HOW IT SERVICE SUPPLIERS ACQUIRE CAPABILITIES IN OUTSOURCING ALLIANCES: AN EVOLUTIONARY PERSPECTIVE

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HOW IT SERVICE SUPPLIERS ACQUIRE CAPABILITIES IN OUTSOURCING ALLIANCES: AN EVOLUTIONARY PERSPECTIVE

Research-in-Progress

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Abstract

In IT outsourcing alliances, the service suppliers acquire significant capabilities through repeated interaction with a variety and multitude of clients. This learning process is especially critical for the survival and growth of suppliers that are in the early or expansionary stages of their lifecycle. This research focuses on the dynamic strategy process by which suppliers acquire capabilities in outsourcing alliances. Specifically, we conducted an interview-based qualitative case study of one of the largest Chinese IT service suppliers that had a diverse client portfolio including Japanese, Western, as well as domestic firms, and was actively expanding its business in the Western market. Drawing on the perspective of evolutionary economics, this research develops a theoretical model that conceptualizes the emergence and evolution of routines and capabilities within the suppliers.

Keywords: Global outsourcing, strategic alliance, supplier capabilities, evolutionary economics, China
Introduction

In IT outsourcing alliances, the service suppliers need to possess significant operational capabilities, such as human resources, process management, and client relationship capabilities, in order to generate value for clients (Levina and Ross 2003). Such capabilities are accumulated through the suppliers’ repeated interaction with a multitude and variety of clients (ibid). The information systems (IS) literature has identified what capabilities the more established IT suppliers, such as TCS and Infosys, already possess (e.g., Oshri et al. 2007; Garud et al. 2006). However, how such capabilities emerged and evolved through the suppliers’ experience with various clients remains unanswered. A conceptualization of this strategy process (e.g., Van de Ven 1992) is especially critical for suppliers, especially those in the early or expansionary stages of their lifecycle, as well as clients that outsource IT services to these suppliers.

China’s IT service suppliers provide an especially revealing setting for this study for several reasons. First, the major development in China’s IT service export sector occurred in the last few years. In mid 2000s, the IT service industry became recognized by China as a key to the country’s strategic transformation from a manufacturing-oriented to a service-driven economy, and the government launched policies that spawned rapid growth of local IT service firms (KPMG 2009). Second, major suppliers have been actively restructuring their client bases. Traditionally, Japan had been the focus of Chinese suppliers’ export business, but recently many firms are expanding in the Western markets (Su 2008). Third, the leading suppliers have been building diverse client portfolios that includes Japanese, Western, and domestic firms, which involves a complex learning process and makes them a valuable subject for this research.

To answer the research question, we conducted an in-depth, multi-year case study of one of the top three Chinese IT service suppliers. Based on 55 interviews with the firm’s all major divisions, and drawing on the concept of routine in evolutionary economics, we develop a theoretical model that conceptualizes the dynamic strategy process by which IT service suppliers acquire operational capabilities through repeated interaction with various types of clients.

Literature Review

A review of the literature on suppliers’ capability development in IT service outsourcing alliances reveals a research opportunity from the perspective of strategy process. The theory of evolutionary economics and its application in alliances, although having not directly addressed the topic, provides a conceptual lens suitable for bridging this gap.

Supplier Capabilities

The IS literature suggests that in IT outsourcing, the service suppliers need to acquire specific types of operational capabilities, including human resources, process management, and client relationship capabilities (Levina and Ross 2003). Human resources capabilities are associated with personnel recruitment, staffing, and development; process management capabilities involve identification, documentation, standardization, and dissemination of best practices; client relationship capabilities refer to the ability to effectively interact and collaborate with clients (ibid; Jarvenpaa and Mao 2008). Suppliers’ capabilities can also be classified into knowledge and skills that are specific to individual clients, and generic project management ability that can be applied across a multitude of clients (Ethiraj et al. 2005).

IT service suppliers’ capabilities can be acquired through various mechanisms. For knowledge-based service firms in general, learning from clients is a critical approach for accumulating business knowledge (Hansen et al. 1999), developing new practices (Anand et al. 2007), and creating innovative solutions (Oliveira and von Hippel 2009). For IT service firms in particular, both business end users in the direct outsourcing model (e.g., Kaiser and Hawk 2004) and upstream suppliers in the mediated outsourcing model (e.g., Jarvenpaa and Mao 2008) are critical sources of capabilities. Specifically, economics of scale and scope of a firm’s client base enable the supplier to explore, create, and re-use different technologies and processes, which eventually translate into capabilities (Levina and Ross 2003).

To facilitate the development of operational capabilities, on one hand, IT service suppliers should implement formal and standard processes for effectively managing dispersed project knowledge (Oshri et al. 2007). On the other hand, suppliers should design flexible structures that enable their organizations to adapt to changing business environment (Garud et al. 2006). None of the existing studies, however, focuses on elaborating how capabilities actually emerge and evolve through the supplier’s interaction with clients. An in-depth conceptualization of the strategy process by which suppliers acquire capabilities would offer valuable insights for both suppliers, especially those in the early stages of their lifecycle or those just venturing into new territories, and client firms that outsource to these suppliers.
**Evolutionary Perspective**

In contrast with transaction cost economics, which has been widely adopted in IT outsourcing research, evolutionary economics focuses on firms’ changing production function, and posits that firms are historically-embedded entities that take incremental steps to achieve marginal improvement in performance (Winter 1988). A foundational concept of the evolutionary perspective is “routine” (Nelson and Winter 1982), which refers to “engrained, taken-for-granted patterns” (Nelson and Winter 2002: 39) governing individual and collective behavior, and are analogous to genotype in biological evolution (Hodgson 2003). At organizational level, routines can be viewed as repetitive, reciprocally-triggered sequences of actions that involve multiple actors (Cohen and Bacdayan 1994). Organizational routines consist of the dual aspects of agency and structure (Feldman and Pentland 2003). As a result, routines can generate change and flexibility, and meanwhile maintain stability and continuity in organizations (Howard-Grenville 2005).

The notion of routine is fundamental to the conceptualization of “capability” in strategic management. Specifically, a high-level routine, or a set of routines, that confers upon a firm options for various production activities constitutes an organizational capability (Winter 2003). Capabilities evolve over time, and their transformation can be facilitated if the firm possesses dynamic capabilities (Helfat and Peteraf 2003), which are meta-routines that extend, modify, or create the ordinary, operating routines (Teece et al. 1997; Winter 2003). The development of dynamic capabilities requires a combination of tacit accumulation of experience and deliberate investment in articulation and codification of routines (Zollo and Winter 2002). In high-velocity markets with blurring boundaries, dynamic capabilities tend to reside in routines that are purposefully simple and conducive to emergent adaptation (Eisenhardt and Martin 2000).

In the context of strategic alliances, “interorganizational routines”, which refer to patterns of interaction among the partnering firms that are developed and refined through repeated collaboration, enable the partners to achieve their strategic goals (Zollo et al. 2002). In particular, an organization’s alliance learning processes, including the routines for articulating, codifying, sharing, and internalizing alliance-related knowledge (Kale and Singh 2007), contribute to alliance success. While existing studies have provided ample evidence that repeated interaction with the alliance partner and adoption of generic knowledge management practices can facilitate a firm’s acquisition of capabilities, it remains unclear how, in the unique setting of alliances, a partnering firm’s capabilities are formed and developed as its organizational routines become closely intertwined with those of its partner through interorganizational routines.

To summarize, existing IS literature has examined the capabilities of IT service suppliers, but has not elaborated the strategy process by which such capabilities emerge and evolve through suppliers’ interaction with various clients. The evolutionary perspective potentially provides a valuable theoretical framework, but the existing research has not directly addressed this issue, especially in the specific type of alliance of IT outsourcing (e.g., Schreiner et al. 2009).

**Research Methodology**

Since this study seeks to answer a “how” question about a phenomenon that is deeply embedded in organizational practice, the case study methodology was selected (Yin 2003). Specifically, we conducted a multiple-year interview-based study of a top three Chinese IT service supplier, according to rankings by major global and domestic industry associations (e.g., IAOP 2010; Chinasourcing 2008). The firm was founded in the early 1990s and has grown to over 10,000 people and over 500 million USD in revenue, with business from leading Chinese, Japanese, and Western firms. We chose to focus on this single firm because it represents an “extreme” (Pettigrew 1990) case in that the firm is one of the most visible, successful, and active players in the industry. The case study combines a longitudinal aspect as we tracked the firm’s evolution during the past three years, with a retrospective aspect as we learned the firm’s development in the more distant past through the interviewees’ retrospective account (Leonard-Barton 1990).

Specifically, data collection started in 2006 and has been ongoing, with the majority of the interviews conducted in summer 2009. Over the three years, the first author paid four visits to the firm’s headquarters and largest subsidiary, both located in China. Altogether 55 in-depth, semi-structured interviews with 53 people were recorded, each lasting between 45 minutes and 3 hours, with the average length of approximately 1.5 hours. 5 of the interviews were administered in English; 1 in Japanese; the rest in Chinese. The interviewees spanned multiple managerial levels, from top executives such as CTO to middle managers such as project leaders. The interviewees covered all major business lines of the Supplier, including Japanese (20 subjects), Western (15 subjects), domestic (8 subjects), as well as corporate-wide functions including human resources, quality improvement, marketing and strategic alliances (13 subjects), and affiliated organizations such as spinoffs and joint ventures (5 subjects). Some of the subjects oversaw multiple divisions such as both Japanese and Western. Internal archives and public documents were also collected.
The processing and analysis of interview data followed the sequence of transcribing, coding in the original language, and translating into English if the original language was Chinese. We chose to code the interview transcripts before translating them as the original language seemed to carry a richer depiction, possibly because the Chinese language embeds significant contextual information (Hall 1976) that may get lost in translation. Meanwhile, interestingly, the process of translating into English sometimes inspired new ideas of coding and triggered an iterative process of re-coding and re-analyzing the data. Specifically, the initial coding was inspired by evolutionary economics especially the notion of routine. Subsequently, guidelines suggested by the grounded theory method (Glaser and Strauss 1967) were followed and inductive techniques were applied to analyze the data (Strauss and Corbin 1997). Findings that emerged from the data were then compared with the existing IS literature and evolutionary economics to identify connections and disparities and to refine the analysis. The construction of the conceptual model was informed by prior qualitative studies (Miles and Huberman 1994). More details of the research procedure are provided in Table 1.

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<tr>
<th>Grounded theory method guidelines</th>
<th>Implementation in this study</th>
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<tr>
<td>Theoretical sampling; intertwining data collection and analysis (Glaser &amp; Strauss, 1967, pp. 45-60)</td>
<td>A broad access to the firm allowed us to systematically select informants that covered different levels and divisions. After each interview, the field researcher used analytical notes to identify conceptual themes, which were then used to formulate new questions and select new respondents.</td>
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<tr>
<td>Reaching theoretical saturation (Glaser &amp; Strauss, 1967, pp. 61-76)</td>
<td>Data collection on a particular issue stopped only when a state of theoretical saturation was reached. For example, when several interviewees in different settings described a certain routine was developed through the same mechanism, the field researcher no longer actively sought data on this topic.</td>
</tr>
<tr>
<td>Theory development through constant comparative method (Glaser &amp; Strauss, 1967, pp. 101-115)</td>
<td>The researcher identified different types of routines and systematically compared how these routines emerged and evolved within the supplier organization. The emerging conceptual model was then compared with related existing literature to identify further disparities and connections.</td>
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**Case Analysis**

We first provide an overview of the firm’s history. Then, based on the interview data and drawing on the reasoning of evolutionary economics, we analyze how different types of clients govern their outsourcing relationships and how routines and capabilities emerge and evolve within the supplier as it repeatedly interacts with its clients. Finally, we identify the impact of different clients’ managerial approaches on the supplier’s capability development process.

**Company Background Overview**

The company is one of the oldest and largest Chinese IT service firms. It was founded in the early 1990s based on a university computer lab and in collaboration with a Japanese electronics manufacturer, which also became the firm’s first client. In the following several years, the firm slowly grew itself in the domestic market. In the mid 1990s, the firm established an alliance with a Global Fortune 500 Japanese technology firm, and started to more aggressively expand its business. In the early 2000s, the firm founded oversea subsidiaries in U.S. and Japan. In the mid 2000s, the firm formed close business relationships with several Global Fortune 500 U.S. and European firms and rapidly grew its presence in the West. In recent years, the firm has been consistently ranked as a global top 100 IT service provider and a leading player in China. Today, the firm employs over 10,000 people and generates over 500 million USD revenue, with strong brand names in China and Japan and growing recognition in the West. The firm can be considered highly entrepreneurial because throughout its history, it deliberately planned and designed capabilities to take advantage of dynamic, uncertain environments (Langlois 2007). The firm will be called the Supplier hereafter.

**Clients’ Outsourcing Governance**

The Supplier classifies its clients into three major groups: Japan, West and China. These markets exhibited different approaches in managing IT service outsourcing alliances with Chinese suppliers. These approaches share significant commonality within each market. In comparing the routines adopted by clients in the three markets, we ground the analysis on a three-pillar framework for characterizing a firm’s alliance management capability, which includes the ability to coordinate, communicate, and bond with the partner (Schreiner et al. 2009). Specifically, coordination refers to the specification of roles, responsibilities, and procedures in task execution; communication involves the conveyance of information and knowledge to the partner; bonding means the process of social integration and the resulting norms and linkages between partners (ibid). The coordination aspect is similar to contractual governance (Poppo and Zenger 2002), while the bonding aspect is consistent with the notion of relational governance (ibid).
Generally speaking, Japanese client tend to assign Chinese suppliers a passive role in the supply chain and outsource lower-end, modularized components to Chinese suppliers. Their communication with the suppliers is in a command-and-control fashion, with highly detailed specifications and standardized processes. On the other hand, Japanese firms attach great importance to establishing long-term, trusting relationship with their suppliers, even more than near-term financial gains. Some clients helped their suppliers to build up capabilities, as shown in the quote below.

“Japanese clients are not eager for quick success and instant benefit. They give you a strategic plan, helping you develop your competence. It is more like a marriage relationship. Once they recognize you, they will not easily choose others. … They will not solicit bids for everything... They think of this as a symbiotic relationship.” [Company Senior VP]

Western firms, in contrast, expect Chinese suppliers to take a more active role in outsourcing by autonomously and independently proposing solutions to solve the clients’ business problems, as described in the following quote. Their communication with the suppliers involves detailed and standardized documentation, as well as unstructured, ad-hoc information, which requires the suppliers to be able to interpret the message and act on it. Their relationship with Chinese suppliers is largely based on the suppliers’ immediate performance and can become contentious at times.

“They (Western clients) have a basic idea and then will let you do it. In this process you have to discover the potential issues or add more stuff to it. You have to propose your own ideas to the client. You have to point out what is going to be caused (by this idea). You should proactively initiate this kind of discussion. In Japanese projects, this way of working is not very likely to happen, or even not allowed to happen.” [Company Senior VP]

While cost reduction is a major reason behind Japanese and Western firms’ decisions to outsource to China, Chinese domestic clients outsource IT work mainly to access specialized technical and managerial expertise. Therefore, they tend to delegate the entire lifecycle of a service to suppliers, from business analysis to IT implementation. Domestic firms’ communication is more unstructured and less standardized, as shown in the quote below. Social relationship, or “guanxi” (Yang 1994), between the client and the supplier tends to be long-term oriented and plays a critical role.

“(In domestic projects) there are no rules, nothing. … Generally speaking, in domestic projects, the client points to a direction, and the developers have to start walking. In international projects, before you ask me to walk, you must tell me, which leg to move first, how far each step is, how many steps I should walk, or what kind of shoes I should wear.” [Project Manager A]

It is worth noting that the different governance routines can be explained by clients’ national cultural backgrounds (e.g., Hofstede 1994). The purpose of analyzing the difference, however, is not to compare the routines per se, but to identify the impact of different routines on suppliers’ capability building process, which will be elaborated later. The cultural aspects (e.g., Ang and Inkpen 2008) of Chinese IT suppliers are examined in a related study (Su 2009).

<table>
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<th>Table 2. Outsourcing Governance Routines</th>
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<td><strong>Routines</strong></td>
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<tr>
<td>Coordination</td>
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<td>Communication</td>
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**Supplier’s Capability Acquisition**

As the client and the supplier interact with each other, the supplier becomes exposed to the client’s internal routines. Through repeated collaboration, some of these routines are replicated across the organizational boundary into the supplier. Sometimes, the replication occurs through a semiautomatic process of experience accumulation (Zollo and Winter 2002). For example, the Supplier’s Japanese clients tend to pay meticulous attention to quality and details of both the IT development process and outcomes; through working with the Japanese clients, the Supplier’s personnel also incorporated the client’s habit of being highly precise and cautious into their own daily practices, as illustrated in the following quote. Other times, the replication involves deliberate learning. For example, the Supplier has been seeking to imitate the Japanese clients’ structured, rigorous, and thorough approach towards project documentation.
“(With Japanese clients,) you have to make no mistake in any word of any document; no mistake in any punctuation mark; no mistake in the color; no mistake in the type of paper for printing, size, and font. Any mistake is a mistake. The client pays attention to every detail. After one to two years’ experience, the developers became highly rigorous, and followed a standard set of rules in everything.” [Project Manager B]

Some of the client’s internal routines or interorganizational routines are perceived by the supplier as useful, although not directly applicable, to the supplier’s own practices. In this case, the supplier may adapt such routines based on its own internal environment and apply the adapted routines to address a closely-related domain in their operations. For example, when problems arose in outsourcing projects, a major Japanese client of the Supplier always requested the supplier’s personnel to conduct detailed and thorough self-reflection and self-criticism in written format. Although the overly self-critical and overly apologetic connotation of this practice was viewed as exaggerated in the Chinese context, the Supplier’s managers believed the habit of reflecting, articulating, and documenting their learning would help the firm improve its performance. This routine was adapted and incorporated into the managers’ daily practices.

“(When problems arise) they would ask you to write “self-reflection” reports, nonstop self-reflection - sometimes, this is too draconian for us - (including) now that things have happened, why did they happen? How to avoid them in the future? … Now we have learned to do this self-reflection among ourselves too, trying to figure out how to prevent similar problems in the future… We indeed need self-reflection.” [VP of a Development Department]

Some of the client’s internal and interorganizational routines have to be matched by corresponding routines of the supplier. If such routines are not available, the supplier may engage in a set of activities to generate such routines. In some cases, the generation process occurs through deliberate learning. For example, the Supplier’s Western clients expected the Supplier to be able to independently propose innovative solutions to address their high-level business needs. This was difficult for the firm as it still lacked sufficient experience in the Western market. To solve this, the Supplier actively invested in research and development to enable such capabilities to be formed internally, as shown in the quote below. In other cases, new routines are generated through improvisation. This process was frequently observed in the Supplier’s business in the Chinese domestic market, where there were no established rules on how to best manage clients, largely due to the varied, emerging, and rapidly-changing nature of Chinese domestic firms.

“(We have) always been conducting R&D, persistently applying and tracking the latest technologies, and even developing new products, in order to solve the “chicken and egg” dilemma (meaning, Western clients require significant capabilities, but such capabilities cannot be acquired unless the vendor works with Western clients).” [Company Senior VP]

The interaction with the client may also trigger a process in which the supplier apply capabilities and routines that were previously accumulated from a different domain. This process is consistent with the notion of preadaptation in evolutionary economics (Cattani 2005; 2006), although our research emphasizes the preadaptation of routines rather than technological inventions. For example, when the Supplier expanded its business in the Japanese market in the 1990s and early 2000, the Western market was marginal to the firm’s strategy. However, as the Supplier started to shift its business toward the previously unanticipated Western market in the mid 2000s, it found it could apply its significant process management capabilities, which Japanese firms had highly valued and pushed the Supplier to acquire, in the Western market, as shown in the following quote. It is worth noting that the application of preadapted routines and capabilities is not a replication within the firm but leads to exploration and learning in a new context.

“In our collaboration with Japanese clients, we obtain best practices in how to manage the projects, how to execute the projects, etc. When some Western divisions thought these might be useful, we would share them… Some best practices are then incorporated into the level of “templates”, which all divisions can use.” [Manager of the Quality and Process Improvement Division]

The above four processes, replication, adaptation, generation, and preadaptation allow the formation of new routines within the supplier organization as the supplier repeatedly interacts with various types of client firms. Specifically, replication and adaptation give rise to a set of routines that are similar to, and compatible with, the client’s routines. By compatible we mean that the presence of two similar routines improves the outcome of the outsourced function. For example, the Supplier’s replication of the Japanese-styled, structured, rigorous management practices improved its collaboration with Japanese clients. Generation and preadaptation lead to a set of routines that are different from, and yet complementary with, the client’s routines. By complementary we mean that the coexistence of two different routines improves the outcome of the outsourced task. For example, the Supplier’s operational capabilities generated through internal research and development enabled it to meet the expectations and demands of its Western clients.
Routines formed through these four processes, together with the supplier’s existing internal and interorganizational routines, can be recombined and evolve into unique new routines. For example, as shown in the quote below, cross-fertilization happened between the detailed-oriented, quality-driven routines acquired from the Japanese market and the proactive problem-solving routines developed in the Western market. Recombination can be an unintentional process. For example, it may occur when managers transferred from one market to another. Recombination may also involve deliberate planning. For example, the Supplier designed three mechanisms to facilitate such recombination. First, it let different divisions to articulate, synthesize and document their learning, and disseminated the knowledge across the firm. Second, it established firm-wide units such as research centers and rotated employees from different markets into the units. Third, it fostered communities of practice (Lave and Wenger 1991) across different markets.

“We borrow things (from one market) and apply to another. Sometimes this can generate competitive advantages for us. For example, in Western business we are able to strengthen our management of details. Our client may feel that our deliverables are indeed assuring and considerate in terms of details. This is because there is the shadow of Japanese behind us. On the other hand, with Japanese clients, we are strengthening the ability to propose new plans… In doing this, you need to have your own ideas, and some innovation. To make it happen, you can diffuse the kinds of capabilities nurtured in Western projects into the Japanese business.” [Company Senior VP]

Routines that have emerged and evolved are subject to internal and external selection. Internal selection occurs as the organizational members evaluate and legitimize the routines (Zollo and Winter 2002). External selection takes place as the effectiveness and efficiency of the routines become tested in repeated interaction between the client and the suppliers. Selection may take place in a semiautomatic fashion during intraorganizational and interorganizational interaction, or take the form of a deliberately planned organizational process. Routines that do not get legitimized are eliminated. Legitimized routines may also become extinct (Cattani 2002) in disruptive events such as personnel turnover or corporate restructuring. Eventually, some routines are retained by an institutionalization process, which ensures that routinized actions continue to be carried out in a consistent and persistent manner (Crossan et al. 1999).

Institutionalization may be achieved through creating rules, procedures, best practices and designing organizational structures, etc. Institutionalization can also take the form of the creation of IT artifacts (e.g., Orlikowski and Iacono 2001) with which the organization can generate rent. One example of such an artifact at the Supplier was a checklist of things project managers should pay special attention to when working with Japanese clients. This checklist was circulated among and enriched by different teams and proved highly valuable for shaping team members’ actions. The set of routines that eventually become institutionalized constitute the supplier’s newly-acquired capabilities. It should be noted that this is an iterative process as new routines and new capabilities, in turn, form the basis of future evolution of routines. The outsourcing suppliers’ overall capability development process is illustrated in Figure 1.
**Client-Supplier Dynamics**

It is worth noting that both Western and Japanese firms outsource to China for similar purposes and yet they exhibit different routines, which have different implications for the Chinese suppliers and lead to different outcomes for the clients. Generally speaking, relationships with Western clients have high entry barriers in the sense that the supplier is expected to possess significant capabilities since the beginning of a relationship to guarantee relatively immediate benefits. For Chinese suppliers, this poses a challenge because most firms used to focus on domestic and Japanese markets and had limited exposure to Western firms. For the Supplier, Western projects provided a good opportunity to rapidly grow its capabilities through experience. On the other hand, the risk was that if the Supplier was unable to achieve significant learning in a short time to meet the clients’ requirements, the relationship might be terminated.

Japanese firms, in contrast, adopt a more incremental approach towards outsourcing to China. When Japanese firms started to outsource IT work to China in the early 1990s, China’s handful of IT service firms, like the Supplier, were in their infancy. However, Japanese firms customized the outsourced work based on the capabilities of the Supplier and used these projects to help the Supplier improve technical and managerial skills. As the Supplier’s capabilities grew through experience, the clients outsourced more complex tasks that required more advanced capabilities to the Supplier, in a stepwise fashion. The benefit of this approach is a stable, committed client-supplier relationship that can continuously generate value for both parties. The drawback is the long lead-time before the benefits materialize. This approach is made possible by Japanese firms’ long-term oriented supplier strategy. This strategy was identified not only in this study, but also in leading Japanese firms’ manufacturing outsourcing (e.g., Liker and Choi 2004).

Drawing on the evolutionary economics reasoning that firms experience continuous learning through evolution of routines (e.g., Zollo et al. 2002), we construct Figure 2 to illustrate the different patterns of client-supplier dynamics in Chinese suppliers’ interaction with Western and Japanese clients. The representation is adapted from Helfat and Peteraf’s (2003) capability lifecycle model. As shown in the figure, the key difference is that Western clients tend to require the Chinese supplier to make relatively abrupt learning investments, whereas Japanese clients tend to define incremental tasks based on the supplier’s existing capabilities. Western firms are also more likely to outsource tasks that require higher levels of capability than Japanese firms. It should be noted that the objective of the figure is not to compare Western and Japanese firms’ outsourcing behavior per se, but to demonstrate that there is an interaction between clients’ outsourcing governance routines and the supplier’s capability development process and outcome.

**Expected Contributions and Future Research**

Drawing on the perspective of evolutionary economics, this paper identifies the dynamic strategy process by which IT service suppliers acquire operational capabilities through repeated interaction with a variety of clients. This study is expected to contribute to the IS as well as management literature in three ways. First, it extends the research on IT supplier capabilities by elaborating the emergence and evolution of these capabilities. Second, it investigates a particular type of firm: IT service suppliers from emerging economies and in early stages of internationalization, which are understudied in IS (e.g., Carmel et al. 2008). Third, it furthers the evolutionary perspective of the firm by providing nuanced conceptualization of how routines and capabilities are formed and developed at the interface between alliance partners. In the future we will further examine the relationship between routines and capabilities in order to construct a more comprehensive theoretical model that can be potentially tested with further empirical data.
References


