware of offshore outsourcing through marketing hype ('you'll save 60% off your costs') or irrational propaganda ("Software: Will Outsourcing Hurt America's Supremacy<sup>i</sup>). Senior executives quickly learned about potential benefits, costs, and risks by talking to peers, consultants, and reading research. Most senior executives initially engaged in offshore outsourcing (Phase II) to seek lower costs, primarily through favorable labor arbitrage. During pilot testing, senior executives learned about the immense amount of in-house management required to effectively work with global suppliers and to achieve real cost savings. As learning accumulated, some senior executives moved to Phase III when they exploited global sourcing for quality as well as cost reasons. One phrase we heard over and over again from participants was, "we went for the price, we stayed for the quality."

Figure 2 The Outsourcing Learning Curve



More mature adopters in Phase IV used offshore outsourcing to enable corporate strategies, such as increasing business agility, bringing products to market faster and cheaper, financing new product development, accessing new markets, or creating new business. These strategic initiatives often evolved over time. For example, a large U.S. Financial Services firm in 2005 used global sourcing of IT and back office functions primarily to enable strategic agility. It had captive centers in Manila and Mumbai, and various joint ventures and fee-for-service relationships with 14 Indian suppliers. During the refinancing boom, the company was able to beat competitors by quickly meeting the immense surge in demand for IT and business process services. As the refinancing boom burst, the company was able to immediately scale back resources. But it took them fifteen years to develop this well-oiled global network.

While at an aggregate level, the learning curve suggests a sequential progression, at the micro level, learning has been iterative and concurrent. Customers continually learned how to assess better their own service portfolio, evaluate suppliers' capabilities, craft contracts, and manage supplier relationships. Even within the same customer-supplier relationship, customers frequently revisited the scope of the deal and re-crafted contracts several times. This iterative learning process is reflected in Figure 3. In the next sections we look at each of these four areas in detail.

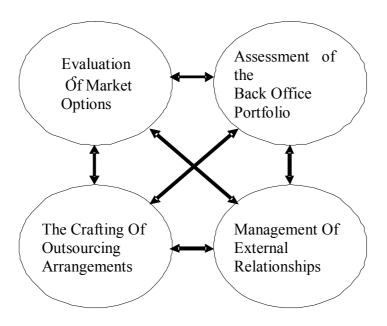


Figure 3: Learning and Feedback in IT Sourcing

#### **Assessment of the Back-Office Portfolio**

#### IT As A Portfolio of Capabilities.

We have increasingly found sourcing strategies beginning with the assumption that back-offices should be treated as a portfolio of activities and capabilities. Some IT activities must be kept in-house to ensure current and future business advantage and flexibility, while others may be safely outsourced. This portfolio perspective is empirically supported by our research findings that selective outsourcing decisions had a higher relative frequency of success than total outsourcing decisions<sup>ii</sup>. We defined the scope of sourcing options as:

**Total Outsourcing:** the decision to transfer the equivalent of more than 80% of the function's operating budget for assets, leases, staff, and management responsibility to external providers.

**Total In-Housing Sourcing:** the decision to retain the management and provision of more than 80% of the function's operating budget internally after evaluating the services market.

**Selective Outsourcing:** the decision to source selected functions from external provider(s) while still providing between 20% and 80% of the function's operating budget internally.

Selective outsourcing decisions have been generally successful during the past ten years, with 85% successes reported by 1995 and 77% reported by 2001<sup>iii</sup>. This relates to the finding that selective outsourcing is also the most common sourcing practice<sup>iv</sup>. The most commonly outsourced functions in IT were mainframe data centers, software development and support services, telecommunications/networks, and support of existing systems. The most commonly outsourced applications in human resources were payroll, benefits administration, and employee training and education<sup>v</sup>. In most cases, suppliers were judged to have an ability to deliver these products and services less expensively than internal managers. The ability to focus in-house resources to higher-value work also justified selective outsourcing.

Participants frequently encountered one or more of the following problems with total outsourcing:

- excess fees for services beyond the contract due to increase in user demand
- excess fees for services participants assumed were in the contract
- "hidden costs" such as software license transfer fees
- fixed-prices that exceeded market prices two to three years into the contract
- inability to adapt the contract to even minor changes in business or technology without triggering additional costs
- lack of innovation from the supplier
- deteriorating service in the face of patchy supplier staffing of the contract

In-house sourcing has remained generally successful (67% up to 1995, 76% up to 2001<sup>vi</sup>). We found, however, that success stemmed from the potential threat of outsourcing. Once empowered through the threat of competition, internal managers often had cost advantages over suppliers (such as no marketing expense, no need to generate a profit). In addition, they often had service advantages, such as knowledge of idiosyncratic business applications. These findings hold consistent with our more recent (2001-5) research (Willcocks and Lacity, 2006).

#### **Core In-house IT Capabilities**

There are many frameworks and theories to help managers assess core capabilities to keep inhouse. The most popular portfolio assessment models are based on theories such as resource dependency theory, agency theory, auction theory, game theory, institutional theory, and, by far the two dominant theories: transaction cost economics (TCE) and the resource-based view (RBV). In many ways, TCE is the ideal theoretical foundation because it specifically addresses make-or-buy decisions based on generic attributes of assets and describes appropriate ways to govern customer-supplier relationships. For example, transaction cost economics posits that transactions with high asset specificity (essentially customization), high uncertainty, and/or occur frequently are best managed internally, while the rest should be

more efficiently outsourced<sup>vii</sup>. Indeed, a number of empirical outsourcing studies have found that asset specificity, the degree to which assets can be redeployed elsewhere without losing value, has been a significant factor<sup>viii</sup>. RBV has been the second theory most widely-applied to the outsourcing context<sup>ix</sup>. RBV suggests that managers keep valuable, rare, non-imitable, and non-substitutable strategic assets in-house<sup>x</sup>, while potentially outsourcing the rest. TCE and RBV are both valuable perspectives. They also guide managers to treat the entire business functions as a portfolio of transactions/capabilities--some which must be kept in-house, some which may be outsourced.

Our most direct assessment of IT as a portfolio has been the model developed by Feeny and Willcocks (1998)<sup>xi</sup>. By synthesizing research findings this suggests four broad categories which customers must keep in-house, even if they intend to outsource nearly all of the IT (or another - e.g human resources, legal, procurement, accounting) function:

- Governance
- Eliciting and delivering business requirements
- Ensuring technical ability and architecture
- Managing external suppliers

Feeny and Willcocks suggest that these four essential tasks can be delivered by nine core capabilities. On the technical side, technical architecture and making technology work are vital. Business facing capabilities include relationship building and business systems thinking. External supply is managed through vendor development, contract facilitation, informed buying and contract monitoring capabilities, while leadership is required along with informed buying to support governance and coordination. Table 2 summarizes the activities to be kept in-house from three different perspectives.

economics		Core capabilities model
	Valuable: activities can be used	
physical or human assets are	to exploit strategic opportunities	and coordination

non-redeployable for alternative uses or users. The activities are so idiosyncratic & customized that keeping them in-house is less costly than outsourcing.	or ward off threats	
High uncertainty: activities cannot be clearly defined for effective third-party contracting. Threat of supplier opportunism is high unless customer incurs excessive transaction costs.	Rare: Few competitors offer the activities	Business requirements: understanding business needs as they relate to the service function (IT, HR, etc), and relationship building among management, users, and the service function
High Frequency: Transactions that occur frequently and are highly asset-specific are less costly if kept in-house.	Non-imitable: It is difficult or costly for competitors to imitate the activity	Ensure technical ability: The architecture operation may be outsourced, but the customer maintains control over architecture design.
	Non-substitutable: The activity has no immediate equivalents	External supplier management: Customers must make informed buying decisions, monitor and facilitate contacts, and seek added-value opportunities from suppliers.

Table 2 Different Portfolio Assessment Perspectives: What core activities should be kept in-house?

#### 'Best-Sourcing' Of Non-Core Capabilities

Once organizations identify core IT capabilities, it does not automatically follow that the remaining 'non-core' capabilities will be outsourced. We found that customers who considered additional business, economic, and technical factors relating to non-core capabilities were most frequently happy with their sourcing decisions<sup>xii</sup>.

A much more complex picture of .'best-sourcing' practice emerged. From a business perspective, some capabilities that are non-core today could become core in the future. Outsourcing this non-core function could well impede strategic exploitation in the future. For example, one of our case studies outsourced their web site design and hosting in 1995, which initially served as a marketing tool. As the web became increasingly important to their strategy, including online sales and customer service, the customer found their outsourcing

relationship impeding the strategic exploitation of the web. It subsequently terminated the supplier at a significant switching cost and brought the function back in-house.

From an economic perspective, some non-core activities may well be more efficiently kept in-house. For example, several of our case study participants were willing to outsource their large data centers but could not find suppliers who could do it cheaper. From a technical perspective, some non-core capabilities are highly integrated with other core activities. This makes outsourcing extremely difficult, and we have many examples of organizations that run into difficulties as a result.

Assuming non-core capabilities pass these tests, we found clients still needing to evaluate the market options, in order to further validate an outsourcing model and to identify viable suppliers, as discussed in the next section.

## **Evaluation Of Market Options**

An important and on-going sourcing process we identified was to keep abreast of market options, even where an organization was currently largely exclusively in-house. Recent work (Feeny, Lacity and Willcocks, 2005) has identified twelve, potentially core, supplier capabilities along with practices in four general outsourcing models. These models are: Feefor-service (time and materials or exchange-based), netsourcing, joint ventures, and enterprise partnerships (see Figure 3). These models are often blended, such as having a joint venture component to structure a shared risk and reward and a traditional outsourcing component for operational delivery. In general, we found each model most suited to particular types of activities, as discussed below.

#### **Time and Materials Model**

Here, supplier capabilities are bought-in to supplement in-house capabilities under in-house management. A typical example is hiring consultants to help in-house teams implement customer relationship management (CRM) systems. Because requirements are uncertain, the customer cannot negotiate a detailed contract, and thus the variable price based on time and materials emerged as more appropriate. We found this time and materials model as the most common, and posing the least risk to customers.

				Mixed		Non-core capabilities;
				(some	Highly	*
Fee for Service			one-to-one	supplier	customized	Customized products or
Outsourcing:	Supplier	Supplier		staff on	contract	services;
Exchange-based	**		or	customer	defining costs	
				site, some	and service	Stable business & technical
			one-to-some	staff	levels for that	requirements
				centralized	particular	•
				at supplier	customer	
				site)		
					Generic	Non-core capabilities;
				Supplier	contract	
Netsourcing	Supplier	Varies	one-to-many	staff	specifying	Standard products or services;
				not on	rental costs	
				customer	and very	Stable business & technical
				site	minimal	requirements
					service	
					guarantees	
				Mixed	Highly	Customer non-core, supplier
Joint Ventures			one-to-one:	(some	customized	core capabilities;
	Venture	Supplier		supplier	for operations	
		Investor	Customer is	staff on	delivery;	Significant market for venture's
			both investor	customer	broadly	product & services
			and first	site, some	defined for	
			major	staff	revenue	Frequently used to access
			customer	centralized	sharing	offshore resources
				at venture)		
Enterprise	Partnership	Customer &	One-to-one	Mixed	Broadly	Customer non-core, supplier
Partnerships		Supplier		(some	defined for	core capabilities;
				supplier	revenue	
				staff on	Sharing,	Significant market for venture's
				customer	customized	product & services
				site, some	after	Hand Configuration C
				staff	partnership is	Used for large scale transform
				centralized	formed	of large back offices
				at venture)		

**Table 3: Suitability of Various Outsourcing Models** 

#### **Exchange-Based or Traditional Outsourcing Contracts**

Here, the customer pays a fee to the supplier in exchange for a customized product or service. In this model, the customer typically transfers its assets, leases, licenses, and personnel to the external supplier. The supplier manages the resources and provides back to the customer a set of products and services governed by a one-to-one contract.

In our early studies of IT outsourcing, we found that customers often had naive expectations about this model. For example, many customers expected to save 25% on IT costs by signing ten-year, fixed-price contracts for a set of baseline services they assumed would remain stable for the duration of the contract. Many customers subsequently re-negotiated, terminated, or switched suppliers mid-stream. For example, one 2000 survey found that 32% of respondents had terminated at least one IT outsourcing contract. Of those, 51% switched suppliers, 34% brought the function back in-house, and the remainder eventually reinstated their initial suppliers due to prohibitively high switching costs (Cullen and Willcocks, 2003).

Survey respondents generally provided a healthy report card for exchange-based outsourcing. Thus in one 2001 survey, respondents rated overall supplier performance as "good", respondents realized some or most of the benefits they expected from outsourcing, and respondents characterized the majority of problems/issues as only "minor" in nature. This is explained by the scope and type of IT outsourcing practiced by responding organizations. The vast majority of respondents pursued selective outsourcing; most respondents also used multiple suppliers (82%) rather than a single supplier, which allows for best-of-breed supplier selection. These results may also be explained by the types of activities selected for outsourcing. For IT, respondents generally targeted stable, non-core IT activities such as such as disaster recovery, mainframe operations, network management, midrange operations, PC support, and help desk operations rather than IT development or IT strategy (Lacity and Willcocks, 2001).

#### **Netsourcing**

Here, the customer pays a fee to the supplier in exchange for a standard product or service delivered over the Internet or other networks. Netsourcing promises to deliver best-of-breed, scalable, and flexible business applications to customer desktops for a low monthly fee based on number of users or number of transactions at the customer site. Customers can rent nearly all popular independent software vendor (ISV) products from netsourcing providers, including enterprise resource planning (ERP), customer relationship management (CRM), personal productivity and communications, e-commerce and e-business packages. Our early research (Kern et al., 2002) shows that this model is suited for customers wanting lower back-office costs at the expense of accepting standardized solutions.

The revenues generated in this space are still modest, less than \$3 billion annually in 2005. Our preliminary research on this space found that early adopters were mainly small to mid-sized enterprises<sup>xiii</sup>. These companies primarily netsourced standard applications such as email, communications, and personal productivity tools.

#### **Customer-Supplier Joint Ventures**

In the joint venture model, the supplier and customer create a new company<sup>xiv</sup>. Deals are typically structured so that the customer investor provides personnel, becomes the venture's first major customer, and shares in future profits if the venture can attract external customers.

In the past, we found joint ventures between customers and suppliers often failed to attract external customers and the relationships were redefined as exchange-based. Examples include Delta Airlines and AT&T, Xerox and EDS, and UBS and Perot Systems. But in the offshore outsourcing space, joint ventures have been the preferred vehicle for large organizations to create a large offshore facilty without the risks with a fully-owned captive center. Customers, such as MasterCard, CSC, Perot Systems, and TRW chose this model over a fully owned model to trade off some control in exchange for less risk. For example,

MasterCard created a joint venture with Chennai-based Mpower Software Services called MPACT which had 250 employees performing IT work for MasterCard in 2005.

#### **Enterprise-Partnerships**

The goal here is often to transform the back-offices of large organizations that have grown through mergers and acquisitions. We have tracked how old ITO and new start-up BPO suppliers have entered the new market space from 1999 offering to transform their larger customer's back offices through leadership, streamlined processes, and new technology (see Willcocks and Lacity, 2006).

For example, the UK-based company Xchanging created three joint ventures with customers, beginning in 2001. The first was a joint venture with British Aerospace (BAe) called Xchanging HR Services for BPO of human resource management. Becoming the venture's first customer, BAe signed a 10 year contract worth £250 million and transferred 430 HR employees to the venture. The second joint venture named Xchanging Procurement Services, also with BAe, provided BPO for procurement. Again, the venture's first customer was BAe, which signed a £800 million, ten-year contract. The third joint venture, with Lloyd's of London and the London insurance market generally, originally called Ins-sure, as at 2006 continued to provide policy and claims processing BPO. Lloyd's signed a 10 year contract worth £400 million with Ins-sure. In these three ventures, BAe and Lloyd's were guaranteed an undisclosed amount of cost savings on the business process and share in the ventures' future profits. In these deals, success will depend partly on Xchanging's ability to deliver on the contracts while simultaneously attracting external customers beyond BAe and the London insurance market.

#### **Comparing Request-For-Proposal To Internal Bids**

During the last fifteen years, organizations that invited both internal and external bids had a higher relative frequency of success than organizations that merely compared a few external bids to current performance (89% by 1995, 83% by 2001 successful)<sup>xv</sup>. We believe that this

was because formal external supplier bids were often based on efficient managerial practices that could be replicated by internal managers<sup>xvi</sup>.

In some cases, internal managers could not implement cost reduction tactics because the internal politics often resisted cost reduction tactics such as consolidating departments, reducing headcount, and standardizing processes and technology. Based on 85 case studies, we found that when customers allowed internal bid teams to compete with external suppliers, 83% of those decisions were successful. When no in-house bid was invited and existing costs were compared with 1 or 2 supplier bids, only 42% of those decisions were successful. The use of an internal bid team served to provide a baseline on what could be attained internally if the in-house staff was empowered to behave like a supplier, such as proposing unfavorable consolidation and standardization of technology (Lacity and Willcocks, 2001).

#### Senior Management and Sourcing Decisions.

Our case study and survey data both suggest that multiple stakeholder involvement and strong outsourcing performance are correlated. In our 2001 survey data, 68% of respondents had at least two stakeholders driving the decision, most frequently the back-office manager and lawyers or the back-office manager and senior executives. Our case study data shows that joint senior executive/back-office manager decisions or back-office managers acting alone had higher relative frequencies of success than senior executives acting alone (Lacity and Willcocks, 2001).

We defined decision sponsor as the person who initiated or championed the sourcing decision and who made or authorized the final decision. In our study, sourcing decisions made jointly with both senior executive and back-office manager input had the highest success rate (76% of joint decisions). It appears that successful sourcing decisions require a mix of political power and technical skills. Political power helped to enforce the larger business perspective--such as the need for organization-wide cost cuts--as well as the "muscle" to implement such business initiatives. Domain expertise on back-office services, service

levels, measures of performance, rates of service growth, and price/performance improvements were needed to develop requests-for-proposals, evaluate supplier bids, and negotiate and manage sound contracts.

### The Crafting Of Outsourcing Arrangements

This section looks at how organizations craft outsourcing contracts, and with what results.

#### **Exchange-Based Contracts Revisited**

Of the outsourcing models found in Table 3, the exchange-based model is still the most common model. But our data reveals there are several types of exchange-based contracts:

**Standard Contracts**: the customer signed the supplier's standard, off-the-shelf contract. This is primarily restricted to the netsourcing space.

**Detailed Contracts**: the contract included special contractual clauses for service scope, service levels, measures of performance, and penalties for non-performance.

**Loose Contracts:** the contract did not provide comprehensive performance measures or contingencies but specified that the suppliers perform "whatever the customer was doing in the baseline year" for the duration of the contract at 10-30% less than the customer's baseline budget.

*Mixed Contracts*: For the first few years of the contract, requirements were fully specified, connoting a "detailed" contract. However, participants could not define requirements in the long run, and subsequent requirements were only loosely defined, connoting a "loose" contract.

Detailed contracts achieved expectations with greater relative frequency than other types of contracts (75% of detailed contracts were successful). These organizations understood their own functions very well, and could therefore define their precise requirements in a contract.

They also spent up to 18 months negotiating the details of contracts, often with the help of outside experts.

From our 2001 survey, customers included the following clauses in their detailed contracts:

- costs (100%),
- confidentiality (95%),
- service level agreements (88%),
- early termination (84%),
- liability & indemnity (82%),
- change contingency (65%), and
- supplier non-performance penalty (62%).

Increasingly, contracts have also included responsibility matrices which outline the responsibilities for both customers and suppliers. This innovation recognizes that suppliers sometimes missed service levels because of their customers' inaction.

No matter how detailed contracts become, changes in requirements occur. As at time of writing, many detailed contracts now have mechanisms of change, including:

- planned contract realignment points to adapt the contract every few years,
- contingency prices for fluctuation in volume of demand,
- negotiated price and service level improvements over time, or even
- external benchmarking of best-of-breed suppliers to reset prices and service levels.

In contrast to the success of the detailed contract, all seven of the loose contracts we studied were disasters in terms of costs and services. Two of these companies actually terminated their outsourcing contracts early and rebuilt their internal departments. Another company threatened to sue the supplier. Senior executives in these companies had signed flimsy contracts under the rhetoric of a "strategic alliance." However, the essential elements of a strategic alliance were absent from these deals. There were no shared risks, no shared

rewards, and no synergies from complementary competencies nor any other of the critical success factors identified by researchers. Instead, these loose contracts created conflicting goals. Specifically, the customers were motivated to demand as many services as possible for the fixed-fee price by arguing, "You are our partners." Supplier account managers countered that their fixed-fee price only included services outlined in the contract. The additional services triggered supplier costs which were passed to the customer in terms of excess fees.

Six of the 11 "mixed" contracts we studied achieved expectations. The contracts contained either shared risks and rewards or significant performance incentives. A Dutch electronics company spun-off of the IT department to a wholly-owned subsidiary. Because the newly-formed company's only source of revenue was from the electronics company, the venture was highly motivated to satisfy their only client's needs (Lacity, Willcocks and Cullen, 2007).

#### **Length Of Contract**

From the customer perspective, there is clear evidence that short-term contracts have higher frequencies of success than long-term contracts. From 85 case studies we studied, 87% of outsourcing decisions with contracts of three years or less were successful, compared to a 38% success rate for contracts eight years or longer. Short-term contracts involved less uncertainty, motivated supplier performance, allowed participants to recover from mistakes quicker, and helped to ensure that participants were getting a fair market price. Participants also only outsourced for the duration in which requirements were stable. Thus they could articulate adequately their cost and service needs. Some participants noted that short-term contracts motivated supplier performance because suppliers realized customers could opt to switch suppliers when the contract expired (Lacity, Willcocks and Cullen, 2007).

In contrast, long-term contracts have remained troublesome, with failure to achieve cost savings as the primary reason. As at 2006, we found that few total outsourcing mega-deals had reached maturity without a major stumbling block. Conflicts are increasingly being

resolved through contract re-negotiations. Suppliers, however, have a clear preference for long-term relationships to recoup excessive transition and investment costs. Returning to The DuPont/CSC/AC deal, the transition activities lasted over 18 months as the contract was operationalized in 22 countries to a population of nearly 100,000 users. The transition also included massive investments by one supplier in IT infrastructure, which the supplier could only recoup in a long-term deal. Clearly, the customer's incentives for short-term deals must be balanced with the supplier's incentives for long-term deals. The Dupont arrangements were subsequently restructured and renewed, with different terms and a different proportion of work to the suppliers, in 2003.

## The Management Of External Relationships

For all the sourcing models, there is an inherent adversarial nature in ITO and BPO contracts in that a dollar out of the customer's pocket is a dollar in the supplier's pocket. A knowledgeable, capable customer following good practices up to the point of signing the contract may well be sufficiently protected from the devastatingly negative consequences experienced in many early 1990s deals. If a supplier negotiates a favorable deal, it should be able to deliver on the contract and still earn a profit margin. But, as Kern and Willcocks (2001) detail, even under the most favourable circumstances, relationship management in outsourcing has emerged as difficult. Here we will mention from our consolidated research three areas where customers and suppliers found ways of improving the relationship dimension in their outsourcing arrangements.

#### **Core Capabilities For Managing External Supply**

Earlier we listed none core capabilities that need to be retained in-house. Of these, five are orientated toward managing external supply, including Leadership and Informed Buying.

These two tend to be more strategic in orientation, but require relationship skills for dealing with senior executives and negotiators within suppliers. The remaining three involve key tasks, but also major skills in and time on relationship management at many different levels within the supplier.

Thus **contract facilitation** is the capability to provide a vital liaison role between the supplier and the customer's user and business communities to ensure supplier success. We found the role arising for a variety of reasons, for example to provide one stop shopping for the business user; the supplier or user demanded it; users were demanding too much and incurring excessive charges.

**Contract monitoring** is the capability to ensure that the supplier delivers on the contract. While the contract facilitator is working to 'make things happen' on a day-to-day basis, the contract monitor is ensuring that the business position is protected at all times.

**Vendor development** is the capability beyond the legal requirements of a contract to explore increasing ways the customers and suppliers can engage in win-win activities. It is in the customer's interest to maximize the contribution of existing suppliers and guard against what we call 'mid-contract sag' where minimal contractual commitments are met, but little else.

#### **Relationship Dynamics**

Even with these capabilities in place, we found customer and supplier relationships sometimes troublesome, but the parties still tended to have a good relationship overall. Rather than seek to extinguish such troubles, the best relationships embraced the dynamics of these quite complex interactions. We identified four common types of customer-supplier interactions: adversarial, tentative, cooperative, and collaborative (Lacity and Willcocks, 2001). These are based on the extent of goal alignment for the task at hand:

- Tentative interactions occurred when goal alignments are unknown, such as during the bidding process. At such times, each side tended to exaggerate their strengths and hide their weaknesses.
- Adversarial interactions occurred when goals were conflicting, such as interpreting which party should pay for something ambiguously stated in the contract.
- Cooperative interactions occurred when goals were complementary, such as the customer wanted the service, the supplier wanted the payment.
- Collaborative interactions occurred when both sides had shared goals, such as educating the user community on what they could expect from the contract.

By attending to the expectations and goals of many outsourcing stakeholders, apparent anomalies in relationships could be clarified. Why, for example, did customer contract managers and supplier account managers *collaborate* to mediate user expectations, then feel perfectly comfortable *fighting* over a monthly bill? Quite simply, the dynamics of stakeholder relationships vary with the task.

#### **Supplier Capabilities**

A major recent stream of our research has focused on an area much neglected in academic studies of outsourcing, namely supplier core capabilities. Depending on what is trying to be achieved, our work suggest that an outsourcing supplier needs three competencies.

Delivery competency encompasses how well a supplier can respond to the client's requirement for day-to-day operational services. Transformation competency represents how well a supplier can radically improve and even transform cost, quality, and functionality in line with the client's formal and informal expectations. Relationship competency relates to the supplier's motivation and ability to align with client needs over time.

Our on-going work points to twelve capabilities needed to underpin these competencies (Feeny et al., 2005).

- Domain expertise sufficient professional knowledge of the target process domain to meet user requirements
- Business management ability to deliver both client service level agreements and supplier business and financial goals
- Behaviour management ability to motivate and manage people, including transferees, to deliver service with a 'front office' mind-set.
- Sourcing expertise and access to whatever resources are necessary to deliver service cost targets
- Technology exploitation ability to develop and deploy technology required to meet service improvements swiftly and effectively.
- Process re-engineering ability to design and implement changes to the service process to meet improvement targets
- Customer development ability to transition'users' of a service to 'customers' who
  make informed choices about service level and functionality
- Planning and contracting ability to develop and contract for business plans which deliver 'win-win' results for client and provider over time
- Organizational design ability to design and implement organizational arrangements
  which enable access to the capabilities required within the provider firm; and delivery
  of them where and when needed within the client.
- Governance- establishment and operation of processes which allow service performance to be defined and agreed, tracked and assessed over time.
- Programme management ability to orchestrate and deploy transformational capabilities to successfully achieved required changes over time
- Leadership ability to identify, communicate and ensure delivery of the mix of delivery, relationship and transformation activities to achieve present and future success for client and provider

Of these twelve, six capabilities emerged from our research as seeming to have major direct bearing on the quality of relationships achieved (see Figure 4).

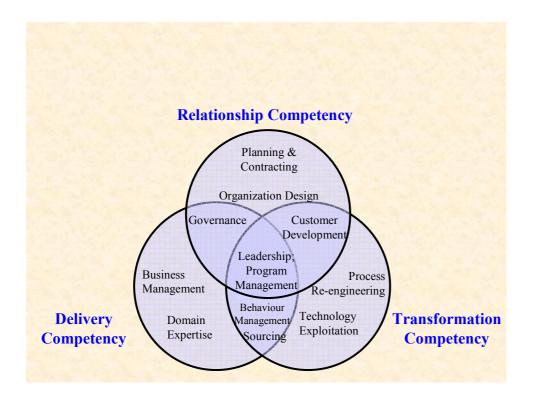


Figure 4 – Core Capabilities In The Outsourcing Services Provider

## **Research Prospects And Conclusion**

The IT sourcing literature is already rich with much empirical survey and case research findings, but is still marked by inconsistencies, a plethora of concepts, research approaches, ambivalent terminology, and a lack of consistency and common focus across different research groupings. To some extent this reflects the relatively youthful state of IT sourcing research, and it could be concluded that the research has been remarkably productive,

rigorous in many respects within individual studies, and also insightful in terms of the learnings achieved over time. One can posit that over time researchers will come to standardize much more, learn from each other's studies and begin to appreciate the real value in cross-research comparison and indeed of collaborative work.

As to the outsourcing phenomenon itself, we have consolidated our findings into a rich picture of evolution since 1991, from its origins as a relatively small IT services market in some sectors, through to the rise of selective multiple supplier sourcing as the consistently dominant approach in IT to the time of writing (2006). At the same time, under semi-recessionary conditions in the developed economies, business process outsourcing and offshore variants of ITO and BPO have greatly increased their share of an ever expanding market for external business process and IT services. We conclude that organizational learning on outsourcing has on the whole been quite slow. It may well be that a lower risk approach, and a safer way to accumulate learning has been through incremental outsourcing, and that customers have adopted this outsourcing strategy precisely to develop in-house knowledge about outsourcing.

Having said that, we regularly find that organizations do not apply their learning well until their third or even fourth generation deals. While client organizations may have a history of outsourcing experiences to draw upon, the problem is change. First generation outsourcing clients often changed what they outsourced and how they outsourced the second and third times around. Each time, they found themselves in a relatively new situation, having to learn anew. Furthermore, if their knowledgeable people had left and had not been replaced, organizational learning could not occur until sometimes the fourth generation deal. At the same time people providing the service to a client also move on, and take with them valuable knowledge that cannot easily be replaced, and will no longer be applied to improving the specific outsourcing arrangement. One of our overall conclusions is that though customer and supplier maturity definitely looks set to evolve further in the next five years, we have seen few signs of the knowledge issues inherent in outsourcing IT and other back-office functions

being addressed in the strategies and practices that these parties brought to bear in the outsourcing arena. By 2006 there were promising signs of some studies in this area appearing in the academic journals. But it remained to be seen whether practitioners themselves would, beyond intellectual property issues, start recognizing knowledge issues implicit in the act of outsourcing large parts of the back-office, let alone standardizing practices on ensuring key retained knowledge, and on suppliers possessing and fully deploying complementary knowledge in the service of their customers.

What does this all this suggest for future research prospects? Firstly, there is undoubtedly work needed on establishing consistency in definitions so that cross comparisons amongst different sets of research studies can be made. The limited ability to carry out such comparisons at the present time limits the contributions different studies make to our understanding of this field. Secondly, a profitable line of research is to investigate the issues detailed in Figure 3 in the context of new forms of mixed sourcing arrangements as offshoring and business process outsourcing gather pace, as predicted to do over the next five years. Thirdly, a major neglected research area remains that of what happens to knowledge whenever an organization outsources some or most of its back-office. Fourthly, the offshoring phenomenon shows signs of evolving into a more complex global offshorenearshore-onshore delivery model. It will be interesting to study how large suppliers take this model forward, including the degree to which they sub-contract work themselves, in order to achieve requisite geographical coverage in the light of economic, labour supply, infrastructure, and customer requirement considerations. Fifthly, the effectiveness of longitudinal case research in the IT sourcing arena needs to be recognised and carried forward. This research work has brought rich evidence on dynamic phenomena, and shown that technology, organizational needs, supplier capabilities and contractual completeness have not stayed still for long, and that, to derive fuller understanding and lessons, research as well as management practice in IT sourcing needs to be focused on history, processes, and contexts, as much as on immediate needs and solving short term problems.

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<sup>&</sup>lt;sup>ii</sup> A detailed description of the research methodology was published in our findings reported up to 1995, which are updated to 2001 in this report:

iii Op. Cit. Lacity and Willcocks (2001)

iv Other sample surveys on selective IT outsourcing can be found in:

<sup>&</sup>lt;sup>v</sup> Lawler et al, *Human Resources Business Process Outsourcing*, Jossey-Bass, San Francisco, 2004.

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ix Examples of empirical testing of RBV in IT outsourcing context:

<sup>&</sup>lt;sup>x</sup> For a concise explantation of the resource-based view, please see:

xv Op. Cit. Lacity and Willcocks (2001)

xvi For a list of practices customers implemented themselves, see: