

Association for Information Systems AIS Electronic Library (AISeL)

PACIS 2012 Proceedings

Pacific Asia Conference on Information Systems
(PACIS)

7-15-2012

Moving Up The Value Chain: Exploring The Issues For Chinese Software & Services Outsourcers

Pamela Abbott

Department of Information Systems and Computing, Brunel University, London, United Kingdom,
pamela.abbott@brunel.ac.uk

Yingqin Zheng

School of Management, Royal Holloway, University of London, Egham, United Kingdom, yingqin.zheng@rhul.ac.uk

Sunila Modi

Department of Information Systems and Computing, Brunel University, London, United Kingdom, sunila.modi@brunel.ac.uk

Rong Du

Department of Management, School of Economics and Management, Xidian University, Xian City, Shaanxi, China,
durong@mail.xidian.edu.cn

Follow this and additional works at: <http://aisel.aisnet.org/pacis2012>

Recommended Citation

Abbott, Pamela; Zheng, Yingqin; Modi, Sunila; and Du, Rong, "Moving Up The Value Chain: Exploring The Issues For Chinese Software & Services Outsourcers" (2012). *PACIS 2012 Proceedings*. 139.
<http://aisel.aisnet.org/pacis2012/139>

This material is brought to you by the Pacific Asia Conference on Information Systems (PACIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in PACIS 2012 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

MOVING UP THE VALUE CHAIN: EXPLORING THE ISSUES FOR CHINESE SOFTWARE & SERVICES OUTSOURCERS

Pamela Abbott, Department of Information Systems and Computing, Brunel University, London, United Kingdom, pamela.abbott@brunel.ac.uk

Yingqin Zheng, School of Management, Royal Holloway, University of London, Egham, United Kingdom, yingqin.zheng@rhul.ac.uk

Sunila Modi, Department of Information Systems and Computing, Brunel University, London, United Kingdom, sunila.modi@brunel.ac.uk

Rong Du, Department of Management, School of Economics and Management, Xidian University, Xian City, Shaanxi, China, durong@mail.xidian.edu.cn

Abstract

To move up the value chain, Chinese software and services outsourcing (SSO) providers will need to provide more value-added services by improving their organisational capabilities and innovative capacity. This paper reports on early findings on processes in which Chinese SSOs engage in order to move up the value chain, towards a transformative collaborative relationship with clients which is referred to as “collaborative innovation”. We provide a literature review on the concept of collaborative innovation and examine different aspects of organisational learning that occur in the interaction between vendors and clients. Data obtained from semi-structured interviews with 12 Chinese SSO providers supplies the basis for the findings which suggest that there are spaces of interaction between clients and providers which offer opportunities for better collaborative practices to emerge and consequently more innovative capacity.

Keywords: Collaborative innovation, Value-creation, Software and Services Outsourcing, China.

1 INTRODUCTION

China has been promoted both in the popular press and among academic circles as the most likely country to challenge the dominant Indian position in the global Software and Services Outsourcing (SSO) market (Ju 2001; Carmel et al. 2008; Analysis International 2008). To this end, various strategies can be seen to have been implemented as fairly high level policy in China such as English language training at earlier levels, concentration on producing more graduates for the sector, and investment in infrastructure and technology parks geared toward this industry (Qu & Brocklehurst 2003). These policies, though essential to the success of the industry, need to be further complemented by strategies at the organizational level in order to launch an effective competitive challenge. One area in which these firms can be seen to be progressing, is in “moving up the value chain”, that is in being able to offer products and services to their clients that are more transformational (Linder 2004; Haggerty 2011) rather than simply functional or operational. This paper seeks to give some insight into practices followed by some Chinese SSO firms that may enable or constrain providing these more value-added services. The paper achieves this through investigating the research question: *through what processes do SSO providers move up the value chain?* The empirical evidence we have gathered on 12 Chinese SSO companies situated in major technology parks in tier 1 and tier 2 cities in China can offer such an insight and can shed some light on whether and how value-added services can or are being developed in Chinese SSO offerings. China is moving from a “made in China” or “serviced in China” to an “innovated in China” perspective (Lacity et al. 2010), therefore it is timely that these perspectives can be more fully investigated and reported on.

The paper proceeds as follows. First, in order to explain and build a theoretical grounding for what it means to “move up the value chain”, this paper will explore a related concept of “collaborative innovation” which has been adopted by outsourcing researchers to explain how SSOs move through various stages of customer relationship starting with little value-added, hands-off third party contracting through to trusting, reciprocal, mutually beneficial transformative relationships where value creation is an inevitable outcome (Willcocks et al. 2010). Next, the paper will describe its research approach and will present the empirical findings. This will be followed by a discussion section highlighting the key insights discovered and then a concluding section will draw together the main contributions of the paper.

2 HOW DO SSO PROVIDERS MOVE UP THE VALUE CHAIN?

2.1 Moving up the Value Chain towards Collaborative Innovation

A variety of outsourcing literature addresses the topic of how outsourcing providers “move up the value chain” (Perunovic et al. 2012). To be precise, “moving up the value chain” refers to service providers being able to develop their capabilities to the extent that they can provide more value-added services to clients. Literature on outsourcing vendor capabilities categorises provider services into those that are more delivery/operational-focused towards those that are more transformational or geared toward client process improvement goals (Mazzawi 2002; Goles 2003; Levina & Ross 2003; Linder 2004; Feeny et al. 2005; Bharadwaj & Saxena 2010; Su & Levina 2010). As client/supplier relationships mature in SSO arrangements, there is a corresponding change in the emphasis placed on the value obtained from that relationship (Carmel & Agarwal 2002; Willcocks & Lacity 2006; Willcocks et al. 2010). In the beginning of the client/provider relationship, outsourced tasks are usually non-core, routine and non-strategic so as to minimize client risk. These tasks represent the lower end of the value chain or lower value-added services. The main concern at this point is in reducing production costs. Over time, as the relationship matures, the emphasis is placed on other intangible aspects such as quality, service and value-added returns (Willcocks et al. 2011). More mature client/provider relationships would be those where mutually beneficial partnerships have emerged which are focused on the value that each side can realize. Critical issues in progressing through this trajectory relate to how “value” is co-constructed and how trust develops at each stage of

the growth path from 3rd party hands-off contractual relationships to mutually beneficial partnerships (Weeks & Feeny 2008; Willcocks et al. 2011). “Value” is co-constructed between client and supplier depending on the context of their relationship and upon the nature of the service being offered (Levina & Ross 2003; Dobrzykowski et al. 2010). Trust represents mutual goodwill and the expectation that each side of the client/provider relationship will deliver on commitments and that the adopted mode of working is within the interest of the longevity of the relationship (Willcocks et al. 2010) .

The partnership stage of the trajectory described above has been associated with achieving “collaborative innovation” in outsourcing relationships (Willcocks et al. 2010; Whitley & Willcocks 2011). An explanatory framework has been proposed to elaborate on how this occurs: client-supplier relationships progress through four stages of maturation, viz., contract administration, contract management, supplier/relationship management and finally collaborative innovation (Willcocks et al. 2010; Whitley & Willcocks 2011). This is comparable to other literature which also suggests similar growth trajectories in client-supplier relationships (Spekman et al. 1998; Carmel & Agarwal 2002; Willcocks & Lacity 2006). The final stage of the Willcocks et al. (2010) framework refers to collaborative innovation as a “step-change” in relationship management which they argue involves four underlying and related processes that emphasize leadership in collaborative initiatives, flexible contracting, team organization and coordination and ensuring the best way to deliver performance. At this stage, client/supplier partnerships are thought to be so integrated and institutionalized that they co-create new knowledge through well established complementary practices which are not constrained by inter-organizational boundaries but which recognize and exploit enhanced supplier capabilities. What invites academic attention includes the linkages between the co-construction of knowledge across organisational boundaries, the perception and co-creation of value between collaborative partners and the contribution this makes to collaborative innovation. The next section deals with the concept in greater details.

2.2 Understanding Collaborative Innovation

Collaborative innovation is a widely used term in strategic management and supply chain management literature where definitions can encompass other related concepts which may be useful in gaining a more rounded view of the phenomenon. The term effectively merges two concepts: collaboration and innovation. Collaboration between firms is seen as encompassing mutually beneficial relationships e.g., strategic alliances, partnerships, or consortia where trust, long-term investment and minimisation of risk are deemed key components (Ring & Ven 1992; Whitley & Willcocks 2011). Collaborative inter-organisational arrangements are hybrid structures between market-based and hierarchical mechanisms and result from a combination of coordination, cooperation, joint investment, information sharing and high levels of integration (Ring & Ven 1992; Spekman et al. 1998). The other concept, innovation, is, broadly speaking, the generation and use of new knowledge usually realized in a business context in the form of new products, services, processes or ideas whose value lies in their potential for exploitation. Innovations can be of two types, either emergent, that is, of an incremental nature that over time can be seen to have improved the status quo or they are radical, that is, a step change, considerably different to the status quo and occurring relatively quickly (Chapman & Corso 2005; Whitley & Willcocks 2011). Innovations have been associated with typologies that attempt to categorise them in terms of source, e.g., technical, business-process oriented, strategic, etc, (Weeks and Feeny, 2008). The outsourcing of innovation (in the form of research and development (R&D) activity and other knowledge-intensive initiatives) has been seen as a major step also in moving away from types of routine work associated with information technology outsourcing (ITO) and business process outsourcing (BPO) to the more value-added activities common in high-end BPO and knowledge process outsourcing (KPO) (Business Week 2005; Frans et al. 2007; Ciappini et al. 2008; Weeks & Feeny 2008).

With this basic understanding of the meaning of these underlying terms, it follows that collaborative innovation is the generation of new knowledge that occurs as a result of inter-organisational relationships based on some form of mutually beneficial endeavour. In order to understand the concept better, the following paragraphs look more in-depth into how the term is deployed in its reference literatures. In the strategic management literature, the focus is on inter-firm cooperation for

competitive advantage. Depending on the focus of the article, the conceptual underpinning may apply management theories such as resource-based theory, network theory or organisational learning (Audretsch & Feldman 2003; Ketchen Jr. et al. 2007; Romero & Molina 2011). In supply chain management literature, the focus is on the functioning of the inter-organizational relationships. These inter-organizational relationships could be client-supplier-, or client-service provider-based as in the outsourcing literature or they could be representative of any network of interacting organisations that seek to benefit from cooperation in some particular business venture, each leveraging the expertise they hold from their position in the supply chain network. In this literature, network or virtual organizational structures are put forward as the basis on which to understand these inter-organisational interactions (Chapman & Corso 2005; Wilding & Humphries 2006; Nambisan 2008; Owen et al. 2008; Ojanen & Hallikas 2009). Value creation is seen as a result of the functioning of the value networks (Stabell & Fjeldstad 1998) in which these cooperating organisations are involved where they can leverage their particular capabilities and specific expertise for the mutual benefit of all participating collaborators (Chapman & Corso 2005).

2.3 How Collaborative Innovation Works

Regardless of the organizational form adopted (network, virtual, partnership etc.) some key elements are considered important in order for these inter-organisational relationships to work and to be conducive to enabling innovative processes. Trust, knowledge and information sharing, mutual learning and open communication are just some of the enabling conditions mentioned in the literature (Spekman et al. 1998; Chapman & Corso 2005; Henttonen 2005). These aspects are very much people-related or social conditions and it has been acknowledged that “good theories” to support these social processes are a major challenge in supply chain management research (Chapman & Corso 2005). The following paragraphs will review some of the literature that looks at these social processes and will discuss their underlying theories or conceptual positions.

While cooperation at the organisational level is a pre-requisite for collaborative innovation, it is also clear from the literature that team behaviour (group level) is also important in promoting collaborative behaviour and in creating the environment for creativity and innovation to occur (Whitley & Willcocks 2011). Virtual teams, for example, are seen to be a vehicle through which collaborative and knowledge-enhancing behaviour can occur (Henttonen 2005). One form of virtual team put forward in the literature is the Collaborative Innovation Network or COIN, a virtual team of “*self-motivated people with a collective vision, enabled by technology to collaborate in achieving a common goal-- innovation-by sharing ideas, information, and work*” (Gloor et al. 2003; Gloor 2006). According to these authors the successful exploitation of such emergent team-based structures can enable an organisation to be “*more creative, productive and efficient by applying principles of creative collaboration, knowledge sharing and social networking*” (ibid). This concept is very similar to that of virtual communities of practice (Hildreth et al. 2000; Kimble et al. 2000; Hildreth 2004) where shared knowledge in distributed environments helps to create conditions for shared expertise to develop. In effect, virtual communities of practice can underpin distributed collaboration (Gressgård 2011) and their emphasis on knowledge creation would inevitably enable innovation to occur.

Nambisan (2008) also provides a conceptual framework from which the practices underlying collaborative innovation can be viewed. The assumption is made that the basis of the collaboration is a form of networked organisation where interaction is enabled by four principles: shared goals (ideas that bring focus to the network’s activities); shared worldviews (shared meanings and understandings of innovation); social knowledge creation (new knowledge emanating from social interactions); and an architecture of participation (technological and process artefacts that assist in collaboration). The social processes mentioned above point to some degree of mutual learning or sensemaking (Moss 2001; Maitlis 2005) taking place between organisational participants. Organisational learning, is in fact, the main theme of Ojanen and Hallikas’ (2009) conceptualisation of how the collaborative process works. “Routines” or practices based on embedded, tacit knowledge are thought to help coordinate inter-organisational relationships. Organisations are deemed to learn through absorptive capacity (Cohen & Levinthal 1990), that is, the ability to recognise and exploit new knowledge from external sources. In fact, strategic alliances are considered an important approach to enhance

organizational learning which enables firms to acquire technology-based capabilities from partners (Kogut 1988; Mowery et al. 1996; Inkpen 2000). Organizational learning is also seen as key to the development of operational capabilities among Chinese firms, which is then used to leverage “moving up the value chain” (Jarvenpaa & Mao 2008; Su & Levina 2010).

Barriers to effective collaboration also exist (Swink 2006). Levina and Vaast (2008) elaborate on these barriers as organisational, national, social, cultural, temporal, spatial, and knowledge-based while also extracting others from their grounded theory study. The barriers are re-conceptualised as boundaries (of fields of practice) and use practice theory (Bourdieu 1977) to create a theoretical framework from which other similar collaborative arrangements can be analysed. Levina and Vaast (2008) conceptualise inter-organizational relationships as boundaries which can be renegotiated by knowledgeable agents thus enabling collaboration, however, ultimately they argue that the boundaries identified reinforced status differences between client and providers thus restricting the level of effective collaboration that could occur and consequently the level of innovation.

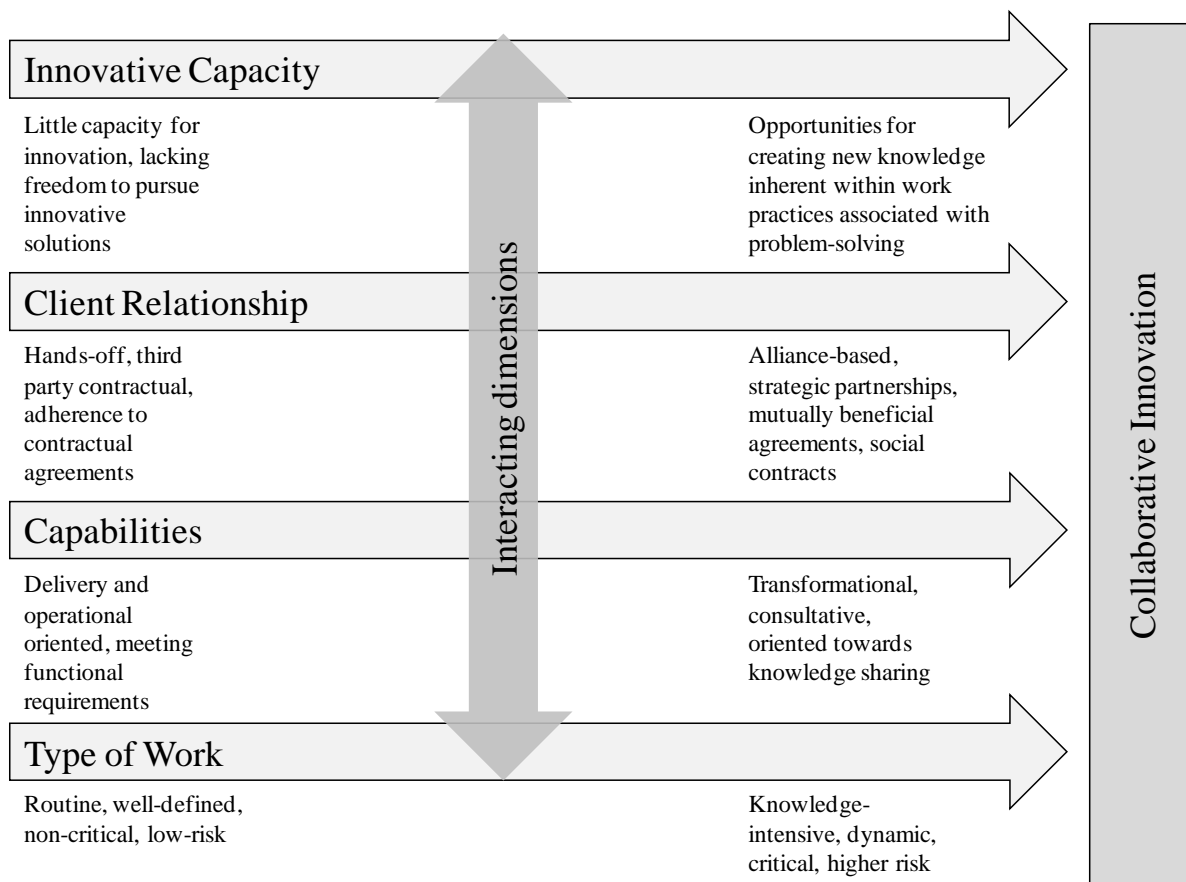


Figure 1 Continua representing trajectories along which SSOs move up the value chain

Through the literature review, it is evident that there are several processes through which SSOs progress in order to move up the value chain. These can be conceptualised as continua (showing progression over time) related to: the type of work which underpins the services provided; the capabilities developed to provide these services; the nature of the client relationship; and the growth of innovative capacity. These elements are interactively connected to each other in that the development of one feeds into the development of the others and, in so doing value creation becomes a constitutive part of this process. As firms become more mature, their capacity for collaborative innovation increases. These processes are mediated by mutual organisational learning between vendor and client, encompassing elements mentioned in the literature such as trust, knowledge sharing, and sensemaking. These latter may prove to both enable and restrict the achievement of collaborative innovation. The processes mentioned above (and illustrated in Figure 1) are quite complex and multi-faceted and would benefit from further elaboration, but not within the scope of this paper. In the next

sections we use Figure 1 as a basis to examine the potential for collaborative innovation in Chinese SSO provider organisations.

3 METHODOLOGY

The study was designed to investigate the processes by which the respondents created opportunities for moving up the value chain and how they viewed these processes. We were interested in the insights we could gain from their own verbal accounts of their experiences. Hence our approach was broadly interpretive (Walsham 2006) in that we were interested in their subjective understandings of these processes, and exploratory in order to investigate potentially interesting themes that would emerge. The research data reported here were collected over a three-week period on visits to three software parks based in Beijing and Shanghai (tier 1 cities) and Xi'an City (tier 2 city). Twelve indigenous and multi-national companies (see Table 1), whose organisational structures reflected a mixture of expatriate and local management, were chosen as participants in the research. The chosen companies reflected a mixture of (a) independent providers, owned and operated by Chinese nationals which serviced both local and foreign clients, (b) captive centres, where the services were provided only to the parent company and its clients and (c) joint venture arrangements where the services were provided both to the main partner and a variety of other clientele not associated with the partner. The companies were engaged in a mixture of services ranging from software development and R&D work, to business process outsourcing, to customisation and localisation.

No.	Interviewees	Type of Company	Location	Size	Clients	Global:Local Split %	Years operating
1.	2 Senior Managers, 1 Project Manager	Independently owned	Tier 1	5K – 10K	US/EU/Asia	65:35	>15
2.	1 Senior Manager	Independently owned	Tier 1	1K – 5K	US/EU	50:50	15 - 20
3.	1 Senior Manger	Captive Centre	Tier 2	<100	US/Japan	100:0	20 - 25
4.	1 Senior Manger	Independently owned	Tier 1	1K – 5K	US/Japan	90:10	10 - 15
5.	1 Senior Manger	Captive Centre	Tier 1	1K – 5K	US/EU	90:10	20 - 25
6.	1 Senior Manger, 1 Project Manager	Joint Venture	Tier 2	<100	US	100:0	1 - 5
7.	1 Senior Manger	Captive Centre	Tier 2	100 – 500	US	100:0	5 - 10
8.	1 Senior Manger	Captive Centre	Tier 2	100 – 500	Japan	80:20	5 - 10
9.	1 Senior Manger	Captive Centre	Tier 1	<100	US	100:0	1 - 5
10.	1 Senior Manger, 1 Project Manager	Captive Centre	Tier 1	<100	EU	40:60	1 - 5
11.	1 Senior Manger, 1 Project Manager	Joint Venture	Tier 2	100 – 500	US/Latin America	75:25	5 - 10
12.	1 Senior Manger, 2 Project Managers	Captive Centre	Tier 2	<100	US/North America	40:60	15 - 20

Table 1. List of companies interviewed

We conducted semi-structured interviews lasting approximately 1 hour in these 12 organisations mainly targeting senior managers and project managers familiar with the processes related to their main service offerings (see Table 1). The interviews addressed three main areas of concern: processes related to the project work undertaken; processes related to knowledge creation and sharing and organizational learning; and processes related to collaboration and developing innovation opportunities. The interview protocol is contained in the Appendix. The research team consisted of two native Chinese speaking researchers, one based in the UK, and one based in China, both with fluent English and Chinese language skills, and one native English speaking researcher based in the UK, with no Chinese language skills. Interviews were held both in English, where the respondents could speak English fluently, and in Chinese, where that was the preferred method of communication.

All interviews were recorded and transcribed; Chinese language interviews were transcribed into Chinese and then, where needed, translated into English for further analysis. The English translations were proof-read and checked by the UK-based Chinese researcher for accuracy. Interviews taken in English were also transcribed for further analysis.

Once the data were collected, a process of thematic coding (Fereday 2006) was used for analysing the data and categorising them into themes. The process was as follows: first, we identified from the literature review (in particular the conceptual ideas presented in Figure 1) several themes that were pertinent to the analysis (see Table 2); second, the transcripts were read then re-read, in order to obtain an overall sense of which themes were related to which tranches of data and whether there were any emerging themes occurring; third, the themes were coded using the Atlas.ti qualitative analysis software; and fourth, a table outlining major findings under the thematic headings was drawn up to compare and contrast the various sources for consistency and cross referencing. Table 2 below outlines the codes used in the thematic coding process. The chapter following presents a narrative, interspersed with excerpts from the actual accounts of the participants which broadly map to the major themes identified in the table.

Main Theme:	Type of work (Establishing value-added nature of project work undertaken)
Codes	<ul style="list-style-type: none"> • Routine work (work that is simple to achieve, not requiring much interpretation) • Clear specification (work that is clearly specified, well-defined) • Goal driven (work that is directed toward some particular goal, aim, objective) • Creative/innovative (allowing the freedom to be creative, to apply new ideas) • Design (more value-added work that involves designing solutions to client problems) • Solution-provision (implementing existing solutions in new settings) • Consulting (advising, recommending, providing workarounds, suggesting new ways of working) • Long term partnership (work that is part of a long-term client relationship) • Short term projects (work that is short-term in nature)
Main Theme:	Organisation Learning (Establishing how the company created, exploited and shared knowledge and skills through its interactions with clients)
Codes	<ul style="list-style-type: none"> • Proactive learning (anticipating situations where new knowledge can be applied and obtaining the learning to do so) • Reactive learning (in response to a situation, rather than anticipating it) • Knowledge sharing with clients (vendor to client, client to vendor) • Knowledge sharing in the team (co-located or extended team) • Knowledge creation (new knowledge at any level, technical, procedural etc) • Knowledge application (using that knowledge) • Community of practice (knowledgeable experts, practice-based knowledge, sharing, co-located or distributed) • Identity (Individual Identity) • Power/status negotiation (where status plays a role in whether effective learning can take place) • Capabilities (skill sets, capacity, expertise in a particular area)
Main Theme:	Collaborative innovation (Establishing processes by which collaboration is encouraged, and creativity/innovation can occur)
Codes	<ul style="list-style-type: none"> • Innovation/creativity (how these are manifest in the work done, examples) • Conditions for creativity/innovation (what encourages creativity or innovation) • Tolerance of error (allowing employees to learn by trial/error) • Shared understanding (in a team or with client) • Organisational values (slogans, overarching principles etc.) • Trust (client-vendor, within the teams, at various levels e.g. PM, Team Leaders etc) • Collaboration with client (in any form that it takes, whether short or long term) • Cross-cultural communication (issues, strategies, workarounds, experiences) • Network expansion (building relationships, creating local-global and global-local)

Main Theme:	Type of work (Establishing value-added nature of project work undertaken)
	<p>linkages, extending networks)</p> <ul style="list-style-type: none"> • Organisational culture (Chinese, American, Japanese, mixed, etc.) • Emergent/novel practices (practices – what is done that is new or comes out of actual experience) • Paradoxes (tensions and contradictions) • Time/space (any indication of how temporal/spatial issues may be affecting the work/relationships between client/service provider)

Table 2. Codes used in the thematic coding process

4 INTERVIEW FINDINGS

All of the providers interviewed spoke of their experiences of “moving up the value chain”. These were influenced by the length of the relationship with the client, the nature of that relationship, the level of trust developed over that time and having to gain that trust through successful completions of projects and the development of capabilities that could be leveraged on other projects. Moving up the value chain was, for the more mature companies within our sample a guiding value which they strived to achieve as evidenced by this quote:

“So, the thing that is different between us and... other companies around here... is that... often times, they throw out thousands of employee numbers. We are actually trying to keep our employee number constant, while moving up the value chain. It’s basically, we want our employees to provide high level work. So, we want to continue to build up the expertise. And once you build up your expertise, that’s when you are able to charge the higher rate; whereas if you keep on focusing on just the number of bodies, then you will always focus on a lower level work.”

Many of these companies expressed the goal of seeking long-term projects or long-term commitments with their clients, of building and investing in partnerships. The partnership very often was established in situations where the provider would act as a value-added reseller (VAR) of one of the client’s major products so that they could gain a foothold with that client. Some providers proudly referred to preferred status positions that they held with their clients. Such accolades would help to build their reputation both locally and internationally and demonstrate their trustworthiness as a partner. Such ambitions on the part of the providers matched well with client expectations since it was revealed that access to the Chinese market was a main motivator for much of the foreign investment activity of the clientele:

“I think, now, the partnership with [the client] is not only... they are client, we are vendors. In some ways, because [the client] also has a product servicing businesses worldwide, sometimes, we also propel a solution based on [the client’s] product to our other clients. So, sometimes we are also their clients too; so, I think this is a very strong partnership. Because we have some connection with the domestic markets, like some banks and some government agencies and also if we know some opportunities beyond our capabilities, we would like to introduce our clients to take these opportunities. So, now, I think the partnership is very complex and very strong. Not only they help... generate value, revenue, but also we can help them generate some profit.”

The processes related to developing client solutions, especially technical solutions, were very similar across interviewees. There were usually structured project management processes, knowledge management systems of varying degrees of complexity, client-side training onsite or offsite, and on-the-job training that took a variety of forms. The knowledge and capabilities gained and the freedom to deviate from client-specified processes depended to a great extent on the relationship with the client, the exposure afforded by the project and the degree of trust already developed. The following quote illustrates:

“Basically, a new customer will start from a small-sized team, or a small-scope project before they take us seriously. As an example, we started with seven people: four developers; three

testers; one PM. And, we did a pilot project and we competed [one] with another vendor; another competitor in Beijing. And, found that [we got more work] than one pilot project. And then... we... at the beginning stage we got just a C++ developer team - upgrade team [to upgrade an existing system]. Then we had a Java team. And, the Java team is currently working on core models of their system. So, basically, the customer would like to start from small size - small team - and then link them to scope work. And then they will meet the team manager and give us more responsibilities, like... not only coding or testing, but also more freedom in respect of project management."

Regardless of the size or process maturity of the service provider, interviewees also mentioned that they were apt to follow processes that originated with the client and looked upon this as a learning opportunity since clients were considered to be more experienced than the providers. Naturally, with captive centres or joint venture service providers, there would not have been much choice in terms of processes used.

Building trust from the provider's perspective is one of ensuring delivery capability. Value is construed by the provider as timely delivery, with appropriate quality. Value in service delivery is associated with open communication between provider and client.

"I don't think I have much difficulty to build the trust; because I did it for many years. I think, if you want your customer to trust you, you must ensure the quality of your daily delivery and keep on schedule; always meet the deadline; and you must make sure about the quality. Not only the timeline, sometimes you have to show your capability of problem solving. You always have all kinds of problems in project execution. And the communication is also very important. You always have to do daily reports or you may need to report to your customer what problems you've experienced and how you've solved it... and also quick response to customers question or request. I think that's how you build up trust in the beginning. And again, communication is the best and the key to the success."

Clients, on the other hand may be interested in attaining value of a different sort, value associated with obtaining a specific expertise not available in their home market, like being able to leverage existing innovations in the Chinese market to exploit at home. Value therefore could come not just from the capability of the vendor to deliver on time but from their ability to exploit linkages to the innovative capacity of local firms. This quote points to one such example:

"In terms of the client, I guess, the flow of information between us and the client... what we are trying to also find today is that a lot of clients don't have the expertise and that's why they are coming to us. And, that is a trend that is also becoming more prevalent with convergence. Because you have companies that used to be in the PC space moving into the mobile space. They don't have that expertise. So, they are actually coming to us for that expertise, now. So, I guess, an example of how... you know, I've actually seen this put into practice... is that there is one company that we work with in Silicon Valley. It was started by the founders of [Company X] and those guys... they wanted to create... basically, intelligent products for the home. So, they had a lot of hardware experience, but they didn't have software experience. So, [we] were actually the entire software services provider - from beginning to end. So, we really tried to be their co-creation partner."

Knowledge sharing in some of the more mature companies is organised along groups labelled centres of excellence. An example would be an offshore development centre (ODC) which would be a team dedicated to a particular client's project. That team would learn all the technical and domain knowledge needed for servicing that client. There were also other groupings dedicated to learning particular expertise not specifically associated with a client's projects. Knowledge sharing would be possible among these centres in so far as client-sensitive information was not disclosed. Knowledge bases were set up to train people within these centres.

“The knowledge sharing, actually, I think we do very well in this way. Because for some key accounts, we have hundreds of engineers. It’s a very large team - project team - working with their clients. They have a dedicated training team. We have the knowledge base to manage all the technical documents and also they will decide on different training courses based on the project and also communication. So, each of these groups, they have their English training. And, for some small team, maybe they only have 4 or 5 engineers, I think the technical leader or some senior engineer will supervise the training. So, there is always a dedicated person in the team to manage all this knowledge. And for us, the good thing is that... of course, some product information is confidential within the team. But, for some universal stuff like management or the process, the different teams... actually, they have the cross team training.”

Not only client but cultural barriers appear to be an issue in ensuring effective knowledge exchange, though and may also stand in the way of encouraging creativity and innovation:

“Because, I think, traditionally... I would say culturally, a lot of our folks from China aren’t necessarily expected to, I guess, develop the solution from start to finish and also implement it. They are used to going to the client... what do you want? What do you want? Is this ok? Is this ok? So, that’s one mindset we are trying to change by having this cross cultural team in place. Well, we are trying, basically... we have our monthly brown bag lunches or we try to do information sharing”.

There seem not to be cultural barriers to exploiting learning from external sources, however. These clearly are opportunities for creating new value well recognised by the providers interviewed:

“And, I think for our project... from executive to the engineer levels, the company... we really learn very fast and also if we see there is some new opportunity or service, I think we will adopt it very fast. So, our organisation is... this is the best model to serving our business now.”

In fact local (Chinese market) to global (foreign market) and global to local exchanges in learning seem to be a way forward for companies wishing to enhance their capabilities as evidenced by the examples given below. The first demonstrates how local innovations led to the local market being used as a springboard for creativity:

“Actually, I think for us... like the telecom or the mobile industry in China. We develop really fast. So, we work with the Chinese mobile companies on their services or some different products. And we started engagement with some telecom service providers in Europe. And they are really big players there. But also they have shared some requests like this... ‘I want to develop these kind of services to serve my end users in Europe’. We can see that already available in China. So, I think, from these perspectives... because we have done many projects with the Chinese mobile companies they are really very flexible and creative in the domestic market – to serve the local users. But, the European players, I think, they are a little bit slower in this way. So, that’s also given us a lot of benefit. We can share the way we have done work with the Chinese mobile companies with the telecom companies in Europe.”

The second demonstrates how introducing global processes to the local market allowed new ways of creating value with local partners:

“Actually, we worked with the Ministry of Information of China to... we can... I think we produced the first or second issues of the China outsourcing whitepaper, with the Ministry together. Because we also wanted to educate the government to give stronger support to the industry. And also, we worked with the Ministry to give outsourcing training to the CIOs of state owned businesses in China. Because we see that... they will be the big buyers in the future. So, that model works very well. And also, I think, because they are big players in the industry these kinds of very successful cases can educate the others to follow their model”.

Impediments to “moving up the value chain” exist though mainly through the lack of opportunities to be creative and innovative. This was evidenced through lack of innovative work, lack of freedom to experiment and lack of tolerance for mistakes. Those organisations operating as captive centres or

joint ventures, although expected to collaborate with their “headquarters” or joint venture partners, were tightly controlled throughout the development phases. The work given was too modular or too restricted to allow for deviation and experimentation. No free time would be available to experiment or “play” with new ideas. The following quote gives a flavour of this problem while also introducing a cultural twist. This organisation has links to both American and Japanese “parent” partners and found that, depending on the partner with which they were interacting, the opportunities for collaborative innovation varied:

“It is because the right is transferred from the head office [in America] to our company. They only provide a general framework or direction. You need to achieve this technical target. You suggest the best way to develop the functions of the product from the technical aspect. From the innovation aspect, there is much room to develop it. However, when the out-sourcing is taken from Japan, the room for innovation is very small because the innovation has been done in Japan. The project has been split into a number of parts and the different parts are allocated in the different places, such as Xi’an, ChengDu, Dalian. They have decided that the innovation is not included.”

In the following section these findings are discussed with reference to analytical concepts taken from the literature review.

5 ANALYSIS AND DISCUSSION

The findings reveal some important insights regarding how the SSO’s in our sample are approaching the issue of moving up the value chain and how their collaborative practices work towards this end. For the suppliers in our sample, moving up the value chain is effectively a process of redefining their spaces of interaction with the client (or boundaries as per Levina & Vaast 2008), that is, social processes occurring at the inter-organizational level that affect the development of collaborative innovation (see Figure 1). These boundaries are of various types, for example, local-global boundaries where knowledge exchanges are taking place between local contexts and global contexts, team boundaries where knowledge exchange takes place across the interfaces of these teams, and trust boundaries, where the provision of more complex work and responsibility can lead to opportunities for innovation. These aspects are further discussed below.

The local-global interface represents processes that allow for the exchange of local knowledge to the global context and vice versa. The provision of outsourcing services has been referred to as a manifestation of the processes of globalisation (Sahay et al. 2003) and the exchange of knowledge from global to local and local to global contexts is deemed a phenomenon made possible through these processes of globalisation (Heeks et al. 2001; Ernst & Kim 2002). Knowledge transfer between these contexts is a non-trivial matter, however, and is complicated by cultural, technical, social and organisational norms (Nicholson & Sahay 2004; Oshri et al. 2008). The findings illustrate that this potential for knowledge exchange is an area where there is an opportunity for organisational learning (Cohen & Levinthal 1990) to take place and for that learning to be realized on both sides of the client-provider relationship. In the findings, it was revealed that the transfer of outsourcing practices from global client through local provider to local client occurred because of the accumulation of learning made possible by the partnership arrangement between the global client and the local provider. Conversely, the global client was able to access key knowledge on local practices within its domain of expertise, knowledge which would not have been possible without access to the client-provider interaction. In both cases, the knowledge gained was instrumental in stimulating innovations in both contexts. In the local context, the outsourcing practices became an organisational innovation for the local clients who were the beneficiaries of that knowledge. For the foreign client, the access to the knowledge of mobile services that were innovations in the Chinese market, provided a means for producing technical innovations in the global client’s foreign market. In both cases value could be achieved from the interactions that were related to revenue on the one hand and on the other investment in future partnerships.

The findings revealed that project work within these SSOs is organised as team-based activity. These teams are either co-located, distributed or a mixture of both with interacting onsite and offsite teams. Communication is an essential part of the teams' organisation and coordination, however, knowledge sharing is key to creating the opportunities for innovation and creativity. In these organisations, knowledge is encapsulated in centres of excellence, which operate very similarly to communities of practice (Hildreth et al. 2000), which can be co-located or distributed. New members are mentored and trained and are exposed to the group's expertise as part of an ongoing peer-learning experience. Knowledge exchange can, however, be hampered by restrictions that are imposed on interactions between these teams due to confidentiality issues. If a team is dedicated to serving a particular client, much of the knowledge is sensitive and cannot be distributed. Knowledge bases and other technical artefacts are used as means of distributing knowledge across these centres and in some cases rewards or special events are held to help to facilitate the exchange of knowledge. Ultimately, however, it is only when members can be exposed to differing expertise representing different frames of reference from disparate centres, that new ideas can emerge. Hence, the more opportunities there are for these shared spaces to be developed, the more this activity could encourage opportunities for innovation. Team interfaces are therefore an area available for redefining so as to gain better opportunities for innovations.

Trust between client and provider offers another space within which there is room for redefinition and proactive engagement. It is clear from the responses given by the providers, that trust is key to the development of collaborative practices. Normally, as trust develops, more complex work is entrusted to the provider and the client's expectations are raised. More complex work brings the opportunity to for process or technical innovations. The development of trust is complicated by a number of issues including cultural barriers (as seen in the example of the strict specifications without room for innovation given by the Japanese client in the findings). A different cultural mindset on the part of the client could result in a different approach to the relationship. The development of trust is also complicated by client expectations. If the client sees the outsourcing opportunity as a means to divest routine low-end work, then their value expectations would be low: e.g., projects that delivered on time and within costs would be sufficient. Delivery capability on the part of the vendor is all that is required (Feeny et al. 2005). If the client sees the outsourcing opportunity as a means of leveraging some particular expertise, then the value expectation is of quality, concept and creativity. Transformative capacity (Mazzawi 2002) on the part of the vendor would be the more valuable contribution in that case. The type of interaction therefore between client and provider offers the opportunity for innovation to occur or not depending on the level of trust attained. Redefining trust boundaries would therefore be a way in which SSOs can gain some leverage in obtaining more value-added work. This may be a difficult proposition, however, given that status differences (Levina & Vaast 2008) between client and provider often do not allow for much negotiation in this area.

The main points of our analysis are now summarised. The spaces of interaction identified as local-global, team, and trust, interfaces, offer the opportunity for improved collaboration and opportunities for innovative practices to emerge between clients and providers. Social processes such as organizational learning, knowledge sharing and trust-building occurring within these interfaces either enable or constrain the development of these practices. The challenge for SSO providers, therefore, is to identify the means by which these interfaces can provide opportunities for growth along the dimensions that allow an organization to move up the value chain.

6 CONCLUSION

Provider organisations, wishing to engage in higher order service provision activities, need to identify and address key areas where client-provider interactions may offer opportunities for better collaboration. We have identified above 3 such areas from the findings of the study, where attention to the relationship at these points demonstrated tangible outcomes for the respondents interviewed. And where these outcomes were impeded, the nature of the barriers suggested where problems preventing improved collaboration could lie. The findings also allowed us to see how innovation occurs as a result of these improved collaborative practices and how value can be constructed to affect the motivations for these practices. The analysis helps us understand better the processes by which

these SSOs could move up the value chain. Our initial conceptual framework and the results of our literature review on collaborative innovation suggest that a theoretical viewpoint can be applied in other similar cases. As part of the future work arising from this project, more work needs to be done to study in further detail the social and technical processes that enable and constrain the redefining of the interfaces we identified. Further work needs to be done to identify other spaces of interaction that may also be important to moving up the value chain. Further work needs to be done, also, on creating a more comprehensive conceptual framework that provides a more complete theoretical underpinning for the ideas presented in this paper.

A major limitation of this paper is the lack of data from the client's side, pertaining particularly to their perception of the provider's potential to provide value and the client-side processes that interact with provider-side processes to create the complex spaces of interaction within collaborative endeavours. This could be the subject also of another complimentary study to further the work introduced here.

References

- Analysis International (2008). China Offshore Software Outsourcing Market Reached CNY 4.53 billion in Q3 of 2003. Available at: <http://english.analysys.com.cn/3class/detail.php?id=397&name=report&FocusAreaTitleGB=&dao hang=Report&title=China Offshore Software Outsourcing Market Reached CNY 4.53 billion in Q3 of 2003> [Accessed November 27, 2008].
- Audretsch, D. and Feldman, M. (2003). Small-Firm Strategic Research Partnerships: The Case of Biotechnology. *Technology Analysis & Strategic Management*, 15(2), 273–288.
- Bharadwaj, S.S. and Saxena, K.B.C. (2010). Service Providers' Competences in Business Process Outsourcing for Delivering Successful Outcome: An Exploratory Study. *Vikalpa: The Journal for Decision Makers*, 35(3), 37–53.
- Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge University Press, New York.
- Business Week (2005). Outsourcing Innovation. *Business Week*, March 21, 2005.
- Carmel, E. and Agarwal, R. (2002). The maturation of offshore sourcing of information technology work. *MIS Quarterly - Executive*, 1(2), 65–77.
- Carmel, E., Gao, G. and Zhang, N. (2008). The Maturing Chinese Offshore IT Services Industry: It Takes 10 Years to Sharpen a Sword. *MIS Quarterly Executive*, 7(4), 157–170.
- Chapman, R.L. and Corso, M. (2005). From continuous improvement to collaborative innovation: the next challenge in supply chain management. *Production Planning & Control*, 16, 339–344.
- Ciappini, A., Corso, M. and Perego, A. (2008). From ICT outsourcing to strategic sourcing: managing customer-supplier relations for continuous innovation capabilities. *International Journal of Technology Management*, 42(1-2), 185–203.
- Cohen, W. and Levinthal, D. (1990). Absorptive-capacity - a new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128–152.
- Dobrzykowski, D.D., Tran, O. and Tarafdar, M. (2010). Value co-creation and resource based perspectives for strategic sourcing. *Strategic Outsourcing: An International Journal*, 3(2), 106–127.
- Ernst, D. and Kim, L. (2002). Global production networks, knowledge diffusion, and local capability formation. *Research Policy*, 31(8-9), 1417–1429.
- Feeny, D., Lacity, M. and Willcocks, L. (2005). Taking the measure of Outsourcing Providers. *Sloan Management Review*, 46(3), 41–48.
- Fereday, J. (2006). Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development | |. *International Journal of Qualitative Methods*, 5(1), 80–92.
- Frans, C., Chieh, H.C. and Dan, Y. (2007). Management of Outsourcing R&D in the era of open innovation. *Ismot'07: Proceedings of the Fifth International Symposium on Management of Technology, Vols 1 and 2*, 252–256.
- Gloor, P.A. Laubacher, R., Dynes, S.B.C. and Zhao, Y. (2003). Visualization of Communication Patterns in Collaborative Innovation Networks - Analysis of Some W3C Working Groups. In

- Proceedings of the twelfth international conference on Information and knowledge management. CIKM '03*. New York, NY, USA: ACM, 56–60.
- Gloor, P.A. (2006). *Swarm creativity: competitive advantage through collaborative innovation networks*. Oxford University Press, Oxford.
- Goles, T. (2003). Vendor capabilities and outsourcing success: A resource-based view. *Wirtschaftsinformatik* 45, 199–206
- Gressgård, L.J. (2011). Virtual team collaboration and innovation in organizations. *Team Performance Management*, 17(1/2), 102–119.
- Haggerty, N. (2011). What we can learn from high value Indian outsourcers. Available at: <http://www.iveybusinessjournal.com/topics/global-business/what-we-can-learn-from-high-value-indian-outsourcers> [Accessed March 17, 2012].
- Heeks, R. et al. (2001). Synching or sinking: global software outsourcing relationships. *IEEE Software*, 18(2), 54–60.
- Henttonen, K. (2005). Managing distance in a global virtual team: the evolution of trust through technology-mediated relational communication. *Strategic Change*, 14(2), 107–119.
- Hildreth, P., Kimble, C. and Wright, P. (2000). Communities of practice in the distributed international environment. *Journal of Knowledge Management*, 4(1), 27–38.
- Hildreth, P.M. (2004). *Going virtual: distributed communities of practice*, Idea Group Inc (IGI).
- Inkpen, A.C. (2000). Learning through joint ventures: a framework of knowledge acquisition. *Journal of Management Studies*, 37(7), 1019–1045.
- Jarvenpaa, S. L. and Mao, J. (2008). Operational capabilities development in mediated offshore software services models. *Journal of Information Technology*, 23(1), 3–17.
- Ju, D., (2001). China's budding software industry. *IEEE Software*, 18(3), 92–95.
- Ketchen Jr., D.J., Ireland, R.D. and Snow, C.C. (2007). Strategic entrepreneurship, collaborative innovation, and wealth creation. *Strategic Entrepreneurship Journal*, 1(3-4), 371–385.
- Kimble, C., Barlow, A. and Li, F. (2000). Effective Virtual Teams Through Communities of Practice. *SSRN eLibrary*. Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=634645 [Accessed December 8, 2011].
- Kogut, B. (1988). Joint venture: theoretical and empirical perspectives. *Strategic Management Journal*, 9(4), 319 – 332.
- Lacity, M.C., Willcocks, L. and Zheng, Y. (2010). *China's emerging outsourcing capabilities : the services challenge*. Palgrave Macmillan, Basingstoke.
- Levina, N. and Ross, J.W. (2003). From the Vendor's Perspective: Exploring the Value Proposition in Information Technology Outsourcing. *MIS Quarterly*, 27(3), 331–364.
- Levina, N. and Vaast, E. (2008). Innovating or doing as told? Status differences and overlapping boundaries in offshore collaboration. *MIS Quarterly*, 32(2), 307–332.
- Linder, J.C. (2004). Transformational Outsourcing. *MIT Sloan Management Review*, 45(2), 52–58.
- Maitlis, S. (2005). The Social Processes of Organizational Sensemaking. *The Academy of Management Journal*, 48(1), 21–49.
- Mazzawi, E. (2002). Transformational Outsourcing. *Business Strategy Review*, 13(3), 39–43.
- Moss, M. (2001). Sensemaking, complexity and organizational knowledge. *Knowledge and Process Management*, 8(4), 217–232.
- Mowery, D.C., Oxley, J.E. and Silverman, B.S. (1996). Strategic alliances and interfirm knowledge transfer. *Strategic Management Journal*, 17, 77–91.
- Nambisan, S. (2008). Transforming Government through Collaborative Innovation. *Public Manager*, 37(3), 36–41.
- Nicholson, B. and Sahay, S. (2004). Embedded knowledge and offshore software development. *Information and Organization*, 14(4), 329–365.
- Ojanen, V. and Hallikas, J. (2009). Inter-organisational routines and transformation of customer relationships in collaborative innovation. *International Journal of Technology Management*, 45(3), 306–322.
- Oshri, I., van Fenema, P. and Kotlarsky, J. (2008). Knowledge transfer in globally distributed teams: the role of transactive memory. *Information Systems Journal*, 18(6), 593–616.
- Owen, L., Goldwasser, C., Choate, K. and Blitz, A. (2008). Collaborative innovation throughout the extended enterprise. *Strategy & Leadership*, 36(1), 39–45.

- Perunovic, Z., Christoffersen, M. and Mefford, R.N. (2012). Deployment of vendor capabilities and competences throughout the outsourcing process. *International Journal of Operations & Production Management*, 32(3), 351–374.
- 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 (Routledge, Ltd.)*, 18(1), 53–67.
- Ring, P.S. and Ven, A.H.V.D. (1992). Structuring Cooperative Relationships between Organizations. *Strategic Management Journal*, 13(7), 483–498.
- Romero, D. and Molina, A. (2011). Collaborative networked organisations and customer communities: value co-creation and co-innovation in the networking era. *Production Planning & Control*, 22, 447–472.
- Sahay, S., Nicholson, B. and Krishna, S. (2003). *Global IT Outsourcing: Software Development Across Borders*. Cambridge University Press, Cambridge.
- Spekman, R.E., Kamauff, J.W. and Myhr, N. (1998). An empirical investigation into supply chain management: a perspective on partnerships. *International Journal of Physical Distribution & Logistics Management*, 28(8), 630–650.
- Stabell, C.B. and Fjeldstad, O.D. (1998). Configuring value for competitive advantage: On chains, shops, and networks. *Strategic Management Journal*, 19(5), 413–437.
- Su, N. and Levina, N. (2010). *Operational Capability Development in Vendor Internationalization: The Case of China's IT Service Industry*, Pittsburgh, PA: University of Pittsburgh.
- Swink, M. (2006). Building collaborative innovation capability. *Research Technology Management*, 49(2), 37–47.
- Walsham, G. (2006). Doing interpretive research. *European Journal of Information Systems*, 15(3), 320–330.
- Weeks, M.R. and Feeny, D. (2008). Outsourcing: from cost management to innovation and business value. *California Management Review*, 50(4), 127–146.
- Whitley, E.A. and Willcocks, L. (2011). Achieving step-change in outsourcing maturity: toward collaborative innovation. *MIS Quarterly Executive*, 10(3), 95–107.
- Wilding, R. and Humphries, A.S. (2006). Understanding collaborative supply chain relationships through the application of the Williamson organisational failure framework. *International Journal of Physical Distribution & Logistics Management*, 36(4), 309–329.
- Willcocks, L., Oshri, I., Kotlarsky, J. and Rottman, J. (2011). Outsourcing and Offshoring Engineering Projects: Understanding the Value, Sourcing Models, and Coordination Practices. *IEEE Transactions on Engineering Management*, 58(4), 706–716.
- Willcocks, L.P., Cullen, S. and Craig, A. (2010). *The Outsourcing Enterprise: From Cost Management to Collaborative Innovation*. Palgrave Macmillan. Basingstoke.
- Willcocks, L. and Lacity, M.C., (2006). *Global sourcing of business and IT services*. Palgrave Macmillan, Basingstoke.

Appendix

1. Type of work and process of production:
 - a. Do you receive well-defined problems or vague requirements?
 - b. Is your work mostly about finding new ways of doing things or improving the current methods of work?
 - c. Is the objective of your work to implement existing solutions in new settings or to come up with new effective business solutions?
 - d. Does the knowledge that you create in your work form part of the service you provide to clients?
 - e. How much freedom do you have to complete your task? Do you work within tightly defined guidelines or can you improvise and change as you see fit?
2. Learning, creating, knowledge creation and knowledge sharing

- a. What percentage of your time is spent on learning new things in order to generate new or better solutions?
 - b. Do you share knowledge with your clients? How do you share knowledge with clients and learn from each other?
 - c. To what extent do you acquire knowledge and skills from your clients, and to what extent do you pass on knowledge and skills to your clients?
 - d. Do you seek external sources of knowledge or creativity when necessary?
3. Organising for collaboration, organising for innovation:
- a. How are creative talent recruited to work in the organisation? How is creativity encouraged?
 - b. What motivates you in your work? What role does the organisation play in creating this motivation?
 - c. Do you share risks of project outcome with clients, for example, project failure, staff attrition or cost overruns? Or is this entirely the client's own risk?
 - d. Are you in long term partnership with your clients?
 - e. Do you have single integrated team values within the organisation? With the client's organisation?
 - f. Do you think there is a high level of trust between clients and you? How do you build trust?
 - g. What strategies does the organisation use to enable effective cross-cultural communication and knowledge sharing with clients? E.g. are there bridgehead teams, cultural liaisons, expatriate or onsite managers? How would you describe such roles?
 - h. How would you describe the organisational environment, e.g. very Chinese, very international, more Western than Chinese etc. and why? How does the organisational environment affect your creativity in your work?
 - i. Are there opportunities for entering new markets overseas? How are these linkages made?