

# From Boundary Spanning to Creolization:

## A Study of Chinese Software and Services Outsourcing Vendors

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### **Abstract**

In achieving success in global sourcing arrangements, the role of a cultural liaison, boundary spanner or transnational intermediary is frequently highlighted as being critical. This paper critiques, builds upon and synthesizes relevant streams of ideas in relation to boundary-spanning and cross-cultural management across a number of disciplines, and constructs a multi-layered creolization framework, encompassing processes at the individual, intra- and inter-organizational and inter-national levels which, we argue, are entangled and interrelated. Viewed as a vital and innovative phenomenon, creolization embodies the interactive, contentious and creative processes of network expansion, mutual sensemaking, cultural hybridity and identity multiplicity. Qualitative empirical data from the software and services outsourcing industry in Northwest China is used to demonstrate the complexity of cross-cultural practices in offshore collaborations and illustrate creolization processes. Potentials for theoretical development are outlined and implications for cross-cultural practices are discussed.

*Keywords:* Offshoring, cross-cultural collaboration, creolization, boundary spanning, cultural hybridity, China

### **Introduction**

Investing in global sourcing relationships has become a critical part of an organization's overall strategy especially within the context of global competition, international movements of labour and interorganizational alliances. The scope of work covered by global sourcing arrangements ranges from routine IT-enabled tasks to more knowledge-intensive activities, which tend to encompass culturally embedded work practices. These culturally embedded work practices are difficult to disentangle from their context, requiring some degree of cultural understanding in order to provide successful resolution to conflicts of meaning and misinterpretations (Nicholson and Sahay, 2004; Oshri et al., 2007; Hong and Nguyen, 2009). The success of global software projects is thus often contingent on the achievement of sufficient

mutual cultural understanding, which provides the basis of trust, knowledge sharing, and smooth collaboration.

Previous work on global sourcing and globally distributed work has provided empirical and practice-based examples of ways in which cross-cultural issues can be managed in cross-border alliances (Walsham, 2002; Krishna et al., 2004; Gregory et al., 2009). It is generally recognised that, in order to facilitate communication between offshore and onshore sites in globally distributed work arrangements, an individual or role is usually identified whose main purpose is to provide a single point of contact between the two organisational groups. This individual is variously referred to as a cultural liaison (Krishna et al., 2004; Levina and Kane, 2009), onsite coordinator (Carmel, 2006) or expatriate manager (Krishna et al., 2004; Levina and Kane, 2009). The responsibilities of the individual or role include bridging cultural disparities, managing communication between sites, helping to develop the onsite-offsite relationship and facilitating knowledge exchange. These activities are usually referred to as boundary-spanning (Levina and Kane, 2009; Gopal and Gosain, 2009).

While concepts like “boundary spanning” or “bridging” have been useful in theorizing about cross-cultural collaborations in offshore outsourcing processes, they are also limited by their emphasis on boundaries, separation of identity, and imagery associated with geographical dispersion such as bridges spanning wide gulfs (see also Yagi and Kleinberg’s 2011 analysis of the terms). Moreover, the majority of literature on boundary spanning has focused on individual qualities, capabilities and identity, with insufficient attention paid to the organisational, inter-organisational and international levels. In general, the literature on globally distributed work has failed to provide meaningful explanations of the complexities of intercultural collaboration inherent within these arrangements (Hinds et al., 2011).

It is thus argued in this paper that the cross-national and cross-cultural linkages established by “bridgeheads” can be anchored by the emergence of “cultural hybridity” that develops at the interface of cultures, customs, bodies of knowledge and institutional regimes. Drawing upon a wide range of literature from cultural studies, international business, and human resource management, and comparing and theorizing from our empirical data we propose the concept of “creolization” which encompasses interconnected concepts and processes identified in cross-cultural management of offshore outsourcing work. This paper suggests that within the context of an ongoing cross-cultural collaboration the assimilation of multiple cultural norms occurs at the individual, organisational, inter-organisational and international levels, that is, a multi-level analytical approach to cross-cultural collaboration can be envisioned.

Our empirical work is an exploratory study undertaken in a relatively new Chinese technology hub in Xi'an City, Northwest China. The study investigates how Chinese software outsourcing suppliers construct practices and processes to navigate the complex cultural landscape representing the interface with their clientele. Our research objective is thus to examine how Chinese suppliers negotiate different emergent cultural practices in software and services outsourcing and to derive theoretical insights on the prevailing phenomenon of distributed collaboration in the context of technology-mediated globalization. The key contribution of this paper is the proposal of the creolization model which enriches our understanding of cross-cultural practices and processes in offshore outsourcing beyond the notion of boundary-spanning. In addition, the paper addresses two weaknesses in the extant literature: the area of global sourcing relationships from the vendor's perspective is under-researched; and studies focusing on the Chinese software and services outsourcing (SSO) industry are sparse.

The following section critically reviews the concept of "boundary-spanning" in globally distributed work. The review provides a basis for the proposal of the "creolization" concept in the next section of the paper titled "From Boundary Spanning to Creolization". The research approach is explained in the Methodology section, following which the study's empirical findings are presented. The Discussion section then elaborates on the creolization model after which the paper's contributions to theory and practice are discussed. There is a final Conclusion section summarizing the key points made in the paper and proposing further research in this area.

## **Boundary Spanning**

The concept of boundary spanning has appeared in the management literature for at least thirty years. It can refer to activities across organizational boundaries (Tushman and Scanlan, 1981) or intra-organizational activities, i.e. interactions between sub-units and groups (Schwab et al., 1985; Carlile, 2002). For example, "informational boundary spanning" is said to be performed by those well connected externally and internally (Tushman and Scanlan 1981). In the context of offshore outsourcing, the practice of boundary spanning has been recognized as critical in moderating the relationship between client and vendor with consequent impacts on project performance (Marchington et al., 2005; Levina and Vaast, 2008; Gopal and Gosain, 2009). Moreover, in addition to being knowledge intermediaries (Sahay et al., 2003; Nicholson and Sahay, 2004), boundary spanners also adopt the role of building trust relationships. A key

driver of globally distributed work is the objective of leveraging the resources and skills of a cheaper, foreign location. Frequently highlighted in research on globally distributed work is the role of cultural liaisons, who are key actors (usually expatriates, inpatriates or repatriates), knowledgeable of both the offshore service provider's and the client's contexts, and who play "bridgehead" or "boundary spanning" roles (Krishna et al., 2004; Marchington et al., 2005; Mahnke et al., 2008; Levina and Kane, 2009; Gopal and Gosain, 2009; Nicholson, 2010).

Various competencies, predominantly technical (Tushman and Scanlan, 1981), have been associated with boundary spanners or bridgeheads. Among these competencies, cross-cultural skills have also been identified as critical to the effectiveness of boundary spanners, for example, in the case of expatriate managers (Harvey and Moeller, 2009). Indeed effective boundary spanners may be able to switch between various cultural identities thus integrating knowledge from different cultural perspectives (Brannen and Thomas, 2010; Hong, 2010; Yagi and Kleinberg, 2011). In the international management and cultural studies literature, types of individuals termed *biculturals* (LaFromboise et al., 1993; Bell and Harrison, 1996) are becoming a recommended choice for global work arrangements as transnational intermediaries and knowledge mediators, with an emphasis on their boundary spanning capabilities (Brannen and Thomas, 2010; Johnson and Duxbury, 2010; Lee, 2010; Yagi and Kleinberg, 2011). Although there is as yet no evidence of a deliberate strategy for global organizations to recruit such individuals (Brannen and Thomas, 2010; Yagi and Kleinberg, 2011), they are more likely to attain management positions in global companies where cross-cultural communication is key (Bell and Harrison, 1996; Hong 2010; Friedman et al., 2012).

The issue of complex identity often underlines the roles of bridgeheads and boundary spanning processes, and is associated with emerging self-perceptions and behavioural norms resulting from "negotiated" organisational identity (Brannen and Salk, 2000; Pauleen, 2003; Gregory et al. 2009) and shifts in individual identity (D'Mello and Eriksen 2010; Levina and Kane, 2009; Yagi and Kleinberg, 2011). Individuals who act as bridgeheads face the challenge to be more "psychologically flexible" and to "adjust their level of identification [with their work organisation] in ways that maintain or enhance their overall sense of self" (Bartel, 2001, p.409).

The literature focuses mainly on boundary-spanners and boundary-spanning (bridging) activities at the individual level and the concept of boundary spanning itself is rarely problematized. The term "boundary", unpacked, suggests "a sharp line of demarcation", a breakdown or discontinuity of "cultural flows" (Hannerz, 1992, p.7). It can be argued that notions like boundary spanning or bridging reify the distinction and separation of two or more

cultural territories that can be artificially connected by agents such as members of a diaspora or expatriate managers. In reality these boundaries are much more blurred and fluid, and at times may even be dissipated. This is not to say boundaries do not exist at all – there are obviously disjunctures and differences when encountering people, practices and organisations from other cultures. The critical point is that these boundaries are not necessarily “spanned” or “bridged”; they are socially constructed and often contested, negotiated, broken down, reconfigured, or perhaps reinforced. For example, Levina and Vaast (2008, p.307) suggest that offshore software application development faces the challenge of “multiple and overlapping boundaries associated with diverse organizational and national contexts” and that these boundaries can lead to an “imbalance of resources among onshore and offshore contributors giving rise to status differences and inhibiting collaboration”. While it is recognised that boundaries across multiple levels are socially constructed, and could in practice be renegotiated by onshore managers to achieve more effective collaboration, the perception of boundaries is still that of barriers to be overcome.

### **From Boundary-spanning to Creolization**

The discussion above indicates the need to problematize boundary spanning. We adopt a social constructivist perspective with emphasis on interaction and negotiation (Yagi and Kleinberg 2011), and present a new conceptualization of the encounter and assimilation of multiple cultures and identities found in globally distributed work such as offshore software and services outsourcing. What is proposed here is to move beyond the notion of linkage or crossing boundaries between two separate territories to the idea of a process of “creolization”. The Oxford English dictionary links the term “Creole” to the Latin word “creare”, which means “to create”. Originally referring to the intermingling and mixing of different ethnic groups in colonized societies, the term was adopted and developed in linguistics and anthropology to study respectively “creole languages” and “creole cultures” (Hannerz, 1992).

*“Creole cultures — like creole languages — are intrinsically of mixed origin, the confluence of two or more widely separated historical currents which interact in what is basically a center/periphery relationship. [However,] the cultural processes of creolization are not simply a matter of constant pressure from the center toward the periphery, but a much more creative interplay. [...] Creole cultures come out of multi-dimensional cultural encounters and can put things together in new ways” (Hannerz, 1992, p. 264-265).*

Within the context of globalization, creolization describes the encounter and the interaction

between, and the disjuncture and the assimilation of, cultures across time and space. The notion of creolization counterbalances the popular discourse of globalization as economic and cultural homogenization, which suggests a global culture imposing itself onto local contexts (Leidner, 2010). Instead, creolization describes the confluence space between cultures as “vital, diverse, innovative” (Sahlin-Andersson and Engwall, 2002). There has also been a related and persistent “convergence-divergence” debate in the cross-cultural management literature (McGaughey and De Cieri 1999; Van den Berghe 2002). The convergence perspective envisages that a universal value system prevails driven by, for instance, the expansion of Western capitalism, while the divergence perspective focuses on the polarization and conflicts of ideologies and cultures. This dichotomous view of opposing processes is rigid and reductive. Chan et al. (2005) extend the convergence theory to reflect instead a process of “cultural hybridization”, and propose the idea of the “contact zone” or a “mixed system” which is *“a ‘space’ constrained by inequality and contradictions, but ... also capable of being seen as the ‘spatial’ and ‘temporal’ co-presence and co-adaptation of various cultural subjects previously separated by geopolitical and historical disjunctures.”*

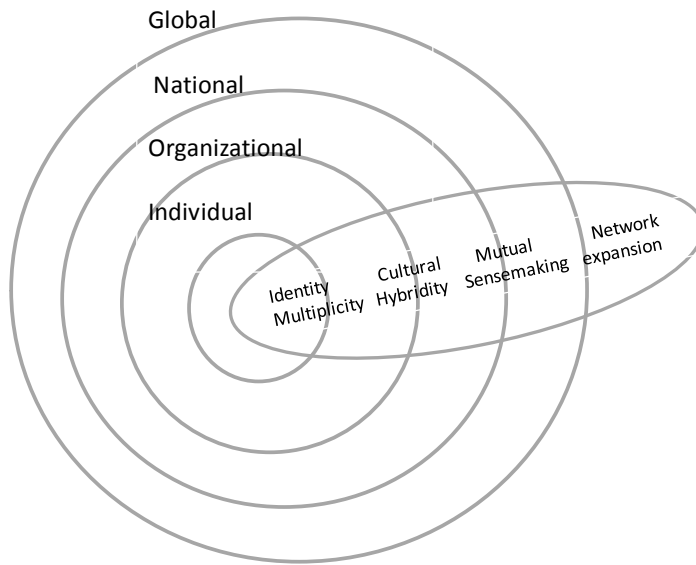
“Hybridity” reflects the reality of a globalized world where there is “a gradual spectrum of mixed-up differences” (Geertz, 1988, p. 148), in contrast to a world where clear boundaries become “objects of reification and power hegemony”. There has therefore been a move in cultural studies beyond notions of separateness into hybridity (Ang, 2003). As Felski (1997, p.12) argues,

*“Metaphors of hybridity and the like not only recognize differences within the subject, fracturing and complicating holistic notions of identity, but also address connections between subjects by recognizing affiliations, cross-pollinations, echoes and repetitions, thereby unseating difference from a position of absolute privilege. Instead of endorsing a drift towards ever greater atomization of identity, such metaphors allow us to conceive of multiple, interconnecting axes of affiliation and differentiation”*).

So the concept of “cultural hybridity” is distinct from concepts such as “diaspora” and “boundary spanning” which emphasise separateness. While the latter terms are useful in signifying the expansion and interconnectedness of networks which is clearly observable in global sourcing activities, they are also constrained precisely by their assumed boundedness which stresses “internal coherence and unity, logically set apart from ‘others’” (Ang, 2003, p. 142). This is not to say that hybridity necessarily erases or replaces the notion of boundaries, although it problematizes it and implies an unsettling of identity (ibid.). Rather, boundaries and

hybridity are co-existing facets of creolization which not only demand the acknowledgement of diversity and difference, but also the recognition of processes of accommodation, contestation and legitimization of a heterogeneous culture, where “the local is constituted globally” (Khondker, 2005). For example, D’Mello and Eriksen (2010, p. 105) emphasize, in a case study of Indian global software workers, the “adaptive, glocalization processes of both individuals and organizations”, and argue that “the ‘local’ is produced at the intersection of translocal, regional, as well as global cultural fields, in ethnographies of local communities, identities and spaces” (ibid, p.104). Taking “cultural hybridity” as a departure point, what is proposed here is the conceptualization of the entanglement of global and local networks, cultures, knowledge and resources as creolization. Creolization is a broader concept which encompasses and extends beyond boundary-spanning or bridging; it underlines elements including diaspora linkages, mutual sense-making, complexity of identity, distributed networking and cultural assimilation which take place in the cultural confrontation and interactions of global sourcing contexts.

Creolization, reconceived from its original cultural and anthropological origins, is constructed here as encompassing four interconnected processes implicated in the success of global sourcing ventures: *network expansion, mutual sensemaking, cultural hybridization and identity multiplicity*. It has been recognised that the complexities of cultural encounters in global software outsourcing can be conceptualised using multi-layered cultural lenses (D’Mello and Eriksen, 2010). In this paper we draw upon Leung et al. (2005) who propose a multi-level, multi-layer model of culture, with both top-down and bottom-up processes shaping and reshaping the different levels. As shown in Figure 1, the conceptualization of creolization is based on such a model and seeks to capture the multi-layered individual, intra- and inter-organisational as well as inter-national dynamics implicated in the global sourcing phenomenon.



**Figure 1 Creolization as multi-layered processes across levels of culture**

At the global level is the process of *network expansion*, which may not be explicit in the original concept of creolization but is an important extension, particularly in the context of offshore service providers. Network expansion refers to the generation and connection of what would otherwise be disparate networks. For example, Irish companies are found to adopt the role of a vendor for accessing offshoring work and to shift to that of a client for further subcontracting that work so as to take advantage of a unique geographical and economic advantage midway between US clients and Indian vendors (Olsson et al., 2008), thereby connecting and mobilising resources from two completely disparate networks.

One important role that creoles play in the processes of network expansion is that of “reputational intermediary” (Kapur and McHale, 2005), i.e. being a proxy of reputational “capital” which the foreign offshore provider gains over time. With the knowledge and capabilities necessary to build the linkages between actors in adopted and home territories, they are able to build trust relationships when exploring and establishing local connections. Bridgeheads have been found to facilitate the building of relationships between foreign business entities and host country clients, to create access to host country markets and to acquire knowledge for capability building (Jensen, 2009). Multiple networks are created, mobilized and joined together via the mediation of bridgeheads, or creoles or creolized sites (firms).

At the inter-national and inter-organizational level is *mutual sensemaking*. There has been extensive discussion on cross-cultural knowledge transfer in the context of global sourcing (e.g. Sarker, 2005; Rottman, 2008; Gregory et al., 2009). However, the notion of objective or reified knowledge which can be transferred from one context to another, is inherently flawed;



knowledge is difficult to share because it is embodied in social and cultural contexts (Marabelli and Newell, 2012) and is a result of individual sensemaking. The boundaries between different cultures are inevitably blurred and dynamic where cross-cultural collaboration takes place. Thus, knowledge is constantly practiced by knowledgeable and reflexive agents who draw upon multiple sources of ideas, norms, cultural understanding and institutional rules in the constant process of sensemaking in cross-cultural collaboration. Creoles serve as “knowledge translators”, that is, mediators of ideas and knowledge, whose activities support, transport and transform knowledge across cultural contexts (Alvarez, 1998; Sahlin-Andersson and Engwall, 2002). Through interaction and collaboration, the agents and members of local cultures build trust, affinity and “shared meaning” with each other. Furthermore, mutual sensemaking also facilitates strategic partnerships and creates potential opportunities for co-creation of value (Vargo et al. 2008; Ngugi and Johnsen 2010). This co-creation of value in client-vendor relationships is in contrast to the traditional model of offshored service provision established around pre-specified design and “doing as told” (Levina and Vaast, 2008). It is achieved through extensive interactions between collaborators, or clients and vendors, with “the ultimate aim of co-designing and co-producing the next level of value for a product or a service” (Romero and Molina 2011).

At the organizational level is the notion of “*cultural hybridity*”. It refers to the cultural amalgamation of two or more sources into a new one which retains elements from the original cultures as well as new elements that emerge from such synthesis (Felski, 1997). Generating a hybrid culture in the organization may involve accommodating national, industrial, corporate and local cultural elements from multiple social contexts. Chan et al. (2005), for example, talk about the “sinification of Western corporate culture” in sino-Western joint ventures, i.e. the appropriation of some aspects of local Chinese traditions into Western corporate culture, such as adapting Western management philosophy to accommodate Chinese Communist Party politics. Chan et al. (2005) also point out that the process of cultural hybridization is not conflict free but ambivalent and contested, yet it is often from the dialectic of conflict or collision that creativity emerges. Such hybridization, however, may not always be successful and produce positive synergies, and there are times when differences and conflicts fail to be resolved. The inability of eBay (China), for example, to compete with indigenous Chinese C2C platforms due to conflicts in the way they interpreted the cultural nuances of doing business in China, may be an example where differences fail to be resolved (Ou and Davison, 2009).

At the individual level is the idea of *identity multiplicity*, i.e. the ability to draw upon the

norms and values of multiple cultures which originate in different social contexts and may be observed at levels spanning from individual to inter-national. It should be noted, though, that people with multiple cultural backgrounds or experience may not necessarily have this ability. Identity multiplicity is a characteristic of reflexive individuals in conditions imposed on society through the forces of globalisation and is particularly relevant in the highly complex environments of distributed global software work (Sahay et al., 2003; D’Mello and Eriksen, 2010). The ability to operate at the interface of cultural groupings and negotiate a state of in-betweenness (Ang, 2003) is key to creating and maintaining cross-cultural relationships, and is the defining characteristic of creole individuals. Creoles apply to local contexts the perspectives, abilities, and notions of image that are particular to the creole experience. *Identity multiplicity* is often a result of processes of acculturation (i.e. adopting social traits of another group) and assimilation (i.e. incorporating the norms and values of another social group into those of one’s own). Inherent to identity multiplicity are tensions inevitably arising from the pronounced “differences” in any cultural confrontation (D’Mello, 2005), as well as the need to reconcile status differences (Levina and Kane, 2009) and disparities in power (Byun and Ybema, 2005) present in cross-cultural collaborations. Note that immigrants are not by default able to adopt mixed identity. For example, Levina and Kane (2009), in the context of offshore outsourcing, point out that it is problematic for onshore immigrant managers to serve as bridgeheads if they do not identify with the offshore groups with whom they share ethnic origins. The tensions experienced by creoles and their consequences are complex and nuanced and call for better understanding.

**Table 1 Creolization as a theoretical construct.**

<b>Underlying concepts of Creolization</b>	<b>Description of underlying concepts as they relate to cross-cultural work</b>	<b>Level of Analysis</b>
Network Expansion	Mediating reputation, network extension, relationship building, creating local-global linkages	Inter-national
Mutual Sensemaking	Translating knowledge, trust building, co-construction of meaning, co-creation of value	Inter-national and Inter-organizational
Cultural Hybridity	Integrating multiple cultures into the organization	Organizational (offshore)
Identity Multiplicity	Operating at the interface of cultural groupings, negotiating a state of “in-betweenness”, tensions arising from the adoption of multiple cultural identities	Individual

In summary, creolization represents the complex inter-relationship of practices, perspectives and connections from the stance of offshore service providers. Table 1 summarizes the

conceptual positions discussed above. To successfully extend their networks into overseas markets, the organizations operating in these intercultural interstices have to mobilize all the above processes, that is, to draw upon local and global connections and resources (e.g. diaspora linkages), actively seek to make sense of inter-organizational knowledge flows by valuing and assigning key individuals as knowledge mediators who are able to negotiate and reconcile mixed identities and status differences. These processes have to be connected and anchored by an organizational culture which embraces hybridity of cultures, norms, and practices.

## **Methodology**

### ***Research Context***

China has been identified as one of the most competitive software outsourcing destinations and is actively implementing strategies to develop this sector, including the development of technology parks targeting offshore software and services providers (Qu and Brocklehurst, 2003; Carmel et al., 2008). According to research done by ChinaSourcing (2010), Xi'an city in Northwest China is considered to have an active software outsourcing industry with an adequately qualified human resource pool. Xi'an High-Tech Zone, which hosts the software and services outsourcing companies operating in Xi'an, posted 2009 revenues of RMB 32.2 million representing a 41% annual growth rate which has been fairly consistent. The turnover rate for software professionals is quite low at 10%, while the annual graduate intake for the outsourcing industry is about 30,000, with 80,000 qualified IT professionals thought to be currently working in the sector. Xi'an has also attracted the attention of the Chinese government; in the 2009 plan to encourage foreign direct investment in software and IT-based services, Xi'an was nominated as an outsourcing demonstration city by the State Council.

Established in 1998, Xi'an Software Park, part of Xi'an High-Tech Zone, promotes the development of software and services outsourcing industries (ChinaSourcing, 2010; Xi'an Software Park, 2011). The park has been appraised as a national software industry and export base, and an exemplar of national services outsourcing. Ninety percent of software and services outsourcing enterprises in Xi'an are located in the park. It has an annual industrial growth rate of up to 45%, and comprises nearly 870 companies, of which foreign-funded enterprises account for about 170. The services offered by these firms range from software development, through to IT-enabled tasks such as handling client queries and providing back-end support to client-facing processes. The park is home to well-known multinational investors such as Oracle, SPSS, Sybase, Fujitsu, NEC, and NTT Data (ChinaSourcing, 2010; Xi'an Software Park, 2011).

## ***Research Approach***

This study set out to gain deep insight into the strategies used by the Xi'an software and services providers in their cross-cultural interactions with foreign clients, from a practice-based perspective, and moving beyond the oft-repeated concepts related to Chinese culture such as *guanxi* and “face”. An exploratory approach was adopted to generate potentially interesting themes. The research data reported here were collected over two visits made to the same software park, separated by a six-month interval. Thirteen indigenous and multi-national companies (see Table 2), whose organisational structures reflected a mixture of expatriate and local management, were chosen as participants in the research. The chosen companies were either (a) wholly-owned subsidiaries (also termed captive centres) where the services were provided only to the parent company and its clients or (b) joint venture arrangements where the services were provided both to the main partner and a variety of other clientele not associated with the partner. In the case of subsidiaries, the mode of sourcing was parent company offshoring to its subsidiary, whilst joint venture companies engaged both in providing offshoring services to main partners and outsourcing services to other clients.

Assistance in recruitment of the candidate companies was obtained from the management of the software park. Our main criteria for selection were that (a) the company should be involved in offshore services provision and (b) there should be ongoing interaction between the client site and/or headquarters and the Chinese-based supplier that would provide a basis for investigating their collaborative practices. In-depth face-to-face semi-structured interviews lasting between 1 to 1.5 hours were held with 20 mid to senior level managers within these companies. The interviews addressed questions concerning the firms' capability to engage in successful outsourcing relationships, their knowledge management processes and issues encountered in cross-cultural collaboration. Interviewing two levels of management allowed for gathering multiple perspectives which could then be used to build rich stories of actual practice. The following table provides details of the companies and participants interviewed.

**Table 2 List of participant companies.**

No.	Interviewee/s	Service Provided	Governance Structure	Size (# Staff)	Clientele	Foreign linkages
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1	Marketing Director	Business Process Outsourcing	Subsidiary	2700	Mainly US	Founded by American Chinese; headquartered in the US; CEO and management team are foreign educated; alumni and connections in Detroit area.
2	HR Manager	Software development, R&D	Subsidiary	200	Domestic and International	Headquartered in America; site managed by foreign educated Chinese from mainland and Hong Kong.
3	CEO	Software development, R&D	Subsidiary	145	US	Headquartered in the US; site managed by Chinese national with foreign experience.
4	Technical Manager, Project Manager (2)	Software development, R&D	Subsidiary	282	US	Headquartered in the US; project managers are foreign educated.
5	CEO	Back office Business Process Outsourcing	Subsidiary	Not disclosed	US	Headquartered in the US; CEO and site managers are Chinese American.
6	VP Marketing, Marketing Director, Engineering Director	Software development, support, maintenance & testing	Subsidiary	86	North American	Headquartered in North America; exchange programmes between Chinese site and foreign client site; internship programmes for Western persons; foreign trained executives and expatriates in managerial positions.
7	CEO/COO and Head of Product Development Management	Back-end Business Process Outsourcing related to market research, customer service, sales, back-end support	Subsidiary	200	US, domestic and other international	Headquartered in the US; large intake of foreign-trained employees.
8	Mid-Level Manager, Sales Manager	Software customisation, ERP consulting	Joint Venture	50	US and European	Value added reseller for major US software firm; repatriate manager from the US; sales manager with experience in foreign countries.
9	CEO	Software development	Joint Venture	65	Japanese and domestic	Senior manager is a repatriate from Japan; they also recruit Japanese employees; Japanese surveillance management techniques used in the subsidiary office.
10	HR Manager	R&D Centre, ePlatform service provider	Subsidiary	50	Taiwanese	Headquartered in Taiwan; local intake; branch manager from Taiwan.
11	Senior Manager	Software development	Joint Venture	Not disclosed	Japanese and domestic	No Japanese background but most employees trained in Japan for two years.
12	Back-office Manager (2)	Software development, R&D	Subsidiary	80	Taiwanese	Headquartered in Taiwan; senior management from Taiwan; staff have experience working in Taiwan.

13	Deputy Manager	Software customisation, ERP consulting	Joint Venture	127	US, Latin American and domestic	Main partner is in US; general manager is a Chinese repatriate with experience in the US.
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Beyond the questions mentioned above, points raised in the interviews were further elaborated on and investigated by the addition of ad-hoc questions related to the context of the enquiry. The rationale for this interviewing technique was to allow the emergence of a reflective understanding between interviewer and interviewee on the points of view being expressed in the interview. It is in the co-construction of this mutual understanding that meaning emerges. Our method is derived from interpretive approaches to information systems research that speak to the inter-subjectivity of meaning and co-construction of reality (Walsham, 1993).

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 two native English speaking researchers 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.

Recognizing boundary-spanning as a useful concept but limited by its emphasis on differences and boundaries, we borrowed the term creolization from the non-IS literature and substantiated it with the conceptual constructs identified and developed in our analysis process. The study broadly adheres to guidelines of grounded theory analysis in Information Systems outlined by Urquhart et al. (2010): constant comparison, iterative conceptualization, theoretical sampling, scaling up and theoretical integration. Initially, a thorough reading of the interviews from the two site visits was undertaken so as to extract main issues emerging from the respondents' answers. Data gathering was conducted in two visits, building on the initial concepts from the first visit to provide additional concepts to guide the investigation in the second visit (theoretical sampling). Interviewees related the identified concepts reflectively to their strategic positions within the industry and their relationships with their clients. These initial themes were then used as high level coding categories for data analysis (iterative conceptualization). The data were coded with the help of a qualitative data analysis software package (Atlas.ti). The themes were compared and contrasted with the literature iteratively to

generate more refined constructs, and incorporated into the coding process, allowing further subcategories of initial codes, as well as new codes to emerge (iterative conceptualization, constant comparison). This iterative process between conceptual constructs and the data eventually gave rise to the conceptualization of creolization, drawing upon *and* further developing existing concepts in the literature (iterative conceptualization, constant comparison, scaling up, theoretical integration). Examples of the main constructs with corresponding coded interview texts are presented in Table 3.

**Table 3 Examples of constructs with corresponding interview texts**

Main construct	Sample interview extract pertaining to that construct
Network expansion	The good thing is we have a lot of people from China [who have] migrate[d] to Canada so actually there are lots of Chinese in Vancouver. Our company in Vancouver usually has a lot of people from Asia and from China as well. So they actually introduced the higher management [to information] about China, about Xi'an, or Beijing.
Mutual sensemaking	We will assign project managers, technical experts to the US, to stay with their client's project team members together; to learn the business and understand their product. Also, we always invite our clients to send their project managers over to China. Because ...they have some assumptions about China. So, if we don't see each other face to face, the communication would be very hard. But, usually we see the very positive results... Most of them have very positive experiences of China; it's like... totally different from what they imagined before they came here.
Cultural Hybridity	This building is designed by an American architect. Unlike a Japanese company, it is more open, respects employees' opinions, no clear hierarchy... It is a mixed culture. We emphasize hard work and humility from the Chinese culture, and encourage innovation from the American culture, as well as precision from the Japanese culture. It integrates the different cultures. Even in the headquarters in Japan, there are many foreigners rather than just Japanese employees.
Identity Multiplicity	I always love to travel and be exposed to different cultures. So, even when I am here, I try to meet people from many different backgrounds; whether they are Chinese locals or foreigners; even if they are foreigners, what industry they are in, different countries they are from, and so on... So, if I were to identify myself, I wouldn't say I am a typical American. In that, I packed up and came here. I wouldn't say I entirely blend in with the locals here, because I have American values deeply, really in me as well. So, I would call myself a global citizen, absolutely.



## **The Study Findings**

This section presents evidence from our key findings which are organized under the conceptual constructs of network expansion, mutual sensemaking, cultural hybridity and identity multiplicity. As mentioned above, iterative comparison of emerging themes with the literature led to these conceptual constructs and to their overall incorporation and reconstitution into the notion of ‘creolization’. Although the findings are presented under these four conceptual headings, they should not be considered as siloed, rather there are interconnections and linkages between the findings reflecting more than one conceptual theme. They have been presented in this way for convenience only.

### ***Network Expansion***

An important characteristic shared by most of the service providers visited was the prevalence of senior management teams with multi-cultural backgrounds and/or experience who invariably performed a liaison or bridging role with regard to the foreign client. These people tend to play a leading role in the company, or serve in key positions such as project managers, sales managers or team leads. Companies without such links with foreign culture and contexts tend to find it very difficult to expand into overseas markets:

*“Actually our general manager has [recently] come back from the United States (repatriated). In doing off-shore services you more or less have to have some connections in host countries, otherwise it’s just like [being] a typical Chinese who has never been abroad - you have no idea what’s outside in the world – It’s kind of like you have some connections but it’s not enough and for lots of our potential clients, we have connections but they don’t. They have never been to China; they have never been to Asia. Some of our clients, they stay in the US and their business is on the West-Coast, so they have never thought about outsourcing off-shore. You get them [to understand the] idea that there is China on the map and it’s a shock for them; they have to understand first the culture of China.... what they can do, and then they will consider the cost ... so it’s kind of step by step, it’s not a technical thing, it’s a cultural thing” (Manager, Company 8)*

These key individuals are at the forefront of cultural encounters and network extensions, and are able, for example, to set up connections, explore new markets, and promote reputations either in on-shore or offshore markets. They are also able to mobilize and exploit institutional and material resources either locally or across national boundaries to achieve their objectives.



For example, executives from one of the most successful business process outsourcing companies in China have strategically tapped into their alumni connections from their US education experience and used this network as a base to expand their global presence:

*“You see we started with these counties we were familiar with around the Detroit area. And also most of the executive level [managers] are graduates from the University of Michigan... and the alumni [network] is a pool, a labour pool, a knowledge pool. And especially FORD and GM these manufacturing car companies in Detroit - they are our customers as well. We are also dealing with Boston, New York, Texas as well. You see how we have grown and where we are now.” (Manager, Company 1)*

Network expansion is thus a process of drawing upon cross-cultural understanding, business and personal relationships and shared knowledge, which results in capabilities to deliver what clients require. The process is not uni-directional, that is, not only does network expansion occur from Chinese suppliers to their overseas counterparts, but it also occurs in the opposite direction as well – some Western companies use their offshore captive centre as a base to explore the Chinese market. Network expansion in China may involve, but is not equivalent to, *guanxi*, the “relationship-extending” activities recognised as characteristic of Chinese culture, which is closer to favouritism based on social obligation or reciprocal benefits. Notwithstanding the subtlety of *guanxi* operations, connecting with clients’ needs is considered essential. Here again is a departure from the simplistic assumption that a Western model of management imposes upon or replaces local practices.

It is thought to be almost impossible for Chinese suppliers to enter any offshore market through merely networking, if they do not have an understanding and delivery capability adapted to the needs of offshore clients. The connections that are made between disparate networks mobilize resources in each network, revealing possibilities and resources that are available in other locations, predicating more complex and potentially higher value business linkages such as consulting/advising or strategic alliances. One respondent described, for example, their role in a complex supply chain network, which started as a joint venture with an American company wishing to offshore services in the ERP consulting space to China. The Chinese side of the joint venture needed to develop a niche expertise with the particular ERP product which they did through the work undertaken for the joint venture partner. As a result, they became a preferred software reseller and systems integrator for the ERP product vendor company, thus raising their profile internationally and locally. Their client base thus extended beyond their joint venture clients to other untapped international clients and the local Chinese market, giving their joint

venture partners and the ERP vendor company valuable access to the Chinese market and a sustainable client base for themselves. From an initial position of almost total dependence on the joint venture client base, the company had migrated to one-third joint-venture-/two-thirds own- client base with a significant overseas presence. Moreover, for local clients, they were able to offer full lifecycle projects from capabilities learnt through their experiences with foreign client interaction.

### ***Mutual Sensemaking***

Most companies we visited made conscious efforts to bridge the cultural and knowledge gaps in serving offshore clients through a number of organisational practices such as: maintaining a semi-permanent onsite bridgehead team; systematically organizing language and cultural training; and sending anywhere from 10% to 80% of their development staff over to clients' sites to acquire language, technical and communicative skills in the particular cultural context:

*“We have the product manager come to China once, twice, every year to do training, and we also go there; we also have a lot of training over the phone and over the emails; we actually emphasize on communication a lot... for myself, I went there last year and we plan to have people to go there every year, and we also have North American people coming more frequently actually to China; we are also planning a long stay for the North American employees in China, like three to six months.” (Manager, Company 4)*

Several firms encouraged exchange visits where clients visit the provider's site for a period of time (three to six months, for example) and providers pay return visits to the client's site so that some form of cultural exchange would take place. Foreign clients would obtain an overview of the work process and environment in China, for example, while indigenous Chinese would learn about the client's cultural context and expectations. A more elaborate example of this was the institution of an “international exchange” concept where one organisation actively encouraged Westerners to visit and work on internships within the organisation, while sending away almost 80% of their own staff to live and work in the Western client's home country.

*“For example... the pharmaceutical company that we are working for the past five years...junior engineers, we'll basically do one at a time, one by one, we send them over to the US ... Sometimes our goal is not even to let them do anything over there, but maybe just to experience the environment there. Sometimes you know geography is different, the culture is different, the communication will be very different. So what we are trying to do is to send*

*them over first of all to get to know the customer, to get to know the company, to get to know the environment. Sometimes it's very important, it actually changes the project. Then if you are the owner of the project and then the customer knows you very well... you build that relationship in the beginning and later on it's going to help them.” (Manager, Company 6)*

Bridgehead teams could spend from 3 to 6 months abroad and on their return would expect to serve as knowledge mediators and direct points of contact with clients. These activities contribute to building and maintaining trust with the client, an aspect with which these key multicultural managers are also identified. Trust is often built through understanding and integrating clients' practices, as well as ensuring service delivery of quality that satisfies clients' standards.

*“[To build long term relationships with clients], I think that the priority is trust...For example, Japan has its own business culture. More specifically, it would be ok in China if we delay a couple of days for delivery of products. But it is impossible in Japan. It has a big impact on the clients' trust. One more example can be given in our current project. Our rest time is based on the Japanese calendar instead of the Chinese calendar. It is because when you are off, they are working, and vice versa. Such issues can influence the quality of outsourcing.” (Manager, Company 9)*

However, mutual sensemaking, especially trust building, has to be achieved not just by visits but actually working together over time. The interviewees revealed that typically, the cross-cultural outsourcing contracts start with one or more initial projects of a year's duration, usually involving simpler tasks, during which the two parties learn about each other's culture and practices, processes of collaboration and expected outcomes. After completion of the short term projects, if the initial encounters prove to be successful, long term relationships will be developed with active input from both parties.

The requirement and amount of effort invested in mutual sensemaking often depends upon the type of work involved. Software development projects often involve intensive communication between onshore and offshore teams, especially those applying agile methodologies. Projects that are more clearly defined and specified tend to rely on point-to-point communication between project managers and key members on both sides, who will then “translate” the information/knowledge to the rest of the team based on their own sensemaking outcome. Interviews on Japanese SSO projects tend to reflect such practices.

### ***Cultural Hybridity***

Many of the firms interviewed demonstrated cultural positions of a blended or hybrid nature. A few examples from the findings would suffice to demonstrate this. The cultural cues with which one of these provider firms identified at the organisational level, for example, tended to accommodate mixed perspectives. At one point it was a foreign company, headquartered in the US, operating in China, viewing itself as different from local Chinese companies but at the same time ironically incorporating within its trading name the indigenous name for China, 'Hua'. The organisation also designated one informal lounge area as the "Starbucks" lounge and decorated it with paraphernalia reminiscent of a New York style café, while serving guests (in this case the research team) cups of Chinese tea to drink. The company also actively supports the development of team-building roles at work that incorporate aspects of North American culture. For example, programmers are encouraged to play basketball as a team sport along with the traditional Chinese ping pong, to create a rock band playing Western music and to embrace popular Western culture (e.g. team members adopting "SouthPark" characters).

*"The Chinese are amazing. The Chinese from Tang dynasty they are great at mixing cultures ...integrating the western culture into themselves. So that's why our employees, we are OK ... we have employee training because when at first... employees came into our company, they tend to have that kind of problem (cultural conflict), but then after ...one year we usually don't have that problem, they are very open minded and very open to the Western culture. And also our customers, they also adapt to the Chinese culture."*  
(Manager, Company 6)

At another firm, the presence of surveillance cameras while employees worked on outsourced tasks was explained as an accommodation of Japanese management practices. In order for their joint venture partner to comply with Japanese government restrictions, a form of direct supervision by proxy was implemented. The firm also actively hired Japanese expatriates and trained staff in the Japanese language. The Chinese partner thus became an extension of the Japanese organisation in ethos and management style. At still another firm, an "American model" of organisational structure has been implemented. Acculturation and assimilation are concepts frequently invoked to describe processes such as those mentioned in this section, where it is expected that when two cultures meet, one is incorporated into the other. For example, it is often said that immigrants to the US are assimilated into the American culture. From the interview analysis, it seems less a process of assimilation than one of hybridization. In other words, elements of both cultures exist in the same organization which generates a cultural hybridity, which is dynamic, contested and open to changes, as in this example of "localization" given by

one respondent:

*“They (another company) used what they learnt from Business College to set up a company culture (non-Chinese). It is impossible to achieve based on my opinion.... I advocate localization. In other words, although your company is [headquartered] from outside, you must develop it locally. In particular, the general manager needs to be localised in order to fully understand the local culture.” (Manager, Company 5)*

Other interviewees often pointed out that while their companies may be headquartered in the US or Japan, the local organization does not completely adopt the foreign culture. Some companies also make deliberate efforts to maintain Chinese customs in the company, respecting the cultural identity of the local employees. For example, one of local branches of an American-headquartered company keeps workers’ unions following Chinese rules, and celebrates traditional Chinese festivals alongside Christmas. A hybrid culture is also sometimes reflected in the demand for the multiplicity of skills required of staff when serving a variety of clients. Moreover, hybridity may result from the overlapping of regulatory regimes under which the companies operate:

*“In general we follow Chinese laws and regulations, customs and promotion systems. In terms of annual fiscal reports, we partly follow Chinese rules and partly follow Japanese rules, so that we can learn from the management experience in Japan. For example, evaluation will take place in March... the same time as in Japan... But their fiscal year report ... differs from China. As a result we have two sets of fiscal reports, with the same data and calculated at different times with a six month interval... we have to merge our fiscal reports with the Japan side, thus we institutionalize these rules from our side.” (Manager, Company 11)*

### ***Identity Multiplicity***

Respondents who had been exposed to non-Chinese contexts either as immigrants or foreign students were able to express unique perspectives that appeared superficially contradictory but upon closer inspection revealed an ability to adopt multiple views of identity and to relate to how these influenced the business environment and foreign client relationships. There is sometimes tension between the need for these organisations to reconcile the local and global contexts created by their “bridging” roles as Chinese service provider both for external multinationals and for local Chinese clients. Such tensions led for example to acknowledgements that the foreign/global context was better understood and easier to negotiate than that of the local/lived-

in, contrary to intuition or expectations.

For example, two of the interviewees, a Chinese returning student and a first-generation Chinese immigrant who is a member of a North American Chinese diaspora, found that although they were now both living and working in China, they viewed it more as an adopted home, claiming instead an affinity with the North American context and viewing China and the Chinese as foreign. In contrast, another returnee diaspora member who set up an SSO to service American clients with back office facilities in Xi'an, described his Chinese employees as follows:

*“They are split into two parts. Externally, they follow whatever rules the American have. As the Chinese saying goes, bow your head under someone else’s eaves. When you work outside, in any client’s company, just follow what the Americans do - no fuss. But when they return to our company, when it comes to internal stuff, they still behave like Chinese, doing a lot of negotiation and bargaining.”(Manager, Company 5)*

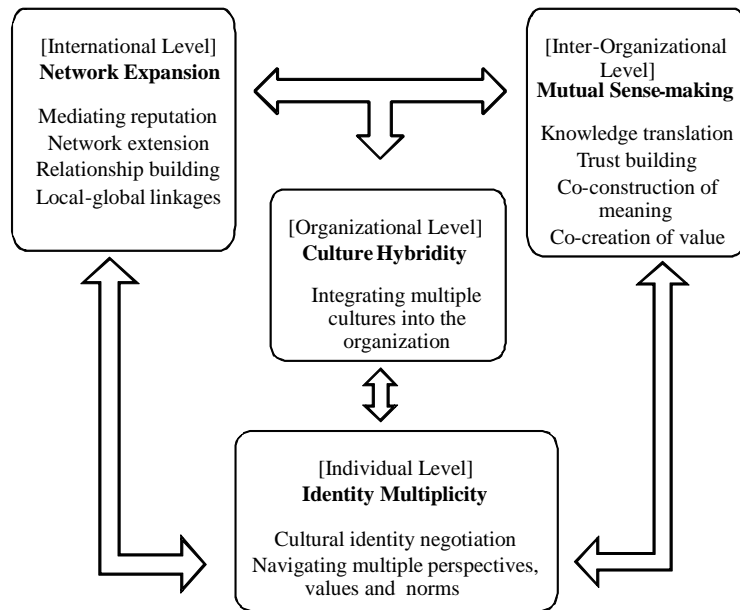
In some cases, an individual’s multiple identities are not so distinctive but somewhat integrated. One such Chinese project manager, who spent 4 to 5 years in Japan, told us how he felt like he was unconsciously behaving in a “Japanese way”. He gave the example that upon receipt of a draft document from a (Chinese) subordinate, he immediately returned it with a demand to re-format the document with specified and symmetrical page margins. From the perspective of the Chinese subordinate, such a request was incredible and unreasonable. Interestingly, this young male manager despite spending some years in Japan also admitted to possessing some anti-Japanese sentiment, an attitude which is prevalent among nationalistic Chinese youth. When asked about how he felt about managing Chinese employees on behalf of Japanese clients, he responded by saying that his priority lay with successfully completing the projects.

Examples like this reflect the tension involved in negotiating differences in status and power between offshore providers and clients. The ways in which respondents adjusted their image reflected some of these power disparities and the respondents’ ongoing struggles with the associated constraints. It was evident in the responses given by one technical manager of a Chinese based US subsidiary that he could not distinguish himself from headquarters management even though he lived, worked and was permanently based in Xi’an managing Chinese teams. In his responses, “us” consistently referred to the North American management team. In contrast, another set of managers used the metaphor of “coach” and “athletes” to describe the relationship between headquarters and subsidiary, stressing that a fundamental

difference in “mindset” precluded effective communication and allowed little room for negotiation.

Whilst the findings have been illustrative of the complex processes evident in the cross-cultural relationships existing at the contested boundaries of the client-supplier interface, the discussion section will synthesize these insights into the more conceptual viewpoints that are proposed in this paper.

## Discussion



**Figure 2 The Creolization Framework**

Cross-cultural issues arise from perceived or actual disparities in subjective understandings of the complex business situations when global sourcing arrangements are undertaken. The topic of cross-cultural management in offshore relationships has been approached from various perspectives in earlier research (Krishna et al., 2004; Huang and Trauth, 2007; Mahnke et al., 2008). Research on the issues of power and identity in cross-cultural contexts has given rise to a social constructivist view of cross-cultural identities, and more recently to the problematization of boundaries and boundary spanning. For example, Levina and Vaast (2005) relate boundary spanning to the integration of various fields of expertise, a “joint field of practice” created by boundary spanners-in-practice who draw upon various organizational and professional resources, including “boundary objects” (Star, 1990; Levina and Vaast, 2006; Gal et al., 2008). This paper critiques and builds upon prior literature and proposes that creolization effectively offers scope for reflection on, and improvement of, cross-cultural collaborative practices.

As shown in Figure 2, creolization is conceptualized as encompassing and connecting the processes of network expansion, mutual sensemaking, cultural hybridity and identity multiplicity, which are either not well recognised in the literature or discussed as isolated issues with no apparent connections. This concept is useful because it (a) does not suggest reification of cultural boundaries but rather implies a creative, interactive and accommodating process of differences; and (b) elucidates and contextualises all of the practices found in the research setting



in a coherent way. These four constructs are clearly interlinked. To differentiate them better they are artificially located at different units of analysis, which are again academically constructed (see Figure 1). However, such a conceptualisation does reflect the richness of creolization as covering the spectrum of the dynamics of global-local encounters, from global, national, organisational to individual. It is noted that there are different degrees of creolization among the visited companies. Companies at the lower end of the value chain tend to show lower degrees of creolization, which perhaps suggests that the degree of creolization may be an important indicator of the dynamic capability of a service provider. One of the interesting examples is a Japanese subsidiary in Xi'an, founded by an American-Japanese. The company has a flat organisational structure and a casual, open work environment, and provides software outsourcing service to Japanese clients, who, according to the manager of the company and our own research findings, tend to require a methodical, meticulous and inflexible work style. While the paradox needs to be further unpacked (additional access to the company was not granted), it is arguably an outcome of creolization.

As illustrated by our data, the boundary-spanning role is augmented when those who undertake this role can also mobilize local resources (an aspect of network expansion), understand multiple cultural roles and positions (aspects of cultural hybridity and identity multiplicity) and effectively translate these into normal day-to-day practices. It is these individuals referred to as “creoles” in this paper who attain leadership positions within these organizations and become key players. They are not simply bridging a “gap” between one organization or one culture and another, but are generating and reconfiguring spaces in which new blended activities can occur such as the embedding of new creolized practices in local business contexts.

Our findings deepen existing understanding on cross-cultural collaboration by revealing multi-dimensional complexities in its practice and how these are interrelated to produce an outcome. Table 4 summaries the practices observed in each dimension of creolization and their significance for an offshore supplier. Creolization is firstly a process of generation and interconnection of networks, which is referred to as network expansion. The research shows that effective Chinese offshore service suppliers are able to explore and establish local networks both onshore and offshore and join them together through the supply bases located in China, thereby exploiting the local institutional, infrastructural, human and cultural resources. For example, our research showed that the local network in Xi'an draws upon high quality and low-cost human resources from its substantial university sector; favourable governmental policies and incentives;

and a long history of cultural interaction with Japan. These resources are exploited by creoles who serve as connecting points between local networks and the onshore network of client-bases. The cultivation and expansion of networks that are successful and sustainable tend not to result from *ad hoc* activities but are based on more sophisticated linkages. The creoles themselves do not identify with any single culture or network. Rather they are able to adopt perspectives from multiple cultural positions to form multiple identities and operate at their intersection.

The constant challenge to mediate perspectives and reconcile differences has to be met with systematic mutual sensemaking activities, such as virtual and face-to-face communications, cross-site training and visits, and trans-situational learning (Vaast and Walsham, 2009). Creolization inevitably comes with tensions, especially reflected in the need to embrace identity multiplicity. However, these tensions can to various extents be dissolved or alleviated if a hybrid organizational culture is cultivated in the supplier base, and differences are not reified but problematized, accommodated and normalized in day-to-day practices. In other words, creolization could be considered a kind of strategic process; it does not privilege distinctions and differences but rather promotes interesting and useful practices from different cultural perspectives, in order to maintain successful offshore collaborations.

**Table 4 Summary of “creolized” practices adopted by Xi’an Software Park practitioners.**

<b>Concepts encapsulated by the creolization construct</b>	<b>Practices identified from the findings (not mutually exclusive but demonstrative of interlinkages)</b>	<b>Level of Analysis</b>
Network Expansion	Generating networks both onshore and offshore which tap into multiple resources on both sides. The networks are interconnected, stabilized and consolidated via creoles who serve as connecting points.	Inter-national
Mutual Sensemaking	Achieving mutual understanding by active cross-cultural communication, cross-site training and visits, and trans-situational learning.	Inter-national and Inter-organizational
Cultural Hybridity	Encouraging the adoption of hybrid organizational cultures that incorporate aspects from various ethnic backgrounds so as to promote more cohesive working cultures, which do not privilege distinctions and differences but rather adopt interesting and useful practices from the different cultural perspectives.	Organizational (offshore)
Identity Multiplicity	Adopting a composite identity that can understand perspectives from different cultural positions so that viewpoints do not appear foreign but simply the product of interactions.	Individual

## **Contribution to Theory**

The key contribution of the paper is the multi-layered conceptualization of creolization, which, we argue, offers an alternative to extant notions of boundary spanning, cultural liaisons, bridgeheads and diaspora influences that are widely posited in the literature as strategies that bridge cross-cultural practices in offshoring.

This paper critiques, builds upon and synthesizes relevant streams of ideas across a number of disciplines to construct a multi-layered creolization framework, encompassing processes at the individual, intra- and inter-organizational and inter-national levels. The creolization concept, borrowed from cultural studies and enriched by conceptual constructs derived from our findings in a study of software and services outsourcing suppliers in China, elucidates the complexities of cross-cultural interaction occurring in global sourcing relationships. Viewed as a vital and innovative process, creolization challenges conventional perceptions of globalization such as cultural convergence and divergence (McGaughey and De Cieri 1999; Van den Berghe 2002), and facilitates the understanding of more interactive, contentious and creative processes of network expansion, mutual sensemaking, cultural hybridity and identity multiplicity.

Studies that present “how-to” recommendations often see boundary spanning as a panacea for cross-cultural issues and rarely recognize that it is only one link in a complex set of interrelated practices which offshore providers can use to attempt to cultivate and sustain long term collaborative relationships with offshore clients. This paper shows that although the use of boundary spanning mechanisms such as cultural liaisons and bridgeheads are important, they are more likely to be effective and sustainable if such practices are anchored in a vision that does not seek to reify differences (boundaries and interfaces with clients) but to problematize them, i.e. to view the spaces where differences occur as areas for negotiation, learning, creativity and embracing multiple perspectives.

It is envisaged that in future work, the framework could be used in a variety of other settings across a number of cross-cultural contexts to examine to what extent the practices contribute to successful performance in, e.g. internationalization (Su and Levina 2010), knowledge management (Kotlarsky and Oshri 2005), collaborative innovation (Willcocks et al. 2010), or the reconfiguration of value networks (Abbott et al. 2012). Finally, linking with current outsourcing literature on vendor capabilities in outsourcing (Lacity et al. 2010; Palvia et al. 2010; Levina and Vaast 2008), it could be fruitful to consider the creolization framework in relation to dynamic capabilities (Teece et al. 1997; Prange and Verdier 2011; Weerawardena et al. 2007).

## **Implications for Practice**

Given that the creolization framework is presented as a multi-layered model, it provides organizations with opportunities to improve practices at the international, inter-organizational, organizational and individual levels. Software service organizations, such as the ones investigated in this research, could benefit from investing at the international level in a variety of networks and vendor-supplier relationships that build reputational capital, leverage resources globally and allow opportunities for mutually beneficial partnerships and alliances to develop. Long-term collaborative partnerships may provide SSO suppliers with opportunities to provide better value propositions to their clients.

At the inter-organizational level SSOs could benefit from encouraging more practices related to mutual sensemaking such as the “international exchange” programme identified in the study which was geared towards promoting mutual cultural understanding. Another beneficial practice could be the adoption of working methods such as agile methodologies which encourage close collaboration, exchange of ideas within a team structure and the building of trusting relationships among distributed team members (Ramesh et al., 2006). It is within the context of these collaborative relationships that value could be co-created between SSO provider and client.

At the organizational level, the benefits as well as the challenges of cultural hybridization within the organization have been demonstrated in the study. A hybrid culture strategy needs to be sensitive to how elements of different cultures can be incorporated so as to enhance organizational productivity or creativity. The organisation needs to determine which aspects of the “Other” culture to adopt and adapt within the organization when using a creolization approach. Cultivating an open, diverse and hybrid organisational culture could make a crucial difference especially to firms that provide services to global clients across diverse cultures.

A hybrid organizational culture would have implications for staff recruitment and development. The individuals identified as “creoles” in this study are key to the success of the approaches mentioned above. Like the biculturals (Brannen and Thomas, 2010) of the international management literature, their ability to integrate and negotiate multiple cultural identities and navigate different knowledge repertoires makes them highly desirable as cross-cultural intermediaries. Creoles could be strategically identified and recruited, or actively nurtured from within the organization through practical approaches such as sending them to client sites on long-term work assignments so that they could become part of, and learn from, other cultural contexts. It is clear from our study that the successful Chinese outsourcing

suppliers consciously employ people with cross-cultural backgrounds, experience or expertise in key managerial roles. Although whether these individuals actually possess “creole” capabilities only becomes apparent through evidence from practice. A proactive approach to the identification and recruitment of creoles could be crucial to enacting and sustaining the other creolization processes.

## **Conclusion**

The purpose of this paper was to derive theoretical insights into the emergent and complex cross-cultural collaborative practices followed by Chinese software and services outsourcing companies in distributed collaborative relationships with their foreign clients. The objective was to gain insights into distributed collaboration through both a grounded study and an analysis of prevailing theoretical concepts, such as “bridging” and “boundary spanning”, which are widely used in the literature to explain this phenomenon. The study and analysis revealed that, though concepts like boundary spanning are useful in this regard, they are limited in their conceptual richness. The paper argued that a more relevant conceptualization of these processes would be anchored in cultural hybridity, a notion that acknowledges that boundaries can be contested, negotiated, and reconfigured rather than just spanned or bridged. Creolization was thus borrowed from the cultural studies literature and used as a basis to propose an alternative view that encompasses the interrelated processes of network expansion, cultural hybridity, mutual sensemaking and identity multiplicity. The creolization framework was subsequently derived, explained and illustrated in the paper through further theorization and grounding in the study results. This constitutes the main contribution of the research. Other contributions include addressing the dearth of both literature on global sourcing from a vendor’s perspective and on the Chinese software and services industry.

The study consisted of a limited sample of organisations within a fairly specific context and was undertaken using a qualitative interpretive paradigm thus limiting generalizability of the findings. Nonetheless, the insights gained from the study show aspects of the offshoring relationship hitherto only marginally addressed in the literature. The framework was also shown to be relevant to multiple levels of analysis, thus providing a more holistic view into the complexities of intercultural collaboration inherent in global sourcing arrangements. Future work in this area could take different directions. More in-depth, longitudinal case studies of creolization practices could be conducted to test and develop the creolization framework to gain further and more substantial insights. The paper also commented on a number of potentially

relevant and related subject areas to which the framework could be applied including knowledge management, capability development and collaborative innovation. The insights gained from this framework are also shown to have the potential to improve the practice of distributed collaboration, thus influencing the success of global sourcing arrangements and complex value networks.

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## **References**

- Abbott, P., Zheng, Y., Modi, S. and Du, R. (2012). Moving Up the Value Chain: Exploring the Issues for Chinese Software & Services Outsourcers. Paper presented at the 16th Pacific Asia Conference on Information Systems, Hochiminh City, Vietnam, May 2012
- Alvarez, J.L., 1998. The sociological tradition and the spread and institutionalization of knowledge for action, in: Alvarez, J. L. (Ed.), *The Diffusion and Consumption of Business Knowledge*. Macmillan, Basingstoke, pp. 13-57.
- Ang, I., 2003. Together-in-difference: Beyond diaspora, into hybridity. *Asian Studies Review*. 27, 141-154.
- Bartel, C.A., 2001. Social comparisons in boundary-spanning work: effects of community outreach on members' organizational identity and identification. *Administrative Science Quarterly*. 46, 379-413.
- Bell, M.P., Harrison, D.A., 1996. Using intra-national diversity for international assignments: A model of bicultural competence and expatriate adjustment. *Human Resource Management Review*. 6, 47-74.
- Brannen, M.Y., Salk, J.E., 2000. Partnering across borders: negotiating organizational culture in a German-Japanese joint venture. *Human Relations*. 53, 451-487.

- Brannen, M.Y., Thomas, D.C., 2010. Bicultural individuals in organizations. *International Journal of Cross Cultural Management*. 10, 5 –16.
- Byun, H., Ybema, S., 2005. Japanese business in the Dutch Polder: the experience of cultural differences in asymmetric power relations. *Asia Pacific Business Review*. 11, 535-552.
- Carlile, P.R., 2002. A pragmatic view of knowledge and boundaries: boundary objects in new product development. *Organization Science*. 13, 442-455.
- Carmel, E., 2006. Building your information systems from the other side of the world: how Infosys manages time zone differences. *MIS Quarterly Executive*. 5, 43-53.
- Carmel, E., Gao, G., Zhang, N., 2008. The maturing Chinese offshore IT services industry: it takes 10 years to sharpen a sword. *MIS Quarterly Executive*. 7, 157-170.
- Chan, K., Luk, V., Wang, G., 2005. Conflict and innovation in international joint ventures: toward a new sinified corporate culture or 'alternative globalization' in China. *Asia Pacific Business Review*. 11, 461-482.
- ChinaSourcing, 2010. 2010 Report on Outsourcing Model Cities of China. China Council for Investment Promotion, Beijing, China.
- D'Mello, M., 2005. Thinking local, acting global: issues of identity and related tensions in global software organizations in India. *Electronic Journal of Information Systems in Developing Countries*. 22, 1-20.
- D'Mello, M., Eriksen, T.H., 2010. Software, sports day and sheera: Culture and identity processes within a global software organization in India. *Information and Organization*. 20, 81–110.
- Felski, R., 1997. The doxa of difference. *Signs*. 23, 1-21.
- Friedman, R., Liu, W., Chi, S.C.S., Hong, Y.Y., Sung, L.K., 2012. Cross-cultural management and bicultural identity integration: When does experience abroad lead to appropriate cultural switching? *International Journal of Intercultural Relations*. 36, 130–139.
- Gal, U., Lyytinen, K., Yoo, Y., 2008. The dynamics of IT boundary objects, information infrastructures, and organisational identities: the introduction of 3D modelling technologies into the architecture, engineering, and construction industry. *European Journal of Information Systems*. 17, 290-304.
- Geertz, C., 1988. *Works and Lives: The Anthropologist as Author*. Polity Press, Cambridge.
- Gopal, A., Gosain, S., 2009. Research note--the role of organizational controls and boundary spanning in software development outsourcing: implications for project performance. *Information Systems Research*. [online, available at: DOI: 10.1287/isre.1080.0205].
- Gregory, R., Prifling, M., Beck, R., 2009. The role of cultural intelligence for the emergence of negotiated culture in IT offshore outsourcing projects. *Information Technology & People*. 22, 223–241.
- Hannerz, U., 1992. *Cultural Complexity: Studies in the Social Organization of Meaning*. Columbia University Press, New York.
- Harvey, M., Moeller, M., 2009. Expatriate managers: A historical review. *International Journal of Management Reviews*. 11, 275–296.
- Hinds, P., Liu, L., Lyon, J., 2011. Putting the global in global work: An intercultural lens on the practice of cross-national collaboration. *Academy of Management Annals*. 5, 135–188.

- Hong, H.J., 2010. Bicultural competence and its impact on team effectiveness. *International Journal of Cross Cultural Management*. 10, 93–120.
- Hong, J.F.L., Nguyen, T.V., 2009. Knowledge embeddedness and the transfer mechanisms in multinational corporations. *Journal of World Business*. 44, 347–356.
- Huang, H., Trauth, E. M., 2007. Cultural influences and globally distributed information systems development: experiences from Chinese IT professionals. *SIGMIS-CPR '07: Proceedings of the 2007 ACM SIGMIS CPR Conference on Computer Personnel Research*, St. Louis, Missouri, USA, pp. 36-45.
- Jensen, P. D. Ø., 2009. A learning perspective on the offshoring of advanced services. *Journal of International Management*. 15, 181-193.
- Johnson, K.L., Duxbury, L., 2010. The view from the field: A case study of the expatriate boundary-spanning role. *Journal of World Business*. 45, 29–40.
- Kapur, D., McHale, J., 2005. Sojourns and software: internationally mobile human capital and high-tech industry development in India, Ireland, and Israel, in: Arora, A., Gambardella, A. (Eds.) *From Underdogs to Tigers: The Rise and Growth of the Software Industry in Brazil, China, India, Ireland, and Israel*. Oxford University Press, Oxford, pp. 236-274.
- Khondker, H. H., 2005. Globalisation to glocalisation: a conceptual exploration. *Intellectual Discourse*. 13, 181-199.
- Kotlarsky, J. and Oshri, I., 2005. Social ties, knowledge sharing and successful collaboration in globally distributed system development projects. *European Journal of Information Systems*, 14, 37–48.
- Krishna, S., Sahay, S., Walsham, G., 2004. Managing cross-cultural issues in global software outsourcing. *Communications of the ACM*. 47, 62-66.
- Lacity, M.C., Willcocks, L., Zheng, Y., 2010. *China's emerging outsourcing capabilities : the services challenge*, Basingstoke: Palgrave Macmillan.
- LaFromboise, T., Coleman, H.L., Gerton, J., 1993. Psychological impact of biculturalism: Evidence and theory. *Psychological Bulletin*. 114, 395–412.
- Lee, Y., 2010. Home versus host — identifying with either, both, or neither? *International Journal of Cross Cultural Management*. 10, 55–76.
- Leidner, D.E., 2010. Globalization, culture, and information: towards global knowledge transparency. *Journal of Strategic Information Systems*. 19, 69-77.
- Leung, K., Bhagat, R.S., Buchan, N., Erez, M., Gibson, C.B., 2005. Culture and international business: recent advances and their implications for future research. *Journal of International Business Studies*. 36, 357-378.
- Levina, N., Kane, A. A., 2009. Immigrant managers as boundary spanners on offshored software development projects: partners or bosses? *IWIC '09: Proceedings of the 2009 International Workshop on Intercultural Collaboration*, Palo Alto, California, USA, pp. 61-70.
- Levina, N., Ross, J.W., 2003. From the Vendor's Perspective: Exploring the Value Proposition in Information Technology Outsourcing. *MIS Quarterly*. 27, 331–364.
- Levina, N., Vaast, E., 2005. The emergence of boundary spanning competence in practice: implications for implementation and use of information systems. *MIS Quarterly*. 29, 335-363.



- Levina, N., Vaast, E., 2006. Turning a community into a market: a practice perspective on information technology use in boundary spanning. *Journal of Management Information Systems*. 22, 13-37.
- Levina, N., Vaast, E., 2008. Innovating or doing as told? Status differences and overlapping boundaries in offshore collaboration. *MIS Quarterly*. 32, 307-332.
- Mahnke, V., Wareham, J., Bjorn-Andersen, N., 2008. Offshore middlemen: transnational intermediation in technology sourcing. *Journal of Information Technology*. 23, 18-30.
- Marabelli, M., Newell, S., 2012. Knowledge risks in organizational networks: The practice perspective. *Journal of Strategic Information Systems*. 21, 18–30.
- Marchington, M., Vincent, S., Cooke, F., 2005. The role of boundary spanning agents in inter-organizational contracting, in: Marchington, M., Grimshaw, D., Rubery, J., Willmott, H. (Eds.) *Fragmenting work: Blurring Organizational Boundaries and Disordering Hierarchies*. Oxford University Press, Oxford, pp. 319.
- McGaughey, S.L., De Cieri, H., 1999. Reassessment of convergence and divergence dynamics: implications for international HRM. *The International Journal of Human Resource Management*. 10, 235–250.
- Ngugi, I.K., Johnsen, R.E., 2010. Relational capabilities for value co-creation and innovation in SMEs. *Journal of Small Business and Enterprise Development*. 17, 260–278.
- Nicholson, B., Sahay, S., 2004. Embedded knowledge and offshore software development. *Information and Organization*. 14, 329-365.
- Nicholson, B., 2010. An institutional analysis of control in offshore outsourcing. Working Paper, Manchester Business School.
- Olsson, H. H., Ó Conchúir, E., Ågerfalk, P. J., Fitzgerald, B., 2008. Two-stage offshoring: an investigation of the Irish bridge. *MIS Quarterly*. 32, 257-279.
- Oshri, I., Kotlarsky, J., Willcocks, L.P., 2007. Global software development: exploring socialization and face-to-face meetings in distributed strategic projects. *Journal of Strategic Information Systems*. 16, 25-49.
- Ou, X. C., Davison, R.M., 2009. Why eBay lost to TaoBao in China: the global advantage. *Communications of the ACM*. 52, 145-148.
- Palvia, P.C. et al., 2010. Capability, Quality, and Performance of Offshore IS Vendors: A Theoretical Framework and Empirical Investigation. *Decision Sciences*. 41, 231–270.
- Pauleen, D. J., 2003. Lessons learned crossing boundaries in an ICT-supported distributed team. *Journal of Global Information Management*. 11, 1-19.
- Prange, C., Verdier, S., 2011. Dynamic capabilities, internationalization processes and performance. *Journal of World Business*. 46, 126–133.
- Qu, Z., 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*. 18, 53-67.
- Ramesh, B., Cao, L., Mohan, K., Xu, P., 2006. Can distributed software development be agile? *Communications of the ACM*. 49, 41–46.
- Romero, D., 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.

Rottman, J. W., 2008. Successful knowledge transfer within offshore supplier networks: a case study exploring social capital in strategic alliances. *Journal of Information Technology*. 23, 31-43.

Sahay, S., Nicholson, B., Krishna, S., 2003. *Global IT Outsourcing: Software Development Across Borders*. Cambridge University Press, Cambridge.

Sahlin-Andersson, K., Engwall, L., (Eds.), 2002. *The Expansion of Management Knowledge: Carriers, Flows, and Sources*. Stanford University Press, Stanford, California, USA.

Sarker, S. 2005. Knowledge transfer and collaboration in distributed U.S.-Thai teams. *Journal of Computer-Mediated Communication*. 10, article 15.

Schwab, R.C., Ungson, G.R., Brown, W.B., 1985. Redefining the boundary spanning-environment relationship. *Journal of Management*. 11, 75-86.

Star, S., 1990. The structure of ill-structured solutions: boundary objects and heterogeneous distributed problem solving, in: Huhn, M., Gasser, L. (Eds.), *Readings in Distributed Artificial Intelligence*. Morgan Kaufmann Publishers Inc., Menlo Park, California, USA, pp. 37-54.

Su, N., Levina, N., 2010. *Operational Capability Development in Vendor Internationalization: The Case of China's IT Service Industry*, Pittsburgh, PA: University of Pittsburgh.

Teece, D.J., Pisano, G., Shuen, A., 1997. Dynamic capabilities and strategic management. *Strategic Management Journal*. 18, 509–533.

Tushman, M. L., Scanlan, T. J., 1981. Boundary spanning individuals: their role in information transfer and their antecedents. *Academy of Management Journal*. 24, 289-305.

Urquhart, C., Lehmann, H., Myers, M.D., 2010. Putting the 'theory' back into grounded theory: guidelines for grounded theory studies in information systems. *Information Systems Journal*. 20, 357-381.

Vaast, E., Walsham, G., 2009. Trans-situated learning: supporting a network of practice with an information infrastructure. *Information Systems Research*. 20, 547-564.

Van den Berghe, L., 2002. *Corporate governance in a globalising world: convergence or divergence?: A European Perspective*, New York: Kluwer Academic Publishers.

Vargo, S.L., Maglio, P.P., Akaka, M.A., 2008. On value and value co-creation: A service systems and service logic perspective. *European Management Journal*. 26,145–152.

Walsham, G., 1993. *Interpreting Information Systems in Organizations*. Wiley, Chichester.

Walsham, G., 2002. Cross-cultural software production and use: A Structural analysis. *MIS Quarterly*. 26, 359-380.

Weerawardena, J., Mort, G.S., Liesch, P.W., Knight, G., 2007. Conceptualizing accelerated internationalization in the born global firm: A dynamic capabilities perspective. *Journal of World Business*. 42, 294–306.

Willcocks, L.P., Cullen, S., Craig, A., 2010. *The Outsourcing Enterprise: From Cost Management to Collaborative Innovation*, Palgrave Macmillan.

Xi'an Software Park, 2011. Xi'an Software Park. [online available at:

<http://www.xasoftwarepark.com/EN/index.html>]

Yagi, N., Kleinberg, J., 2011. Boundary work: An interpretive ethnographic perspective on negotiating and leveraging cross-cultural identity. *Journal of International Business Studies*. 42, 629–653.