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The Cultural Frame Management: The Emergence of Cultural Intelligence in Chinese IT Service Vendors

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CULTURAL FRAME MANAGEMENT: THE EMERGENCE OF CULTURAL INTELLIGENCE IN CHINESE IT SERVICE VENDORS

Research-in-Progress

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Abstract

As China transforms itself toward a leading destination for global IT service outsourcing, major Chinese vendors increasingly face the challenge of collaborating simultaneously and effectively with three major client bases with diverse national cultural backgrounds, namely domestic, Asia especially Japan, and the West especially the U.S. and Western Europe. This provides a good opportunity to study how firm-level cultural intelligence is formed within vendors. To explore this question, qualitative case studies of twelve leading China-based IT service vendors, including all of the most globally recognized Chinese vendors, were conducted. Based on interviews with top and middle level managers, and drawing on the practice-oriented view of culture and the cultural frame perspective, this paper develops the notion of collective cultural frame and identifies the process of cultural frame management within the vendor. This process functions as a mechanism by which firm-level cultural intelligence emerges within vendor organizations.

Keywords: Cultural intelligence, cultural frame, vendor perspective, outsourcing, China

Introduction

China is transforming itself into a leading destination for global IT service outsourcing (e.g., China Ministry of Commerce 2009). Today, the country's overall software industry is about twice the size of India's; however, the industry has been domestically-oriented, and within its offshore revenue, Japan and to a lesser extent South Korea account for over 50%, due to these countries' strong cultural and economic ties with China (Carmel et al. 2008). In recent years, major Chinese IT service vendors have been actively expanding their business in the Western markets, especially the U.S. and Western Europe, and achieved some success (Su 2008). A key challenge in dealing with this increasingly diversified client portfolio is culture (e.g., Krishna et al 2004). Specifically, vendors need to acquire the ability to simultaneously and effectively manage three major client bases with diverse national cultural backgrounds.

China's IT service industry in this unique transition phase in its history provides a good opportunity to address an unexplored but important question in the information systems (IS) literature: How is firm-level cultural intelligence, i.e., a firm's ability to operate effectively in a culturally diverse environment (Ang and Inkpen 2008), formed within vendors? Specifically, existing research on cultural intelligence focuses on the client rather than the vendor's perspective; also, to answer this question, a broader conceptualization of culture is needed (Myers and Tan 2002); furthermore, China itself with its cultural and economic significance is understudied in IS (Jarvenpaa and Mao 2008). By investigating how leading Chinese vendors acquire the ability to simultaneously work effectively with three major client bases, China, Asia and the West, the paper seeks to bridge the above gaps in the IS literature.

To answer this question, interview-based qualitative case studies of twelve major Chinese IT service vendors were conducted. These firms include all of the most globally recognized Chinese vendors as well as several other most domestically reputable vendors, according to rankings by leading international and Chinese industry associations (e.g., IAOP 2008; Chinasourcing 2008). Based on interviews with top and middle level managers of each vendor, and drawing on the alternative, practice-oriented view of culture (e.g., Swidler 1986) and the frame analytic perspective (Goffman 1974), the paper develops the concept of collective cultural frame; based on this concept, a cultural frame management process is identified within the vendor. This process functions as a mechanism by which vendors' firm-level cultural intelligence is formed.

Literature Review

By reviewing the conceptualization of culture and its implications for the research on IT service outsourcing, this section identifies several gaps in the IS literature. Then the section introduces a unique theoretical lens, the cultural frame perspective, which the rest of the paper will build on to bridge these gaps.

Culture

Culture can be broadly defined as the human-made part of the environment (Herskovitz 1955). It includes subjective aspects, such as a social collectivity's characteristic cognitive structures, including values, beliefs and attitudes (Triandis et al 1972; Triandis 1994), as well as objective aspects such as tools and artifacts, social networks and institutions (Gelfand et al. 2006). An early and still dominant way to model culture is the pan-cultural approach, which reduces cultural differences into a set of psychological traits. In particular, Hofstede (1980; 1994) characterizes national cultures along dimensions such as power distance, uncertainty avoidance, individualism vs. collectivism. Recently, the dynamic constructivist approach emerges as a new paradigm for conceptualizing culture (Hong and Chui 2001). According to this approach, culture is temporal, emergent, situation-sensitive, constantly produced and reproduced, interpreted and reinterpreted in social interaction (Kahn 1989; Morris and Fu 2001).

Culture has its strategic value in social and organizational life. In particular, the notion of "culture in action" conceptualizes culture as "a repertoire or 'tool kit' of habits, skills, and styles from which people construct 'strategies of action'" (Swidler 1986: 273). This alternative, practice-oriented view focuses on culture's role of producing observable effects in social construction, and offers a valuable lens for analyzing a wide range of phenomenon (Wedeen 2002). Specifically, in the social and political realm, culture is employed as a set of rhetorical, interactional, and material tools to mobilize and coordinate social action (Pattillo-McCoy 1998). In the organizational realm, culture provides a tool kit, or menu, from which entrepreneurs, acting as "skilled cultural operators" (Lounsbury and Glynn 2001) strategically choose different options to achieve their goals (Rao 1994).

The rise of global IT outsourcing (Lacity et al. 2008) and offshoring (Lacity and Rottman 2008) brings compelling needs and unique opportunities to further understand culture, from both the client's (e.g., Krishna et al. 2004) and the provider's (e.g., Oshri et al., 2007) perspectives. In particular, firms' intercultural capability, that is, the ability to manage cultural diversity, has been identified as a key success factor since the earliest research on IT outsourcing and offshoring (e.g., Apte and Mason 1995). Recently, this ability became systematically defined as firm-level cultural intelligence (Ang and Inkpen 2008). It is worth noting that despite the continued emphasis of culture in IT outsourcing and offshoring, several gaps still exist in the IS literature. First, except a few studies (e.g. Walsham 2002), most existing work adopts the pan-cultural approach; alternative conceptualizations are needed to enrich our understanding of culture (Myers and Tan 2002). Second, most work of intercultural capability is from the clients' perspective; there lacks research on vendors' cultural intelligence. Third, the geographic locations involved in existing studies concentrate on the U.S., Europe, Japan and India; few studies explore China, a country that has diverse and complex cultures and is viewed by many as the next major IT outsourcing destination (e.g., CIO 2007).

Cultural Frame Perspective

The frame analytic perspective was introduced by Goffman (1974). The word "frame", or framework, is defined as "schemata of interpretation" that "allows individuals to locate, perceive, identify, and label" occurrences within their daily life (ibid: 21). In subsequent theoretical work, the notion of frames also become interpreted as "clusters of rules which help to constitute and regulate activities, defining them as activities of a certain sort and subject to a given range of sanctions (Giddens 1984: 87)", and frames allow "individuals to categorize an indefinite plurality of circumstances or situations as to be able to respond in an appropriate fashion to whatever is 'going on'" (ibid: 88).

The concept of frame has been extensively applied for both descriptive and analytic purposes in sociology. In particular, the notion of "cultural frames", defined as repertoires of cultural and ideological symbols and rhetoric that resonate with mass audiences, is often employed as tactics by organizations or individuals to mobilize people into collective action (e.g., Hunt 1984). In these mobilization activities, the process of framing is both deliberately planned and dynamically constructed (Benford and Snow 2000), and plays the critical role of bridging structural or organizational elements with individual psychological factors (Snow et al. 1986). Cultural frame perspective proves to be a valuable lens for analyzing a wide range of social and political events (e.g., Hunt 1984; Rao et al. 2003).

Recently, the frame analytic approach has been increasingly used to explain organizational phenomena, especially during periods of transformation (Davis et al. 2005). For example, at organizational level, Rao (1998) shows that new organizational forms can be seen as the result of institutional entrepreneurs' construction of cultural frames by recombining existing cultural materials (Amburgey and Singh 2005). At intra-organizational level, Kaplan (2008) suggests that strategic decisions can be viewed as emerging from organizational actors' contests of political framing practices. In IS-related domains, Orlikowski and Gash (1994), Acha (2004), and Kaplan and Tripsas (2008) adopt the concept of frame to define people's assumptions, expectations and knowledge about the meaning of technology. It is worth noting that in the frame analytic perspective, culture is usually conceptualized as dynamic, strategic and contested, which is consistent with the aforementioned notion of "culture in action" (Swidler 1986).

To summarize, the literature review suggests that there is a need to utilize alternative conceptualizations of culture to explore cultural intelligence from the vendor's perspective, especially vendors from important but understudied locations such as China, while the cultural frame perspective potentially provides a useful theoretical foundation.

Research Methods

Since this study seeks to answer "how" and exploratory "what" questions regarding a phenomenon that is embedded in organizational practices, the case study methodology was selected (Yin 2003). To provide a relatively complete view of the upper tier of China's offshore IT service industry, twelve vendors of varied sizes and backgrounds were chosen, including all of the most globally recognized Chinese vendors as well as several other most domestically recognized vendors (e.g., IAOP 2008; Chinasourcing 2008). These firms are based in seven service outsourcing "hub cities" officially authorized by the Ministry of Commerce of China. Collectively the seven cities cover all three major geographic drivers of China's IT service industry: North China, Northeast China, and East China. Since the study is especially interested in vendors' interaction with all three client bases: domestic, Asia outside of China, and the West, only vendors that had clients from all three locations were selected, except for one vendor that had outstanding international reputation but only focused on the Western market.

The interviewed vendors provide a wide range of services. Their IT outsourcing (ITO) services can be broadly categorized into: first, enterprise services (ES), such as ERP and CRM system implementation; application services (AS), such as IT application development and maintenance; product services (PS), such as software development, testing, and globalization. Some vendors also offer business process outsourcing (BPO) services, such as customer service and technical support. The services discussed in this paper all refer to ITO and do not include BPO. Table 1 shows each vendor's basic information, main service offerings, background, and key interviewees of this study.

Table 1. Interviewed Firms

Firm	Founding	HQ	Size (2008)	Services	Interviewees	Background
Neusoft	Early 1990s	Shenyang	~ 14000	ES, AS, PS, BPO	North American CEO; Senior VP; Project and HR Managers; etc.	Strong brand name in Japan; strong relationships with major clients from China, Japan, and the West
VanceInfo	Mid 1990s	Beijing	~ 6000	ES, AS, PS, BPO	CEO, Global Marketing Manager; Strategic Alliance Manager	Focusing on the U.S. market; strong relationships with major clients from China, Japan, and the West
Insigma	Mid 1990s	Hangzhou	~ 5000	ES, AS, PS	North American CEO (2 people); Project Managers	Strong relationships with major clients from China, Japan, and the West
iSoftstone	Early 2000s	Beijing	~ 4000	ES, AS, PS, BPO	Senior Vice President	Strong relationships with major clients from China, Japan, and the West
hiSoft	Mid 1990s	Dalian	~ 3000	ES, AS, PS	Chief Marketing Officer; Project Managers	Strong relationships with, and balanced revenues from, both Japan and the West
Beyondsoft	Mid 1990s	Beijing	~ 3000	ES, AS, PS, BPO	Vice President; Business Development Manager	Focusing on the Western market; main business directly transferred from the U.S. or Europe
Longtop	Mid 1990s	Beijing	~ 3000	ES, AS, PS	Director of Offshore Delivery; General Manager	Focusing on the domestic market; strong market position in China; expanding rapidly into the U.S.
Achievo	Early 2000s	U.S.	~ 2000	ES, AS, PS	Chief Information Officer; Marketing Director	Founded in the U.S.; strong relationships with major clients from China, Japan, and the West
Sofmit	Early 2000s	Chengdu	~ 1000	ES, AS, PS, BPO	CEO; HR Manager	Solid relationships with clients from China, Japan, and the West
Newtouch	Mid 1990s	Shanghai	~ 500	ES, AS, PS, BPO	Senior R&D Manager	Solid relationships with clients from China, Japan and the West
USTC EBT	Mid 1990s	Hefei	~ 500	ES, AS	International Business Manager	Solid relationships with clients from China and Japan; some projects from the West
Bleum	Early 2000s	Shanghai	~ 500	AS, PS	Marketing Director; HR Manager	Owned and managed by Americans; focusing on the Western markets; good international reputation

Data collection was concentrated in the summers of 2006, 2008, and 2009, when every firm except one was visited. One or several top-level executives, and some middle-level managers in some cases, were interviewed at each firm. Altogether 30 in-depth, semi-structured interviews were conducted and recorded, each lasting between 45 minutes and 3 hours, with the average length of approximately 1.5 hours. 6 of the 30 interviews were conducted in English; 24 were conducted in Chinese, while the transcripts were translated into English. The vendors' internal archives and publicly available information were collected to supplement the primary data. Guidelines suggested by grounded theory (Glaser and Strauss 1967) were followed and inductive techniques were used to analyze the data (Strauss and Corbin 1997). Findings that emerged from the data were compared with the literature reviewed in the previous section to identify connections and disparities. More details of the research procedures are provided in Table 2.

Table 2. Details of Data Analysis

Grounded theory method guidelines	Implementation in this study
Theoretical sampling; intertwining data collection and analysis (Glaser & Strauss, 1967, pp. 45-60)	Informants were initially selected opportunistically. After each interview, the field researcher used analytical notes and open coding to identify conceptual themes, such as "cultural frame", i.e., an interpretive scheme in cross-cultural interaction, from the interview transcript. The themes were used to formulate new interview questions and, if possible, pick new respondents.
Reaching theoretical saturation (Glaser & Strauss, 1967, pp. 61-76)	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 the same communication style of clients from a certain location, the field researcher no longer actively sought data on this topic.
Theory development through constant comparative method (Glaser & Strauss, 1967, pp. 101-115)	The researcher identified and systematically compared the "collective cultural frames" of the vendors' clients from the three major locations, and analyzed how the vendors adapted to their clients' collective cultural frames. The emerging conclusions were then compared with related existing literature.

Case Analysis

Through analysis of the data and drawing on the reviewed theoretical perspectives, the concept of collective cultural frame emerges from the cases. Based on this concept, a process of cultural frame management is then identified. Finally, the implications of this process for the vendors' cultural intelligence are synthesized and discussed.

Collective Cultural Frame

When describing the characteristics of their client bases, the most salient dimension vendors use to categorize their clients is the client's country location. All vendors group their clients into three bases: Asia especially Japan and South Korea, the West especially North America and Western Europe, and China. A key reason for this grouping is the different business practices of clients located in different countries, which in turn require the vendors to possess different capabilities to service these clients. The major differences in clients' business practices in IT outsourcing, according to the descriptions of interviewees, can be synthesized into three categories, which are, communication, coordination, and collaboration. Specifically, communication refers to the transfer of information between the client and the vendor; coordination refers to the management of dependency between the client and the vendor's activities; collaboration refers to the division of labor between the client and vendor in completing a common task (Malone and Crowston 1994). Table 3 summarizes the specific differences and provides some examples from the interviews. For confidentiality purposes, the positions of the interviewees and the names of companies are not disclosed.

Table 3. Comparing Business Practices of Major Client Bases		
Asian	**Western**	**Domestic**
Communication Highly detailed and precise communication protocol	Detailed and precise communication protocol	Abstract, sometimes vague communication protocol
Example: *"Japanese clients may have a 14-page spec for our 2 hours' programming. Our work is simply reading it, understanding it, and coding it… Domestic clients have no specs at all and just tell us what they want … With Japanese clients you shouldn't be too smart; you should stick to certain rules… (The rule is) 'If you don't tell me what to do, I shouldn't do it.' With domestic clients, (the rule is) 'If I already know what to do, I am out of business (meaning, the clients don't have clear, precise specifications; it is the vendor's business to figure out what the requirements are).' American and European clients are in between." [Interviewee from Vendor A]*		
Coordination Highly formal business process and change management	Formal business process and change management	Less formal business process mediated by guanxi (social relationship), ad hoc change
Example 1: *"Foreign clients place more emphasis on process and want to know how the project is done. Domestic clients are not interested in process… Their requirements may change 10 times a day … Japanese clients are most formal; everything is very detailed. Korean is between Japanese and American clients." [Interviewee from Vendor B]* Example 2: *"(The biggest cultural barrier an American manager faces in China is that) Personal relationship is very important in China. People talk about a lot of things: 'Yes, I can do this.' But they don't put them into the contract." [Interviewee from Vendor C]*		
Collaboration Low vendor autonomy, fragmented work, outcome and process based monitoring	Some vendor autonomy, holistic work, outcome and process based monitoring	High vendor autonomy, holistic work, outcome based monitoring
Example 1: *"American clients differ from Japanese clients in that American clients require us to have some innovative capability. With Japanese clients we have to completely follow their requirement specs. American clients give us an abstract outline of the function… We need to help them design, and the design process involves a lot of innovation." [Interviewee from Vendor D]* Example 2: *"Personally, I prefer to work with domestic clients than Japanese clients, because for a technologist, working with domestic clients means more space." [Interviewee from Vendor E]*		

These characteristics reflect the client firms' interpretive schemes in IT outsourcing. Generally speaking, Japanese clients treat outsourcing to China as a highly structured process with precise communication protocols and rigorous control mechanisms; Western clients share a similar view but give more autonomy to the vendors in terms of business analysis and technical innovation; Chinese domestic clients, in contrast, perceive outsourcing as a result-driven, flexible process where interpersonal "guanxi", i.e., connections and social relationships (Yang 1994), play a key role. Some of these practices are consistent with pan-cultural descriptions of national psychological traits. For example, Japanese clients' highly disciplined approach could be interpreted as uncertainty avoidance behavior that is especially pronounced in the Japanese culture (Hofstede 1994). Some practices are better explainable by a country's institutional factors (e.g., Guthrie 1998). For example, many Chinese clients' less formal management style was largely due to the emergent nature of China's domestic market and late adoption of IT; as Chinese firms became more exposed to global businesses, their IT service outsourcing practices also became more professionalized.

Drawing on the frame analytic perspective (Goffman 1974) and the practice-oriented view of culture (Swidler 1986; Wedeen 2002), the above interpretive scheme that allows a firm to manage interactions with organizations with a particular national cultural background can be defined as the firm's "collective cultural frame". The word collective implies that the frame is constructed through interactions of individuals and groups within the organization (Kaplan 1998). In this definition, "culture" is seen as a tool kit of "semiotic practices" (Wedeen 2002), including habits and styles from which firms construct strategies (Swidler 1986). Although some of the practices seem consistent with traits described by the traditional pan-cultural approach (e.g., Hofstede 1980; 1994), this view significantly differs from the latter in that this view focuses on the dynamic and constructed aspects of culture, and emphasizes culture's strategic value in organizations. In the context of client-vendor interaction in IT services, collective cultural frame can be conceptualized as consisting of three main components: communication, coordination and collaboration. The concept is also applicable in other contexts to broadly refer to other firm-level cultural interpretive schemes.

Cultural Frame Management

From the vendor's perspective, the ability to manage client relationships is a core competence (Levina and Ross 2003). This ability is especially difficult to obtain in cross-cultural situations (e.g., Krishna et al. 2004). China's leading IT service vendors often face the challenging task of simultaneously working effectively with clients with significantly different collective cultural frames, including firms from China, Japan, South Korea, U.S. and Europe. The completion of the task can be conceptualized as centered on a "cultural frame management" process (Figure 1).

Figure 1. Cultural Frame Management
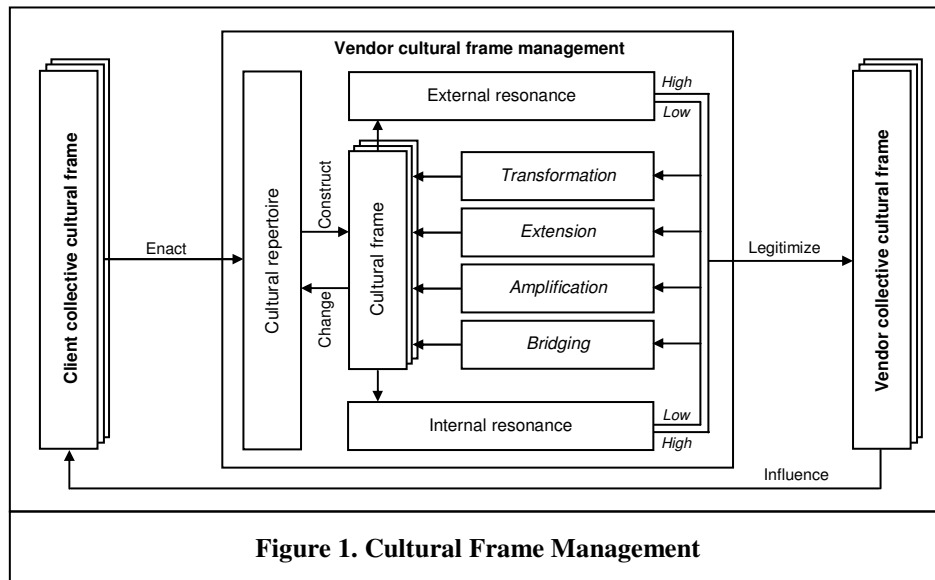
As the vendor interacts with a client, the client's collective cultural frame enacts individuals or groups within the vendor to select from their cultural repertoires, or toolkits, elements that resonate with the client's cultural frame. The cultural repertoire is based on the individual or group's preexisting cultural backgrounds and expanded through training and experience working with firms with different cultural backgrounds. For example, in interacting with potential French clients, Vendor F employed a project manager who had lived and worked in France for years, because the manager's understanding of French business practices and social etiquette could help engage the client. The selected cultural elements combined form an initial cultural frame which allows the individual or the group to make sense of varied and ambiguous signals from the client and react to the signals.

The formed initial cultural frame may resonate to varying degrees with internal stakeholders and the external client as the interaction continues. Internally, the cultural frame needs to be congruent with the expectations, assumption or knowledge of various organization members (Orlikowski and Gash 1994). Employees with different cultural backgrounds, such as those from recent mergers and acquisitions, may be a source of incongruence and may act as an agent of change. Externally, the cultural frame should be compatible with key elements of the client's cultural frame so that a common understanding is established. If either or both of the internal and external resonance are low, difficulties and conflicts arise, and the cultural frame should be realigned. Adapting Snow et al.'s (1986) taxonomy, frame alignment activities can be classified into four types: transformation, extension, amplification, and bridging.

Frame transformation refers to changing old understandings and meanings of an interpretive frame (Snow et al. 1986). This is also called "keying" by Goffman (1974). In this process, some elements of an individual or group's cultural frame are deleted or replaced with new ones. For example, after Vendor F acquired a U.S. IT service firm as its onshore front-end office, Vendor F had to change the overly conservative mindset prevalent among engineers in the back-end office in China. This conservativeness had low internal resonance with the U.S. team and had affected sales and marketing.

"(In project scoping, Chinese engineers) error too much on the conservative side, (on) the worst case scenario…, when in effect that is not really a fair representation… (We bring) the type of scoping and development processes that are more aligned with the U.S. expectations and we definitely are making progress in transferring that type of mindset to our engineering team. (The reason for conservativeness is that) they don't want to disappoint, don't want to bring bad news, but that is not the Western philosophy." [Interviewee from Vendor F]

Frame extension refers to the broadening of the boundaries of an interpretive frame (Snow et al. 1986). In this process, some auxiliary elements are incorporated into an individual or group's cultural frame. For example, in interacting with long-term Japanese clients, Vendor D's managers' perception of Japanese firms as highly detail-driven and tending to micromanage started to resonate less with the external situation. The frame was then extended by the knowledge that much autonomy would be given to the Chinese vendor once a trusting relationship emerged.

"Japanese clients are more detail-driven (than domestic and Western clients), especially in the early phase of the cooperation. But after long-term collaboration with Japanese clients, you don't need to spend too much effort (in planning and co-managing). You can make estimations on your own … they will only directly contact the client representative." [Interviewee from Vendor D]

Frame amplification refers to "the clarification and invigoration of an interpretive frame" (Snow et al. 1986: 469). In this process, some elements of an individual or groups' cultural frame are strengthened and become more pronounced. For example, initially, Vendor F's managers' and engineers' vague understanding of the detail-oriented style of Singaporean clients did not gain sufficient external resonance with a Singapore-based client. The frame was then amplified as the vendor's staff accumulated more experience interacting with this client.

"Singaporean clients are draconian. For example, occasionally there were some small grammatical errors in the emails sent by our technical members. They would highlight the errors in red and tell you how to write properly. … So in Singaporean projects, we try to be as careful as possible, try to proofread as much as possible, and try to be typo-free." [Interviewee from Vendor F]

Frame bridging refers to the linkage of two or more unconnected interpretive frames (Snow et al. 1986). In this process, one cultural frame incorporates elements from another frame. For example, the above interviewee from Vendor F said that the knowledge acquired from working with the more demanding Singaporean client enhanced her external resonance with the U.S. client she later worked with, helping her communicate and collaborate more effectively with the U.S. client.

"I learned to explain, articulate and communicate an issue to clients using different methods and from different angles. … Although the Singaporean clients are draconian, I indirectly learned what aspects they would consider in projects. Some of these aspects may be exactly what we lacked, and that helped us in our work with the American clients." [Interviewee from Vendor F]

In the frame realignment process, the adjusted or added cultural elements in turn enrich the firm's cultural repertoire. The realigned cultural frame will continue seeking internal and external resonance, and further realignment may be engaged. If a cultural frame obtains both internal and external resonance, the frame is legitimized and a collective cultural frame emerges within the vendor. The collective cultural frame allows an implicit agreement on meanings of information and events to be reached between the client and the vendor and within the vendor. It is worth noting that the vendor's collective cultural frame may also influence the client's collective cultural frame. For example, as many other Chinese vendors, Vendor B faced frequent and ad hoc requirement changes when working with domestic clients; in response, Vendor B had been trying to adjust domestic clients' understanding of IT service outsourcing by making them agree on requirements up front and compensate for unexpected changes later on. Overall, the cultural frame management process is dynamic and temporal, and may iterate as internal and external business conditions change over time.

Vendor Cultural Intelligence

As an interviewee from Vendor G alluded to in the following quote, collective cultural frames can become a source of competitive advantage for vendors. This is consistent with the notion of firm-level cultural intelligence, which refers to a firm's managerial, competitive and structural capabilities that enable the firm to operate effectively in culturally diverse environments (Ang and Inkpen 2008). The interviews suggest that cultural frame management functions as a mechanism by which firm-level cultural intelligence emerges from the firm's cultural repertoire primarily consisting of individual organization members' cultural intelligence (Earley and Ang 2003). This process is moderated by the characteristics of the vendor's project portfolio. For example, cultural diversity of the client base, the vendor's strategic focus on clients with different national cultural backgrounds, and the amount of client-vendor interaction involved in the outsourcing work all contribute to the vendor's development of cultural intelligence.

"We can bring the U.S. mindset towards providing services and towards advanced technology … One differentiation for [Vendor G] is that we emphasize the fact that as a U.S. headquartered company with U.S. headquartered management, we are applying U.S. business practices to the work that we do for our clients." [Interviewee from Vendor G].

Expected Contributions and Future Research

Through qualitative case studies of twelve leading Chinese IT service vendors, this study develops the notion of collective cultural frame and identifies the process of cultural frame management which functions as a mechanism by which firm-level cultural intelligence emerges within vendor organizations. This paper contributes to the IS literature in three major ways. First, it extends existing research on cultural aspects of IS by elaborating the micro-processes of the formation of firm-level cultural intelligence from the vendor's perspective. Second, the theoretical models in this work bring together the alternative, practice-oriented view of culture and the frame analytic perspective, and provide a valuable conceptualization of culture in IS. Third, the methodology includes in-depth interviews with top-level manages of all of the most globally recognized Chinese IT service vendors, which is the first in the IS literature and enriches our understanding of China as an emerging global IT outsourcing destination.

This study has its limitations. In particular, the case study method may lead to some case-specificity in the findings. However, the theoretical models should be generally applicable to vendors from locations other than China. Also, in this study, the majority of the interviewees were senior managers. Their views and descriptions may be different from other members of the firms. Currently, more interviews with more members from some of the twelve vendors, as well as from other Chinese vendors, are being conducted to increase the breadth and depth of the research base. In the future, as more data are collected and analyzed, this study can be extended in multiple ways. First, the theoretical model proposed in Figure 1 will be refined. Second, the specific process of cultural frame management, by which vendors' firm-level cultural intelligence emerges, will be further elaborated. Third, in this study the client locations are broadly categorized into China, Asia outside of China, and the West; in the future a more fine-grained analysis of vendors' interaction with clients from different countries can be conducted.

Acknowledgements

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