

# Cultural Intelligence and Offshore Outsourcing Success: A Framework of Firm-Level Intercultural Capability\*

Soon Ang<sup>†</sup>

*Nanyang Business School, Nanyang Technological University, Nanyang Avenue, Singapore 639798, e-mail: asang@ntu.edu.sg*

Andrew C. Inkpen

*Thunderbird School of Global Management, 15249 N 59th Avenue, Glendale, AZ 85306, e-mail: andrew.inkpen@thunderbird.edu*

## ABSTRACT

This article discusses the importance of firm-level cultural intelligence in the context of international business ventures such as offshoring. We identify the recent movement toward global delivery models in offshoring ventures as the strategic imperative for offshoring partners to acquire and develop firm-level cultural intelligence. Drawing on Earley and Ang's (2003) conceptualization of cultural intelligence and the resource based view of the firm, we develop a conceptual framework of firm-level cultural intelligence. The framework comprises three dimensions of intercultural capabilities of the firm: managerial, competitive, and structural. We propose items to measure these three dimensions and discuss theoretical and managerial implications.

***Subject Areas: Cultural Intelligence, Offshoring, and Outsourcing.***

## INTRODUCTION

With rapid advances in transportation and information technologies, firms are coming into greater intercultural contact than ever before. Intercultural contact is necessary and unavoidable in international business ventures such as offshore outsourcing. Firms with capabilities to manage intercultural contact (i.e., culturally intelligent firms) will outperform firms that are "less intelligent."

Most research on performance variance on offshoring or outsourcing focuses on either the legal contract with its corresponding tight contractual mechanisms or the more relational mechanisms to manage the customer–supplier relationship (Kern & Willcocks, 2000; Koh, Ang, & Straub, 2004). Various models predicting outsourcing success have been developed, with model antecedents comprising variables such as contract conditions and customer–supplier relationships. In this article, we propose an alternative model of performance in international ventures such as offshore outsourcing. We introduce the concept of firm-level cultural

---

\*Invited paper.

<sup>†</sup>Corresponding author.

intelligence, which we define as a form of organizational intelligence or firm-level capability in functioning effectively in culturally diverse situations.

A critical assumption underlying this article is that international venture performance in terms of efficiency and effectiveness is determined by the quality of organizational intelligence (Huber, 1990), specifically firm-level cultural intelligence. Firm-level cultural intelligence is rooted in both psychological research on individual cultural intelligence and the resource-based view of the firm, which views the firm as a bundle of resources and capabilities. In this article we propose that when organizations venture overseas, firm-level cultural intelligence is a necessary predictor of organizational performance in foreign ventures such as offshore outsourcing.

This article is organized as follows. In the next section, we describe the extent of offshore outsourcing so that we can appreciate the depth of the issue. We also define culture and cultural intelligence as they are used in this article. We then present our conceptual framework on firm-level cultural intelligence as it relates to international ventures. Specifically, we introduce the three dimensions of firm-level intercultural capabilities: managerial, competitive, and structural and relate them specifically to offshore outsourcing. We conclude by discussing implications for future research and for managers.

## **EMERGING TRENDS OF GLOBAL DELIVERY MODELS IN OFFSHORING**

The most common distinction made between outsourcing and offshoring is that outsourcing refers to the purchase of services from another firm (Ang & Straub, 1998), while offshoring refers to the purchase of services from another firm located in another country (Harrison & McMillan, 2006). Since 2002, the number of offshoring ventures has grown significantly. Offshoring has spread beyond the traditional IT services of applications outsourcing (AO) and infrastructure outsourcing (IO), to business process outsourcing (BPO), knowledge process outsourcing (KPO), and consulting services for migration. Market research conducted by various consulting firms show that the offshoring market in 2000 was approximately U.S.\$119 billion (Kearney, 2007; Marriott, Young, Huntley, & Matlus, 2007). In just less than a decade, the industry has expanded by more than 2.5 times to U.S.\$300 billion by 2008. It is further estimated that the U.S.\$300 billion represents only about 10% of the potential market for global offshoring services (NASSCOM-McKinsey, 2005).

Until recently, India was the world's premier offshore location. However, the sheer imbalance between the global demand and India's supply of IT services has led to creeping costs and excessive strain on India as an offshoring service delivery center. Given that India is also several time zones away from major customers in North America and Europe, companies are seeking alternative locations that are more "nearshore." Nearshore services have many advantages. They align overseas delivery centers with the customer's primary time zones and, hence, the benefits of proximity in travel time and same working day communications. Nearshore services also leverage better understanding of the business and legal environments and greater language and cultural compatibility. For example, Central and Eastern

European (CEE) countries such as Hungary, Poland, Slovakia, and Russia are emerging as attractive nearshore countries for Western European countries, while Mexico as a nearshore destination has captured a sizeable market share of the North American offshoring market.

Starting in late 2007, global delivery models have emerged as a popular strategy for delivering offshoring services. A global delivery model refers to the ability of a service provider to deliver seamless services from an optimized delivery structure that involves resourcing skills and resources from several global locations (Marriott & Matlus, 2007). These global locations may be geographically dispersed to include an appropriate mix of on-site, onshore, nearshore, and offshore resources. Thus, rather than focusing on the choice of three location options—offshore, onshore, or nearshore—comprehensive global delivery models of offshoring allow companies to tap into the skills, expertise, and infrastructure of locations beyond one single locale.

There are a number of challenges facing both customers and suppliers as the offshoring market matures toward global delivery models. First, there is the choice of locations. As discussed earlier, many other countries besides India have emerged as competing locations for offshoring services: Canada, Mexico, and Brazil in North, Central, and South America; Hungary, Ireland, Poland, Russia, and Romania in Europe; China, the Philippines, and Malaysia in Asia; and South Africa in the African continent (NeoIT, 2005). A company's ability to optimize among these location choices and operate as a seamless global delivery network is a strategic imperative for both customers and suppliers of offshoring (Marriott, 2007).

Second, the multiple countries/locations involved in the delivery of offshoring services magnify the global collaborative challenges between the customer and supplier of offshoring. It is widely recognized that creating and sustaining a smooth collaborative relationship between customer and supplier is critical for outsourcing success (Koh et al., 2004). When a firm outsources services to a single-location service provider, it has to learn to manage both its own expectations and those of the contracting parties. As the offshoring industry matures from a single-location offshoring service to a global service delivery model involving multiple locations, challenges to smooth collaborative relationships become more exacerbated and complex (Levina & Vaast, 2008).

Cherry and Robillard's (2004) time and motion studies of IT research and development (R&D) engineers from multiple locations working in distributed, global software development projects found that as much as 50% of the engineers' work hours were spent on ad hoc collaborative activities and global communication with their R&D engineer counterparts from around the world. Fifty-seven percent of this ad hoc communication was devoted to what they termed "cognitive synchronization"—in which R&D engineers exchange information to ensure that they shared the same knowledge or the same representation of the object in question; 32% of the ad hoc communication was spent on conflict and problem resolution. Only 8% is spent on actual codevelopment of the software in which developers contribute to the development of a new feature or components of the software, while the remaining 3% is spent on coordinating and planning for future meetings, and working sessions.

These findings suggest that as offshoring matures into global service delivery models, firm-level cultural intelligence—the capability of firms to work effectively with others from diverse cultures—will emerge as a very critical (if not the key) resource for firms leveraging on offshoring.

## **CULTURE**

Before we develop our theory of firm-level cultural intelligence and its relation to offshoring, we will clarify and define culture and cultural intelligence as they are used in this article. Traditionally, and perhaps because of Hofstede's (1980) work based on work values, the bulk of research on culture is narrowly concerned with only the shared values and beliefs of members of different societies. Yet, Triandis (1972) in an earlier treatise on culture proposed that culture should best be modeled as having objective and subjective components. Objective culture describes what we can see—the observable and visible artifacts of cultures, which include the human-made part of the environment; the economic, political, and legal institutions; as well as social customs, arts, language, marriage, and kinship systems. As Gelfand, Nishii, and Raver (2006) succinctly put it:

Numerous scholars have bemoaned the fact that the extensive focus on values in cross-cultural research reflects a subjectivist bias, where culture is reduced to factors that exist inside the individual's heads. The focus on cross-cultural differences in internal values has taken place in the absence of a concomitant focus on external influences on behaviors, such as cultural norms and constraints, social networks, and components of the larger social structure (i.e., what can be called a structuralist approach) (Gelfand et al., 2006, p. 1225).

Following Triandis' broader view of culture, we conceptualize culture broadly to include subjective constructs such as values and beliefs and also other ecological and objective elements such as institutional perspectives of cultures (Leung & Ang, 2008). Hence, in this article, we view culture as having both subjective and objective components. The objective components are comprised of institutional elements such as legal, economic, political, religious, and educational systems that could influence the effectiveness of offshoring ventures (Leung & Ang, 2008).

## **CULTURAL INTELLIGENCE**

Early research tended to view intelligence narrowly as the ability to grasp concepts and solve problems in academic settings. There is now increasing consensus that "intelligence may be displayed in places other than the classroom" (Sternberg & Detterman, 1986). The growing interest in "real-world" intelligence has identified new types of intelligence that focus on specific content domains, such as social intelligence (Thorndike & Stein, 1937), emotional intelligence (Mayer & Salovey, 1993), and practical intelligence (Sternberg et al., 2000).

According to evolutionary anthropologists, humans and other primates have similar social intelligence—a set of sophisticated social-cognitive skills

for competing and cooperating (Herrmann, Call, Hernandez-Lloreda, Hare, & Tormasello, 2007). However, humans differ from other forms of primates in that humans have evolved cultural intelligence—the “ultrasocial” skills that enable them to actually create different cultural groups, each operating with a distinctive set of artifacts, symbols, and social practices and institutions. To function effectively in the cultural world into which they are born, humans must learn to use the artifacts and tools and to participate in these practices that require special social-cognitive skills of social learning and communication associated with the cultural group the humans are born into.

Earley and Ang (2003) defined cultural intelligence as an individual’s capability to function and manage effectively in culturally diverse settings. This conceptualization of cultural intelligence extends Herrmann et al.’s recent views in that cultural intelligence refers to not only a person’s capability in creating cultural groups and functioning effectively in one of those cultural groups, but also a person’s capability to function effectively in interactions across cultural groups (2007).

Cultural intelligence is motivated by the practical reality of globalization in the workplace (Earley & Ang, 2003). Just as social intelligence or emotional intelligence (EQ) complements cognitive intelligence (IQ), in that both are important for an individual to find success at work and in personal relationships in an increasingly interdependent world, we suggest that cultural intelligence (CQ) is another complementary form of intelligence that can explain variability in coping with diversity and functioning in new cultural settings. Since the norms for social interaction vary from culture to culture, it is unlikely that IQ and EQ (or social intelligence) will translate automatically into effective cross-cultural adjustment and interaction.

Ang et al. (2007) operationalize CQ as a four-factor model that includes metacognitive, cognitive, motivational, and behavioral dimensions. CQ as a four-factor construct is based on Sternberg and Detterman’s (1986) framework of the multiple foci of intelligence. Sternberg and Detterman integrated the myriad views on intelligence to propose four complementary ways to conceptualize individual-level intelligence: (i) metacognitive intelligence is knowledge and control of cognition (the processes individuals use to acquire and understand knowledge); (ii) cognitive intelligence is individual knowledge and knowledge structures; (iii) motivational intelligence acknowledges that most cognition is motivated and thus it focuses on magnitude and direction of energy as a locus of intelligence; and (iv) behavioral intelligence focuses on individual capabilities at the action level (behavior).

The four factors of CQ mirrors the contemporary views of intelligence as a complex, multifactor, individual attribute that is composed of metacognitive, cognitive, motivational, and behavioral factors (Sternberg & Detterman, 1986). Metacognitive CQ reflects the mental capability to acquire and understand cultural knowledge. Cognitive CQ reflects general knowledge and knowledge structures about culture. Motivational CQ reflects individual capability to direct energy toward learning about and functioning in intercultural situations. Behavioral CQ reflects individual capability to exhibit appropriate verbal and nonverbal actions in culturally diverse interactions.

## **FRAMEWORK OF FIRM-LEVEL CULTURAL INTELLIGENCE**

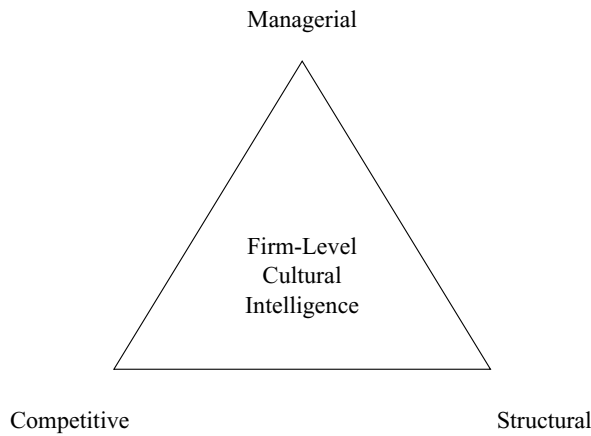
The previous section established CQ as a valid concept at the individual level. Given our objective of understanding firm success in international business ventures such as offshoring, we now shift the discussion to the firm level. We will argue in this section that the concept of firm-level CQ can be developed, managed, and enhanced by firms in their pursuit of offshoring success.

A core theme is that firms can develop the capability to learn and generate new knowledge to operate effectively in culturally diverse environments. Teece argued that “not only must the innovating enterprise spend heavily on R&D and assiduously develop and protect its intellectual property, it must also generate and implement the complementary organizational and managerial innovations needed to achieve and sustain competitiveness. With intangible assets being critical to enterprise success, the governance and incentive structures designed to enable learning and the generation of new knowledge become salient” (Teece, 2007, p. 1320–1321).

The better a firm is at learning and generating new knowledge, the more intelligent the firm. Huber (1990) defined organizational intelligence as an organization’s capabilities to acquire, process, and interpret information external to the organization and is an input to the organization’s decision makers. Although all organizational decision making involves some aspects of intelligence, Leidner and Elam (1995) distinguished organizational intelligence from organizational decision making. Intelligence is viewed as an input to the organization’s decision makers. Thus, better intelligence should lead to better decisions. In this article, we identify firm-level cultural intelligence as a form of organizational intelligence necessary to make effective offshoring decisions and achieve postoffshoring performance.

We draw on resource-based theory to develop a basis for operationalizing the concept of firm-level cultural intelligence. Resource-based theory (e.g., Wernerfelt, 1984; Barney, 1991) conceptualizes firms as consisting of a bundle of resources and capabilities. Resources and capabilities are defined as “the tangible and intangible assets a firm uses to choose and implement its strategies” (Barney, 2001, p. 54). In essence, there are two important assumptions underlying the resource-based theory. First, resources and capabilities, like human intelligence, are heterogeneous among firms even in the same industry because resources and capabilities are combined differentially across firms. Thus, the firm with the more valuable resources has the foundation for creating a unique competitive position. Second, key resources and capabilities are imperfectly mobile across firms because resources and capabilities are often unique to a firm.

Accordingly, for a resource or capability to be regarded as a source of sustained competitive advantage, four features are suggested: valuable, rare, costly to imitate, and organizationally embedded (Barney, 1991). A resource or capability is valuable when it can add value to a firm and lead to competitive advantage. However, if a resource or capability is commonly available, regardless of its value, it is less likely to lead to competitive advantage because competitors can acquire the resource easily. As such, rarity is also considered a key feature of a resource that can lead to sustained competitive advantage. At the same time, a resource should be costly to imitate by competitors. By and large, imitability is determined

**Figure 1:** Framework of firm-level cultural intelligence.

by path dependencies, time compression diseconomies, and causal ambiguity (e.g., Dierickx & Cool, 1989; Reed & DeFillippi, 1990). To the extent that a resource is tightly embedded within a firm, it is even more difficult to copy because the complexity involved in the social nature of an organization makes it hard for outsiders to trace the source of a firm's competitive advantage. Moreover, the value of a resource can be maximized when it is closely linked to complementary resources within the firm (Helfat, 1997).

Prior research has used many different methods to classify resources and capabilities, with no single approach gaining generally accepted status. To drive our arguments, we focus on three types of capabilities that encompass both tangible and intangible resources and span multiple firm levels. We label the resources managerial, competitive, and structural capabilities (Figure 1).

### **Managerial Cultural Intelligence**

The possession of CQ by a firm's managers is a valuable resource, especially when the CQ resides in its upper echelons or top management team (TMT) (e.g., Hambrick & Mason, 1984) and in the project managers of the offshoring venture. A firm's TMT embodies the vision and worldview of the firm. Studies have consistently found a significant relationship between TMT characteristics and firm strategies (e.g., global strategy) and performance (e.g., Carpenter, Sanders, & Gregersen, 2001). Hambrick and D'Aveni (1992) suggested that team resources (e.g., team size, expertise) and team social structure (e.g., average tenure, tenure heterogeneity) are crucial attributes of TMTs. Similarly, Miller placed important emphasis on TMT experience because experience shapes the cognitive structures through which managers see the world (Miller, 1991). Such cognitive structures influence how TMT sense and filter business issues (or filter them out) as well as interpret and construct meanings out of them (Kiesler & Sproull, 1982). Forming appropriate mental models thus allows TMTs to cope with fast changing external environments and devise strategies accordingly (Huff, 1990).

The value of cognitive resources is demonstrated by the actions of decision makers. For example, their ability to make judgments about business opportunities and then turn those judgments into competitive action is a hallmark of organizational success. The diversity of the TMT may contribute to an enhanced ability to make competent decisions as will experience, which may be direct or vicarious. The motivation and drive of the TMT also contributes to the managerial intercultural capability of an organization.

Cultural intelligence must also reside within offshoring project managers. As boundary spanners, project managers come into daily contact with supplier and/or customer employees in the international business ventures. They define the specifications, manage conflict, resolve disputes, and ensure that performance outcomes of offshoring projects are of quality, within budget, and on schedule. Whether residing in the TMT or in offshore project managers, managerial intercultural capabilities comprise a key resource and are necessary to sustain dynamic capabilities associated with offshoring.

### ***Metacognitive CQ***

Metacognitive CQ refers to a manager's level of conscious cultural awareness during cross-cultural interactions. People with strength in metacognitive CQ consciously question their own cultural assumptions, reflect during interactions, and adjust their cultural knowledge when interacting with those from other cultures. Metacognitive CQ involves higher-level cognitive strategies that allow managers to develop new heuristics and rules for social interaction in novel cultural environments by promoting information processing at a deeper level (Nelson, 1996).

For example, a Western business executive with high metacognitive CQ would be aware, vigilant, and mindful about the appropriate time to speak up during meetings with Asians. Those with high metacognitive CQ would typically observe interactions and the communication style of their Asian counterparts (such as turn-taking), and would think about what constituted appropriate behavior before speaking up.

### ***Cognitive CQ***

Cognitive CQ refers to a manager's knowledge of norms, practices, and conventions in different cultures that has been acquired from educational and personal experiences. Cultural knowledge consists of knowledge of both the objective culture (i.e., the human-made part of the environment; the economic, political, and legal institutions; social customs, arts, language, marriage, and kinship systems; as well as a subjective culture of values and beliefs).

The cognitive factor of CQ is a critical component of CQ, because knowledge of culture influences people's thoughts and behaviors. Understanding a society's culture and the components of culture allows individuals to better appreciate the systems that shape and cause specific patterns of social interaction within a culture. Consequently, those with high cognitive CQ are better able to interact with people from a culturally different society.



### ***Motivational CQ***

Motivational CQ refers to a manager's capability to direct attention and energy toward learning about and functioning in situations characterized by cultural differences. Kanfer and Heggstad (1997, p. 39) argued that such motivational capacities "provide agentic control of affect, cognition and behavior that facilitate goal accomplishment." Those with high motivational CQ direct attention and energy toward cross-cultural situations based on intrinsic interest (Deci & Ryan, 1985) and confidence in cross-cultural effectiveness (Bandura, 2002).

Motivational CQ is a critical component of CQ because it is a source of drive. It triggers effort and energy directed toward functioning in novel cultural settings. For example, a Chinese executive who has a good command of Japanese and likes interacting with those from other cultures would not hesitate to initiate a conversation with a fellow colleague from Japan. In contrast, another Chinese executive who is just learning Japanese or dislikes cross-cultural encounters would be less likely to engage in such a cross-cultural interaction.

### ***Behavioral CQ***

Finally, behavioral CQ refers to a manager's capability in exhibiting appropriate speech acts, that is, verbal and nonverbal actions taken while interacting with people from different cultures. As Hall (1959) emphasized, mental capabilities for cultural understanding and motivation must be complemented by the ability to exhibit appropriate verbal and nonverbal actions based on cultural values of a specific setting. When individuals initiate and maintain face-to-face interactions, they do not have access to each other's latent thoughts, feelings, or motivation. Yet they can rely on what they see and hear in the other person's vocal, facial, and other outward expressions.

In intercultural situations, nonverbal behaviors are especially critical, because they function as a "silent language" and impart meaning in subtle and covert ways (Hall, 1959). Because behavioral expressions are especially salient in cross-cultural encounters, the behavioral component of CQ may be the most critical factor when working closely with partners from another culture.

In summary, the importance of managerial cultural intelligence as a key resource is grounded in the nature of offshoring as a process of managerial interactions. Firms must either select offshoring project managers with international executive potential or develop boundary spanners with the requisite levels of managerial cultural intelligence comprising metacognitive, cognitive, motivational, and behavioral elements. Firms that lack this resource at the managerial level will struggle to deal with issues that arise between managers from different cultural contexts.

### **Competitive Cultural Intelligence**

At the firm level, managerial capabilities embodied in CQ will be insufficient to create sustainable offshoring advantage. If we are to view firms as intelligent, the intelligence cannot exist simply because firms have culturally intelligent managers. In addition to the CQ of the TMT and offshoring project managers, the firm must possess competitive resources. From the perspective of CQ, the resources will be

embodied in the processes and routines that exist in the firm that enable the firm to manage the competitive factors associated with offshoring.

Wernerfelt (1984) posited that firms use their resources to create resource position barriers so that other firms would find it more difficult to catch up, thus establishing competitive advantage. Some examples suggested by Wernerfelt (1984) that can enhance firms' resource position barriers include machine capacity, customer loyalty, production experience, and technological needs. In other words, competitive resources such as operational, marketing, R&D, financial, as well as reputational resources are crucial for contributing to a firm's competitiveness in the marketplace. In addition to the type of resources, Wernerfelt (1984) stressed the importance of the mode of acquisition of those resources. Broadly speaking, one can distinguish between internal generation (e.g., corporate innovation and venturing and corporate diversification) and external acquisition (e.g., acquisitions and alliances). The ability to generate competitive resources through these means helps build a firm's competitiveness.

In this article we are concerned with offshoring performance and, more specifically, the firm intelligence associated with the creation and management of resources necessary to be successful in offshoring. The intelligent company is one that fully understands the type of resources necessary to compete and fully understands the competitive risks associated with strategic decisions. To select an appropriate offshore business partner, the intelligent client company must have the ability to (i) identify the key competitive factors associated with offshoring performance, (ii) assess the cultural and institutional risks associated with each of the factors, and (iii) incorporate the competitive factors into decision processes.

There are a variety of competitive factors associated with offshoring. Offshoring can result in the loss of valuable skills and, possibly, the creation of competitors (Reich & Mankin, 1986; Bettis, Bradley, & Hamel, 1992; Blinder, 2006). Firms must have processes in place to evaluate and manage the competitive risks of offshoring. Firms must also understand the reputational risks of offshoring. Poor performance by the offshoring partner as well as negative reports about the offshoring activities can damage a firm's reputation. To build a strong offshoring relationship, the firm must design appropriate incentives that are consistent with the cultural environment. The firm must also possess the capability to manage the cultural compatibility of the partnership.

To identify additional competitive factors we looked to *Gartner Research*. *Gartner Research* (Marriott, 2007) identified 10 competitive risks factors that firms should use to assess a country's capacity and potential as an offshore services location. Several of these reflect elements of the objective culture, including the economic, legal, and institutional country-level criteria of language, government support, labor pool, cost, subjective cultural value compatibility, and data and intellectual property security and privacy. Assessing and evaluating these criteria in an intelligent manner enhances the probability of success in offshoring ventures and helps mitigate the risks associated with offshoring. In addition, firms that develop the intelligence associated with competitive criteria would create a difficult-to-imitate resource.

In summary, a firm's possession of competitive CQ could be viewed as a meta-capability (Teece, 2007) that transcends technical or operational capabilities.

Firms that have this competitive capability will be able to integrate and combine various knowledge assets within the firm and between the firm and international business partners (Kogut & Zander, 1992; Grant, 1996).

### **Structural Cultural Intelligence**

The third resource associated with a firm's cultural intelligence is structural. Structure refers to the way a firm organizes and develops routines for hierarchical or reporting relationships (Miller & Friesen, 1983). Organizing structure enables a firm to harness and combine resources that reside in various parts of the organization to form capabilities. The structures reflect how firm actions and strategies are formulated and implemented. They are also complicated patterns of social action developed over a certain period of time (Nelson & Winter, 1982). Some firms have horizontal hierarchical structures that enable quick communication and response whereas others prefer vertical hierarchical structure that emphasizes detailed deliberation and control. Some firms are more decentralized in their organizational and control structure whereas some are more centralized.

In addition to a firm's formal structure, its informal structure also represents an important resource, although one that is probably less able to be reconfigured than the formal structure. For many firms, routines and actions are often shaped and determined by social networks and cliques that do not exist officially in a firm (Inkpen & Tsang, 2005). By and large, differences in structures reflect how managers view where firm resources reside within the organization and how they use and combine them to create competitive advantages. Structure also involves how firms manage important interorganizational relationships, such as offshoring projects.

While due attention needs to be paid to organizing within an organization (whether of the customer or supplier firm) to support an offshore venture, more attention must be paid to structuring *the interorganizational interface between the customer and supplier*. Inter-organizational interfaces are natural faultlines that can make or break cross-border business ventures (Xu & Shenkar, 2002; Begley & Boyd, 2003; Griffith & Myers, 2005). Hence, we now focus our attention on the micro-level structuring of the relationship between the customer and supplier in offshoring projects, with special emphasis on designing culturally intelligent governance norms, routines, processes, and business practices to manage potential offshoring performance drift and culture clashes.

There are a number of perspectives proposed in the literature on managing the micro-interorganizational interface in outsourcing and offshoring arrangements (see Dibbern, Goles, Hirschheim, & Jayatilaka, 2004). Some studies focus on the formal legal governance as ways of defining the roles and responsibilities of the contracting parties (e.g., Ang & Beath, 1993). Others advocate a more relational governance because in reality, interorganizational relationships are governed more by relational contracts that are based on trust and flexibility than by legal contractual elements (Macneil, 1980; Willcocks & Kern, 1998). Koh et al. (2004) identified psychological contracting as one such form of relational governance. Psychological contracting refers to the mental beliefs of the mutual expectations and obligations in a contractual relationship (Rousseau, 1995). Mutual obligations are the essence

of any business venture such as an offshoring contract. The supplier agrees to make specific contributions to the customer in return for certain benefits from the customer. Hence, the concept of mutuality highlights the importance of looking at perceived norms and expectations from the perspectives of both parties in a relationship rather than only one perspective.

Psychological contracting emphasizes psychological or perceived (as distinct from legal) obligations. According to Macneil (1980), written contracts are never complete. They need to be supplemented by unwritten promises as embodied in the spirit of the contract or a handshake. Hence, encapsulating any legal contractual agreement associated with offshoring is a set of psychological contracts. Psychological contracting represents a broader concept than the legal contract. The psychological contract encompasses both the explicit terms of the legal contract and the unwritten norms, expectations and perceptions of obligations that drive the behaviors of the offshoring parties.

Koh et al. (2004) conducted an extensive psychological contract study with more than 370 customers and supplier outsourcing managers. They found that outsourcing customers and suppliers each held beliefs of structural norms that are critical for outsourcing success. The customer perceived structural norms from the supplier were accurate project scoping, clear authority structures, taking charge, effective human capital management, effective knowledge transfer, and the building of effective interorganizational teams. Suppliers on the other hand perceived corresponding structural norms from the customer as clear specifications, prompt payment, close project monitoring, dedicated project staffing, knowledge sharing, and project ownership.

These sets of structural norms were identified in the context of outsourcing, where services were provided from another firm in the same country. In the offshoring context, we expect differences in cultures to have direct bearing on the structural conditions in that people from different cultures would value and interpret the same set of structural governance norms differently (Hofstede, 1983; Luo, 2001). Effective offshore projects will depend largely on offshoring parties creating structural governance that accommodates culturally adept norm expectations.

Take the customer obligation to specify clear specifications and its corresponding supplier obligation to scope the offshore project accurately. We know that offshore projects, especially software development projects are highly complex. Software development frequently takes place under conditions of high uncertainty because client requirements can be ambiguous (i.e., vague, incorrect and/or frequently changing) (Whang, 1992). In many cases, software products are innovations and, by their very nature, innovations embody specification uncertainties (Ang & Beath, 1993). Many suppliers do not know what they have been asked to take on at the outset of software development projects, since clients often only know what they want when they actually see the completed product.

The uncertainties inherent in software development are further exacerbated when these activities are offshored to locations that vary in their societal norms for uncertainty avoidance. Uncertainty avoidance refers to the level of stress that is experienced by a society in the face of an unknown future (Hofstede, 1980). Germans with their reputation for precision and engineering prowess, for example,

are stereotyped to be very high in uncertainty avoidance, whereas Indians are stereotyped to thrive on uncertainty.

Societies with high uncertainty avoidance prefer work that is highly structured and has detailed standard operating procedures spelled out (Ang, Van Dyne, & Begley, 2003). On the other hand, societies with lower uncertainty avoidance prefer to leave specifications more open-ended to allow for greater latitude for exploratory innovation. Notwithstanding the uncertainty properties inherent in software products, we expect cultural conflicts to emerge if offshoring parties differ fundamentally in their orientation toward uncertainty avoidance.

We also expect culture to influence the remaining sets of supplier and customer norms. For example, the customer obligations to effect prompt payment and ensure close project monitoring and the corresponding supplier obligations to take charge and define clear authority structures for the offshore project. Different societies place varying weight on performance. While “doing” cultures emphasize achievement, “being” cultures emphasize quality of life and well-being. The “doing-being” dichotomy pits task accomplishment against social relationship. The U.S. work culture tends to be highly task-focused. U.S. firms would encounter greater resistance on highly task-focused, performance-based supplier obligations from societies that do not ascribe to the American-based expectations.

Mutual knowledge sharing between the customer and supplier represents another critical structural norm in offshoring. Inkpen and Crossan (1995), for example, emphasized the importance of international business partners as local knowledge providers of information related to domestic markets and environments, sources of raw materials, and contacts with local government agencies and labor unions. Customers expect suppliers to share best industry practices and transfer know-how of the product or services to them so that the customers could better exploit the product or services for competitive advantage. Suppliers, on the other hand, expect customers to provide the necessary information and business know-how to them so that they can customize products and services that meet customer’s business needs.

We know from research in knowledge sharing that intercorporate knowledge flows are complex and difficult. Knowledge sharing is further complicated by culture in cross-border knowledge flows. Farh, Earley, and Lin (1997) found that a unique dimension of organizational citizenship held by Chinese employees is the need to protect company resources. Hence, we would expect Chinese employees to be more reticent in sharing company business practices than employees from other cultures. Li and Scullion (2006) further identified three types of cultural distances that could block cross-border knowledge flows: (i) physical distance—the differences in geographical isolation, time zone differences, and differences in the sophistication of telecommunication infrastructure, scope of knowledge sources, and scale of the partner’s business; (ii) institutional distance—differences in the maturity of the legal framework for contract law, property rights law, company law, and arbitration procedures to ensure greater legal transparency; and (iii) cultural value distance—differences in cognition, as well as in communication patterns. For example, Chinese tend toward more holistic and relational thinking that may not be aligned with the logic-rational decision-making paradigm of the West (Nisbett, 2003). High context cultures in many Asian societies also differ in

their communication patterns from low context cultures. While low context cultures focus on direct and explicit forms of communication, where words are the dominant means of knowledge exchange, high context cultures focus more on communicating with the “context”—where attention is paid not only to the message but also the feelings and thoughts of the messenger and the recipient (Hall, 1959).

The next pair of structural norms relates to human capital management. Because of institutional differences governing labor, we assume each party in the offshoring relationship to manage its own human resources according to human resource policies, practices, incentives, and reward systems compatible with the local cultural and institutional values of their employees. The complexity arises with transplants (Ho, Ang, & Straub, 2003). Transplants refer to employees from customer organization in one country that supplier organization from another country “buys” over in offshoring deals. The most recent case is the much publicized Nielsen-Tata Consulting Service \$1.2 billion offshoring mega-deal where several hundred Nielsen employees were “rebadged” as TCS full-time employees (Karamouzis & Huntley, 2007).

Managing transplants are tricky because conflict concerning roles and responsibilities, rewards and incentive systems can (and do) arise between the “rebadged” employees and their new offshore, employing organization (Ho et al., 2003). Fundamentally, the philosophy of the man at work is different under the Chinese system and the Western system of management. In the former, man is seen as an adaptive, family-oriented, socially responsible being. Rewards based on social approval, family honor, and face are likely to be more effective than instituting calculative, individual-driven incentives. In the latter Western system, the man at work is a rational/economic being with a focus on maximizing monetary rewards and efficiency (Whitley, 1990). Hence, employment relationships are structured more relationally in Asia than in the West (Ng & Ang, 2004). Asian employees place significantly greater emphasis on harmonious relationships, collective welfare, and cooperation, while Western societies focus more on material rewards and individual recognition.

The final pair of structural norms relates to interorganizational teamwork and project ownership. As with other structural norms, the meaning of teamwork and project ownership varies across cultures. For example, a recent study of supply chain relationships between U.S. firms and their, primarily, Japanese and U.S. partners shows that U.S. partners, being more task-oriented, place more value on performance efficiency and less value on team cohesion and solidarity (Griffith & Myers, 2005). In another study of Sino-European joint ventures, Lang (1998) found that Chinese tended to shy away from project ownership and responsibility, preferring to solve problems by escalating them to superiors than to resolving the problems at the peer level.

Cultural influences on structural norms reveal how vulnerable interorganizational *interfaces between* the customer and supplier are to cultural faultlines. To be culturally intelligent, offshoring partners should evaluate how their specifications, payment, project monitoring, knowledge sharing, human capital management, and teamwork differ from each other. At the very least, to avoid any cultural chasms and fallout, we expect offshoring parties to act in due diligence and structure culturally informed norms and expectations for the interorganizational interface.

## DISCUSSION AND CONCLUSION

In this article, we argued for the importance of firm-level cultural intelligence in the context of international business ventures such as offshoring. Offshoring arrangements now involve multiple locations worldwide. We expect that only culturally intelligent firms (i.e., those that have invested in developing the requisite intercultural capabilities) would be able to leverage effectively from international business ventures such as offshoring. Drawing on Earley and Ang's (2003) micro-level conceptualization of cultural intelligence and the resource based view of the firm, we developed a framework of firm-level cultural intelligence. In the framework, we focused on three dimensions of intercultural capabilities of the firm: managerial, competitive and structural.

In the managerial intercultural capabilities, we described the four-factor model of individual level cultural intelligence. We emphasize the importance of the cultural intelligence of top management teams as well as those of the project managers directly responsible for offshoring ventures. In the competitive dimension of firm-level cultural intelligence, we highlight competitive risks associated with offshoring projects. We discuss the capability of the firm to identify, calibrate, and manage these risks. Finally, in the structural dimension of firm-level cultural intelligence, we stress the importance of developing culturally intelligent structural norms. The structural norms govern the interorganizational interface and take into consideration potential cultural faultlines that could occur at the interface.

The conceptual framework in this article has a number of important research implications. First, with its emphasis on firm-level capabilities, the framework should help researchers conceptualize and study cultural intelligence beyond its current micro-level focus. Second, we encourage empirical research on firm-level cultural intelligence. The Appendix proposes items to operationalize each of the three dimensions of firm-level cultural intelligence. The managerial intercultural capabilities are adapted from Ang and Van Dyne (2009) while the other two dimensions were developed for this article. Each dimension has nine items. While somewhat speculative, the measures taken together could be used to spearhead empirical studies of firm-level cultural intelligence in the context of offshoring or other international business ventures. Third, future research is needed to theorize specific propositions to relate firm-level cultural intelligence in its nomological network. Specifically, future research could theorize and examine firm-level cultural intelligence on meaningful performance outcomes such as financial, nonfinancial performance, and product/service quality.

Future research could also theorize and investigate antecedents and moderating influences of project characteristics, firm characteristics, cultural distances, environmental turbulence, and other situational factors on the relationship between firm-level cultural intelligence and performance outcomes. Archival and primary data from field studies of international business ventures, in particular those that trace the ventures longitudinally, should be useful for testing relationships and assessing the causal directions implied in the nomological network.

The ideas introduced in this article also have important implications for practice. The framework on firm-level cultural intelligence should raise awareness in companies and help them better understand that to build a culturally intelligent organization, it goes beyond recruiting and training culturally intelligent

executives. Rather, the firm has to invest in creating competitive and structural capabilities that take into consideration potential cultural faultlines. As we have argued, these capabilities can be the core for a difficult-to-imitate resource that enhances the probability for success in offshoring.

From a practical perspective, the framework and its associated measures also provide a form of an intercultural balance scorecard for organizations venturing overseas. A firm could conduct an internal audit of the level of cultural intelligence of (i) its top management team, (ii) the projects managers responsible for specific international business ventures, (iii) its competitive capabilities, and (iv) its structural norms associated with managing the interorganizational interface.

To a field that is largely culture blind and culture bound (Triandis, 1994), we conclude by stressing that cultural intelligence as a firm-level capability is a strategic imperative for businesses in light of globalization and the strategic necessity in sourcing for products and services from firms internationally. We propose that firm-level cultural intelligence is complex and multidimensional. We encourage future research to pay special attention to culture and its many ramifications in business and organizational life. [Received: May 2008. Accepted: May 2008.]

## REFERENCES

- Ang, S., & Beath, C. (1993). Hierarchical elements in software contracts. *Journal of Organizational Computing*, 3(3), 329–361.
- Ang, S., & Straub, D. W. (1998). Production and transaction economies and IS outsourcing: A study of the U.S. banking industry. *MIS Quarterly*, 22(4), 535–552.
- Ang, S., & Van Dyne, L. (2009). *Handbook on cultural intelligence: Theory, measurement, and applications*. New York: ME Sharpe.
- Ang, S., Van Dyne, L., & Begley, T. (2003). The employment relationships of foreign workers versus local employees: A field study. *Journal of Organizational Behavior*, 24(5), 561–583.
- Ang, S., Van Dyne, L., Koh, C., Ng, K. Y., Templer, K. J., Tay, C., & Chandrasekar, N. A. (2007). The measurement of cultural intelligence: Its predictive validity on cultural judgment and decision making, cultural adaptation and job performance. *Management and Organization Review*, 3(3), 335–371.
- Bandura, A. (2002). Social cognitive theory in cultural context. *Applied Psychology: An International Review*, 51(2), 269–290.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Barney, J. B. (2001). *Gaining and sustaining competitive advantage* (2nd ed.). Upper Saddle River, NJ: Prentice Hall.
- Begley, T. M., & Boyd, D. P. (2003). *Organizational Dynamics*, 32(4), 357–371.
- Bettis, R. A., Bradley, S. P., & Hamel, G. (1992). Outsourcing and industrial decline. *Academy of Management Executive*, 6(1), 7–22.
- Blinder, A. S. (2006). Offshoring: The next industrial revolution? *Foreign Affairs*, 85(2), 113–128.



- Carpenter, M. A., Sanders, W. G., & Gregersen, H. B. (2001). Bundling human capital with organizational context: The impact of international assignment experience on multinational firm performance and CEO pay. *Academy of Management Journal*, 44(3), 493–511.
- Cherry, S., & Robillard, P. N. (2004). Communication problems in global software development: Spotlight on a new field of investigation. In ISCE (Ed.). *Proceedings of the International Workshop on Global Software Development, International Conference on Software Engineering*. Edinburgh, Scotland, 48–52.
- Dibbern, J., Goles, T., Hirschheim, R., & Jayatilaka, B. (2004). Information systems outsourcing: A survey and analysis of the literature. *The DATA BASE for Advances in Information Systems*, 35(4), 6–102.
- Dierickx, I., & Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science*, 35(12), 1504–1511.
- Earley, P. C., & Ang, S. (2003). *Cultural intelligence: Individual interactions across cultures*. Palo Alto, CA: Stanford University Press.
- Farh, J. L., Earley, P. C., & Lin, S. (1997). Impetus for action: A cultural analysis of justice and organizational citizenship behavior in Chinese society. *Administrative Science Quarterly*, 42(3), 421–444.
- Gelfand, M. J., Nishii, L. H., & Raver, J. L. (2006). On the nature and importance of cultural tightness-looseness. *Journal of Applied Psychology*, 91(6), 1225–1244.
- Grant R. M. (1996). Prospering in dynamically competitive environments. *Organizational Science*, 7(4), 375–387.
- Griffith, D. A., & Myers, M. B. (2005). The performance implications of strategic fit of relational norm governance strategies in global supply chain relationships. *Journal of International Business Studies*, 36(3), 254–269.
- Hall, E. T. (1959). *The silent language*. New York: Doubleday.
- Hambrick, D. C., & D'Aveni, R. A. (1992). Top team deterioration as part of the downward spiral of large corporate bankruptcies. *Management Science*, 38(10), 1445–1466.
- Hambrick, D., & Mason, P. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9(2), 193–206.
- Harrison, A. E., & McMillan, M. S. (2006). Dispelling some myths about offshoring. *Academy of Management Perspectives*, 20(4), 6–22.
- Helfat, C. E. (1997). Know-how and asset complementarity and dynamic capability accumulation: The case of R&D. *Strategic Management Journal*, 18(5), 339–360.
- Herrmann, E., Call, J., Hernandez-Lloreda, M. V., Hare, B., & Tomasello, M. (2007). Humans have evolved specialized skills of social cognition: The cultural intelligence hypothesis. *Science*, 317(5843), 1360–1366.
- Ho, V., Ang, S., & Straub, D. W. (2003). When subordinates become IT contractors: Persistent managerial expectations in IT outsourcing. *Information Systems Research*, 14(1), 66–86.

- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.
- Hofstede, G. (1983). The cultural relativity of organizational practices and theories. *Journal of International Business Studies*, 14(2), 75–89.
- Huber, G. (1990). A theory of the effects of advanced information technologies on organizational design, intelligence, and decision-making. *Academy of Management Review*, 15(1), 47–71.
- Huff, A. S. (1990). *Mapping strategic thought*. Chichester, UK: Wiley.
- Inkpen, A. C., & Crossan, M. M. (1995). Believing is seeing: Joint venture and organization learning. *Journal of Management Studies*, 32(5), 595–618.
- Inkpen, A. C., & Tsang, E. W. K. (2005). Social capital, networks, and knowledge transfer. *Academy of Management Review*, 30(1), 146–165.
- Kanfer, R., and Heggstad, E. D., (1997). Motivational traits and skills: A person-centered approach to work motivation. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior vol. 19*. Greenwich, CT: JAI Press, 1–56.
- Karamouzis, F., & Huntley, H. (2007). Nielsen-TCS \$1.2 billion outsourcing megadeal marks milestone for offshore pure-play providers. G0015855, Gartner Group.
- Kearney, A. T. (2007). Offshoring for long-term advantage. Accessed April 29, 2008. [available at [http://www.atkearney.com/Shared\\_Res/Pdf/GSLI\\_2007.Pdf](http://www.atkearney.com/Shared_Res/Pdf/GSLI_2007.Pdf)]
- Kern, T., & Willcocks, L. P. (2000). Exploring information technology outsourcing relationships: Theory and practice. *Journal of Strategic Information Systems*, 9(4), 321–350.
- Kiesler, S., & Sproull, L. (1982). Managerial response to changing environments: Perspectives on problem sensing from social cognition. *Administrative Science Quarterly*, 27(4), 548–570.
- Kogut, B., & Zander, U. (1992). Knowledge of the firm, combinative capabilities, and the replication of technology. *Organizational Science*, 3(3), 383–397.
- Koh, C., Ang, S., & Straub, D. W. (2004). IT outsourcing success: A psychological contract perspective. *Information System Research*, 15(4), 356–373.
- Lang, N. S. (1998). *International management in China: Strategies for Sino-European and Sino-Japanese joint ventures*. Wiesbaden, Germany: Deutscher Universitäts Verlag.
- Leidner, D. E., & Elam, J. J. (1995). The impact of executive information systems on organizational design, intelligence, and decision-making. *Organization Science*, 6(6), 645–664.
- Leung, K., & Ang, S. (2008). Culture, organizations and institutions: An integrative review. In R. S. Bhagat & R. M. Steers (Eds.). *Cambridge handbook of culture, organizations, and work*. New York: Cambridge University Press.
- Levina, N., & Vaast, E. (2008). Innovating or doing as told? Status differences and overlapping boundaries in offshore collaboration. *MIS Quarterly*, 32, 307–332.

- Li, S., & Scullion, H. (2006). Bridging the distance: Managing cross-border knowledge holders. *Asia Pacific Journal of Management*, 23(1), 71–92.
- Luo, Y. (2001). Antecedents and consequences of personal attachment in cross-cultural cooperative ventures. *Administrative Science Quarterly*, 46(2), 177–201.
- Macneil, I. R. (1980). *The new social contract: An inquiry into modern contractual relations*. New Haven, CT: Yale University Press.
- Marriott, I. (2007). Gartner's 30 Leading Locations for Offshore Services. G00153754, Gartner Group.
- Marriott, I., & Matlus, R. T. (2007). Gartner on outsourcing 2007–2008: The growing use of global delivery. G00152934, Gartner Group.
- Marriott, I., Young, A., Huntley, H., & Matlus, R. T. (2007). Predicts 2008: Global sourcing heading to the next stage of maturity. G00153046, Gartner Group.
- Mayer, J. D., & Salovey, P. (1993) The intelligence of emotional intelligence. *Intelligence*, 17(4), 433–442.
- Miller, D. (1991). Stale in the saddle: CEO tenure and the match between organization and environment. *Management Science*, 37(1), 34–52.
- Miller, D., & Friesen, P. H. (1983). Strategy-making and environment: The third link. *Strategic Management Journal*, 4(3), 221–235.
- NASSCOM-McKinsey. (2005). The National Association of Software and Service Companies (NASSCOM)-McKinsey report 2005: Extending India's leadership of the global IT and BPO industries, national association of software and service companies and McKinsey & company, New Delhi. Accessed April 29, 2008 [available at <http://www.McKinsey.com/Locations/India/Mckinseyonindia/>].
- Nelson, R. R., & Winter, S. G. (1982). *An evolutionary theory of economic change*. Cambridge, MA: Belknap Press of Harvard University Press.
- Nelson, T. O. (1996). Consciousness and meta-cognition. *American Psychologist*, 51(2), 102–116.
- NeoIT. (2005). Research summary: Mapping offshore markets update 2005. Offshore insights market report series. Accessed April 29, 2008. [available at [http://www.neoit.com/Pdfs/Whitepapers/Oiv3i08\\_0905\\_Mapping-Offshore-Markets.pdf](http://www.neoit.com/Pdfs/Whitepapers/Oiv3i08_0905_Mapping-Offshore-Markets.pdf)].
- Ng, K. Y., & Ang, S. (2004). Human resource management in Asia: Understanding variations in human resource practices using a resource exchange perspective. In K. Leung (Ed.), *Handbook of Asian management*. Boston: Kluwer Publishers, 475–506.
- Nisbett, R. (2003). *Geography of thought: How Asians and westerners think differently . . . and why*. New York: Free Press.
- Reed, R., & DeFillipi, R. J. (1990). Causal ambiguity, barriers to imitation, and sustainable competitive advantage. *Academy of Management Review*, 15(1), 88–102.
- Reich, R. B., & Mankin, E. D. (1986). Joint ventures with Japan give away our future. *Harvard Business Review*, 64(2), 78–86.

- Rousseau, D. M. (1995). *Psychological contracts in organizations: Understanding written and unwritten agreements*. Thousand Oaks, CA: Sage.
- Sternberg, R. J., & Detterman, D. K. (1986). *What is intelligence? Contemporary viewpoints on its nature and definition*. Norwood, NJ: Ablex.
- Sternberg, R. J., Forsythe, G. B., Hedlund, J., Horvath, J. A., Wagner, R. K., Williams, W. M., et al. (2000). *Practical intelligence in everyday life*. New York: Cambridge University Press.
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and micro-foundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350.
- Thorndike, R. L., & Stein, S. (1937). An evaluation of the attempts to measure social intelligence. *Psychological Bulletin*, 34(5), 275–285.
- Triandis, H. C. (1972). *Analysis of subjective culture*. New York: Wiley.
- Triandis, H. C. (1994). *Culture and social behavior*. New York: McGrawHill.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180.
- Whang, S. (1992). Contracting for software development. *Management Science*, 38(3), 307–324.
- Whitley, R. D. (1990). Eastern Asian enterprise structures and the comparative analysis of forms of business organization. *Organization Studies*, 11(1), 47–74.
- Willcocks, L. P., & Kern, T. (1998). IT outsourcing as strategic partnering: The case of the U. K. Inland Revenue. *European Journal of Information Systems*, 7(1), 19–45.
- Xu, D., & Shenkar, O. (2002). Institutional distance and the multinational enterprise. *Academy of Management Review*, 27(4), 608–618.

## APPENDIX: ITEMS TO MEASURE

### FIRM-LEVEL CULTURAL INTELLIGENCE

#### Managerial Cultural Intelligence (adapted from the mini-9 item CQ scale, [Ang & Van Dyne, 2009])

1. Top Management Team members (TMT)/project managers are confident they can work with business partners from different cultures.
2. TMT/project managers are confident in dealing with the stresses of working with business partners from cultures that are new to them.
3. TMT/project managers know the cultural values and religious beliefs of other cultures.
4. TMT/project managers know the legal and economic systems of other cultures.
5. TMT/project managers know languages of other cultures.

6. TMT/project managers are aware of cultural differences when interacting with business partners from different cultural backgrounds.
7. TMT/project managers check the accuracy of their cultural knowledge when interacting with business partners from different cultural backgrounds.
8. TMT/project managers modify their verbal behavior (words, tone, style) when a cross-cultural interaction requires it.
9. TMT/project managers modify their nonverbal behavior (gestures, time, and space orientation) when a cross-cultural interaction requires it.

### **Competitive Cultural Intelligence**

1. Our firm values its public reputation as a good international business partner.
2. Our firm has the reputation of offering attractive culturally appropriate incentives to international business partners.
3. Our firm has a process in place to evaluate the competitive risks of offshoring.
4. Our firm has the capability to assess the cultural compatibility of international business partners.
5. Our firm understands that in selecting an offshoring partner, factors such as language, government support, cost, and data and IP security and privacy must be evaluated (note: each factor would have a separate measurement item).
6. Our firm has a process in place to evaluate the proposed financial performance of offshoring projects.
7. Our firm has a process in place to evaluate the actual financial performance of offshoring projects.
8. Our firm has a process in place to evaluate the nonfinancial performance of offshoring.
9. Our firm has legal mechanisms in place to manage risks associated with proprietary firm knowledge.
10. Our firm has a system in place to exit from offshoring contracts with minimal business disruptions.

### **Structural Cultural Intelligence**

1. Our firm understands the expectations we have of our international business partners.
2. Our firm understands the expectations our international business partners have of us.
3. Our firm knows how our international business partners' expectations differ from our own.
4. Our firm knows how to resolve cultural differences in expectations with our international business partners.

5. Our firm knows how to develop mutual expectations that are culturally agreeable with our international business partners.
6. Our firm is confident in building culturally appropriate plans that ensure smooth transitions and limited disruption when activities are moved to offshore partners.
7. Our firm knows how to develop culturally appropriate norms and standard operating procedures with our international business partners.
8. Our firm knows how to design culturally appropriate governance mechanisms to ensure high offshoring performance.
9. Our firm knows how to develop knowledge sharing strategies with our international business partners.

**Soon Ang** is Goh Tjoei Kok Chaired Professor in Management and IT at the Nanyang Business School, Nanyang Technological University, Singapore. She received her PhD from the University of Minnesota and specializes in three distinct areas: outsourcing, cultural intelligence, and global leadership. Her papers have appeared in *Information Systems Research*, *Management Science*, *MIS Quarterly*, *Organization Science*, *Academy of Management Journal*, *Communications of the ACM*, *Social Forces*, *Journal of Applied Psychology*, *Human Resource Management*, and *Journal of Organizational Behavior*, among others. She has won numerous best paper awards at HICSS, SIGMIS, and the Academy of Management. She is senior editor of *Information Systems Research*, associate editor of *Management Sciences* and *Decision Sciences*, consulting editor of *Management & Organization Research*, and is on the editorial boards of *Organization Sciences*, *Journal of Organizational Behavior*, and others. She pioneered and coauthored two books on cultural intelligence published by Stanford University Press and is currently editing the *Handbook on Cultural Intelligence* (New York: ME Sharpe). She was recently accorded the prestigious Distinguished International Alumni Award by the University of Minnesota for her distinguished academic leadership and scholarship record.

**Andrew Inkpen** is J. Kenneth and Jeanette Seward Chair in Global Strategy, Thunderbird School of Global Management. He obtained his PhD from the Ivey School, University of Western Ontario. His research interests include strategic alliances and joint ventures, mergers and acquisitions, organizational learning, the management of and transfer of knowledge in multinational corporations, and interorganizational trust. His research has been published in various journals, including *Academy of Management Review*, *California Management Review*, *Organization Science*, *Strategic Management Journal*, *Journal of International Business Studies*, *Journal of Management Studies*, and *Management International Review*. He is coauthor of *Global Strategy: Creating and Sustaining Advantage Across Borders* (New York: Oxford University Press, 2006). He serves on the editorial review boards for several journals, including *Academy of Management Journal*, *Strategic Management Journal*, *Organization Science*, *Journal of Management Studies*, *Journal of International Business Studies*, and *Organization Studies*.