Crossing cultural boundaries: knowledge sharing in intercultural business networks

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ABSTRACT

Strategic business nets are increasingly important in producing economic value in the global arena. This paper examines the influence of national culture on knowledge sharing in different types of intercultural business nets. Knowledge sharing is essential for the functioning of any business network as it influences the interaction between the actors and the outcomes they can achieve. Cultural factors have for long been known to influence the communication and success potential of strategic alliances. Similarly, culture is seen to shape how actors behave in business relationships and networks involving people from several national cultures.

Our basic assumption is that the nature of the cultures involved in the network and the type of network both influence the knowledge sharing barriers. This issue is studied through two conceptual frameworks. First, a framework identifying different types of strategic nets and the requirements they impose for knowledge sharing is proposed. Then a classification scheme of culture, based on the individualism-collectivism and the vertical-horizontal dimensions, is derived. The strategic-net and cultural types are then combined in an intercultural business-net framework, and the opportunities and barriers of knowledge sharing are analysed by using examples representing Asian-European and Asian-North America

INTRODUCTION

Strategic, purposefully developed business nets are becoming increasingly important in competing and producing economic value in the global arena. This conceptual paper examines the influence of culture on knowledge sharing in different types of intercultural strategic business nets. Why focus on knowledge sharing? We contend that it is essential for the functioning of any business network as it influences the interaction between the network actors and the outcomes they are able to achieve. Without the capacity for sharing knowledge, no business network can utilize the specialized resources and capabilities of its members, nor can it co-produce new knowledge. Thus, knowledge sharing is a critical factor in terms of its relative competitiveness (Almeida et al., 1998, Bhagat et al., 2002, Håkansson 1993, Larsson et al., 1998).

In order to articulate knowledge sharing we need a basic conceptualisation of the concept of knowledge. Most scholars, as Dyer and Nobeoka (2000) note, divide knowledge into explicit/codifiable knowledge or information, and tacit knowledge or know-how (Grant 1996, Kogut and Zander 1997, Nonaka 1994, Polanyi 1966). Information is seen as easily codifiable knowledge that can be shared between actors, presuming that the "syntactical rules required for deciphering it are known" (Kogut and Zander 1997, 386). By comparison, know-how involves knowledge that is tacit, 'sticky', and difficult to codify and transfer (Nelson and Winter 1982). A more fundamental question is whether knowledge and knowledge work are viewed primarily from a functionalist and rather unproblematic perspective, or whether one recognizes the inherent ambiguity and rhetorical character, as emphasized by Alvesson (Alvesson 2001). In our approach, both of these views are considered relevant.

Knowledge sharing thus refers to sharing not only codified information, but also beliefs, images, experiences and contextualised practices (Ambrosini and Bowman 2001, Davenport and Pruzak 1998). Inter-organisational interaction research shows that this is essential for creating mutual knowledge and expectations between network actors. It is only through knowledge sharing that a base of jointly held knowledge, necessary for mutual understanding, can be created and maintained (Anderson and Narus 1990, Araujo 1998, Ford, Håkansson, and Johansson 1986, Håkansson 1993, Larsson et al., 1998, Nonaka and Takeutschi 1995, Ring and Van de Ven 1994). This jointly-held knowledge base is vital for the evolution of mutual trust between the network actors, and there is strong evidence that trust is a necessary condition for any deeper inter-firm cooperation (Dyer and Nobeoka 2000, Halinen 1994, Morgan and Hunt 1994).

Cultural factors have for long been known to influence the communication and success potential of strategic alliances (Brouthers et al., 1995, Contractor and Lorange 1988, Doz and Hamel 1998). Similarly, culture is seen to shape how actors behave in cross-cultural business relationships and networks involving people from several ethnic or national cultures (Almeida et al., 1998, Bhagat et al., 2002, DeLong and Fahey 2000, Hamel 1991). Culture, however, is a very complex and "nested" phenomenon (Swindler 1986). For example, there are cultural layers such as the national culture, the organizational or business culture, and the professional culture, all of which jointly affect an

individual's behaviour in a specific context (Kale 1996, Törnroos and Möller 1993, Usunier 1996).

In order to keep our discussion manageable, we will focus on the role of the national culture. In brief, our objective is to examine the influence of the national culture on the knowledge sharing in different types of intercultural strategic networks. Our basic assumption is that the nature of the cultures involved in the network and the type of network both influence the barriers faced in knowledge sharing. We will use cross-cultural international business examples from extant studies to illustrate our conceptual analysis, and will pay special attention to cases representing different Asian-European and Asian-North American business relationships and networks.

The paper comprises four sections. In the next section, we will introduce a conceptual framework for different types of strategic nets and discuss the requirements they impose for knowledge sharing. The third section first discusses the characteristics of culture, and then proposes a classification scheme based on the individualism-collectivism and the vertical-horizontal dimensions. The strategic-net and cultural types are then combined in an intercultural business-net framework, and the opportunities and barriers of knowledge sharing are then analysed. A discussion on the theoretical and managerial implications concludes the paper.

TYPES OF STRATEGIC NETS AND THEIR KNOWLEDGE REQUIREMENTS

Network forms of organizing economic activities have rapidly increased in number since 1990. Globalisation, increased technological complexity and the reduction of inter-organisational transaction costs through the use of the internet are some of the factors behind this development (Ford et al., 2002, Möller and Halinen 1999). The focus in this study is on intentionally formed networks that contain at least three parties, which we call strategic or business nets. These nets come in many forms and with many purposes; the literature and business press, for example, mention supplier nets, distribution nets, technology development or R&D nets, and competitive and technology coalitions, for example.

Our basic assumption is that different strategic nets pose diverse requirements and challenges for knowledge sharing and creation. In order to develop this notion we need a

systematic description of their characteristics. Essential to any strategic net is the underlying system through which it produces value.

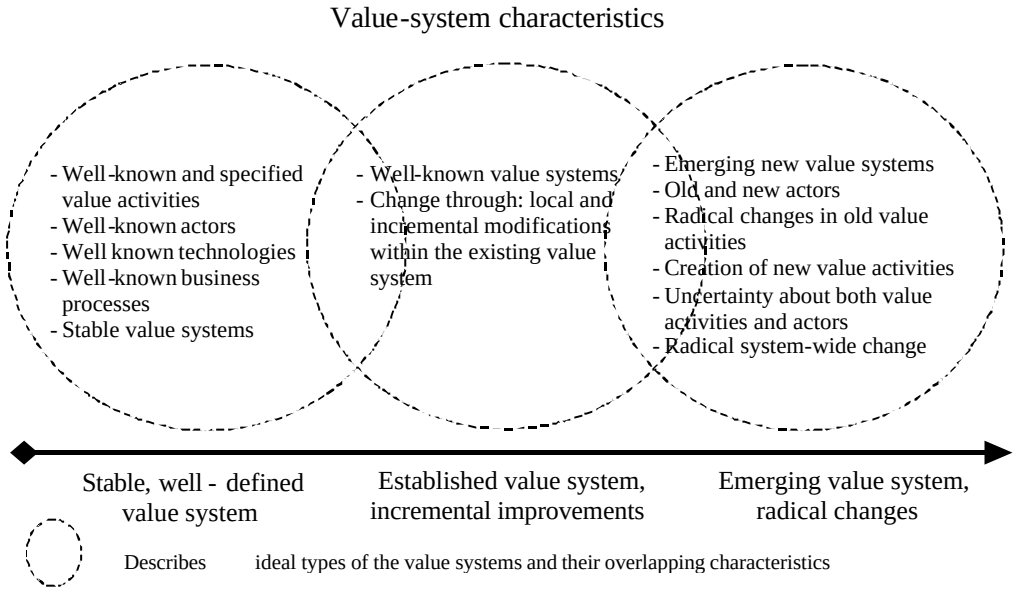
The value-system construct is based on the notion that each product/service requires a set of value activities performed by a number of actors forming a value-creating system, using Parolini's term (1999, p. 59-68). Value creation is fundamentally based on the knowledge the actors have about resources and value activities, and on how they combine this knowledge in order to create new knowledge (Håkanson 1993). The value system is not a new concept, and has been given different shades of meaning by authors such as Håkansson and Snehota (1995), Normann and Ramirez (1993), Parolini (1999), Porter (1985) and Richardson (1972).

We adopt the value-system concept for describing the characteristics of business nets, and contend that the level of determination of the value system greatly influences knowledge sharing in the net. By determination we mean how well known the value activities of the net and the capabilities of the actors to carry them out are, and to what extent these value activities can be explicitly specified. The value creation is illustrated using a value system continuum (Figure 1) that presents three ideal types of system. This continuum is then used for examining the knowledge and learning characteristics of different types of strategic nets.

The left end of the continuum describes clearly specified and relatively stable value systems. The actors producing and delivering specific products, and their value activities and capabilities, are basically known. The multi-tiered supply nets in the automobile industry are based on this kind of value system (Dyer, 1996). Toyota, Dell, IKEA and Nike illustrate well-specified supplier or distribution solutions based on strategic nets that, we suggest, generally pursue efficiency gains in terms of production/logistics and time compression, rapid growth opportunity, and access to a wider customer base. In terms of knowledge, the capability to exploit current actor competencies through effective knowledge transformation and sharing is considered essential (Dyer and Nobeoka 2000, Levinthal and March 1993, March 1991).

The right end of the continuum describes emerging value systems aimed at developing new technologies, business concepts or products. These future-oriented systems may require radical changes in the existing value systems and in the creation of new value activities. This is the landscape that Eisenhardt and Martin (2000) describe as "high ve-

locity markets". For example, Internet portals and emerging mobile services are generally created through strategic nets involving a telecom operator, several "middleware-type" software producers, and content/services producers. Emerging value systems involve complex collaborative learning processes (e.g., the Bluetooth coalition). Uncertainty and tacitness related to value activities and to actors and their capabilities are inherent features. Nets creating emerging value systems pursue technology and business solutions that are pronouncedly more effective than the existing ones.



Note: Large corporations are hubs and participants in all kinds of nets

Figure 1. The value - system continuum

Source: Möller, Rajala, Svahn 2002)

From the perspective of knowledge sharing, the challenges faced by the actors in strategic nets trying to create emerging value systems are pronouncedly different from those faced by actors in stable and well-specified nets pursuing operational efficiency. Sense making of the emerging opportunities (Weick 1995), influencing images and setting agendas through rhetoric (Alvesson 2001), and co-creating knowledge through exploration (March 1991), dominate the transfer of existing explicit knowledge.

The middle of the continuum describes value systems that are relatively well determined, but that are being modified through incremental and local change processes. Most multi-actor R&D nets, as well as business-process modifications, exemplify these kinds of changes. From the knowledge perspective, local development nets require a balanced position between knowledge exploitation and exploration. The capability to

bridge different communities of practice – experts in various technologies, software developers, business managers – is essential in creating new specialized knowledge (Araujo 1998, Dyer and Nobeoka 2000, Tuomi 1999).

It should be noted that the value system continuum is an abstract and static theoretical construct. In reality, we will never find ideal value systems. In the same vein, many strategic nets, i.e. their value systems, "stretch" across at least two ideal types. Nets may be interrelated through actors having roles in several; and most large corporations have roles in multiple nets across the continuum. Finally, the "content" of the continuum, the strategic nets and their underlying value systems, is in constant evolution. Once nets creating innovative services such as e- and m-banking are specified, they "move" towards the left end of the continuum.

On the basis of this discussion, we suggest that the issues faced in knowledge sharing and creation in strategic nets are profoundly influenced by the underlying value systems. In other words, the challenges of "knowledge management" are remarkably different across the continuum.

THE INFLUENCE OF CULTURE ON KNOWLEDGE SHARING IN MULTI-CULTURAL STRATEGIC NETS

Next we will evaluate the role of culture in sharing knowledge in the identified types of strategic business nets. The relevance of culture in understanding managerial behaviour in cross-cultural contexts lies in its shaping force: culture shapes our repertoire of habits and styles, and informs us how to behave in certain situations (Argyris 1976, Geertz 1973, Swidler 1986). There are, however, many approaches to culture. Schein (1996), in his well-known treatise, describes it in terms of three dimensions, artifacts, values and basic assumptions. Joynt and Warner (1996) have a broader view: they regard human nature, relations to nature, activity orientation, human relationships, relations to time, and space orientation as dimensions of culture. Mead (1948) shares this perspective, and specifies language, nationality, education, profession, group, religion, family, sex, social class and organizational culture. As these definitions show, the concept is extremely broad, making the analysis of cultural influence difficult (Deshpande and Webster 1989, Geertz 1973, Holden 2002, Swidler 1986). In order to reduce this com-

plexity we will focus on studies that have primarily investigated the influence of culture on organizational behaviour and management, especially cross-cultural communication.

Dimensions of Culture: Individualist and Collectivist Cultures

Hofstede (1980, 1991, 2001, Hofstede and Bond 1988) has identified five cultural dimensions in his seminal cross-national studies: Power distance, Individualism (Collectivism), Masculinity (Femininity), Uncertainty Avoidance, and for Chinese cultures Confucian Dynamism, sometimes encapsulated as long- versus short-term orientation. Several scholars, as Bhagat et al. (2002, 208) note, regard the individualism-collectivism dimension of cultural variation as the major distinguishing characteristic in the way that different societies analyse social behaviour and process information. Triandis and his colleagues have defined individualism as a cultural pattern consisting of loosely linked individuals who view themselves as independent with their own preferences, needs, rights and contracts; whereas collectivism refers to a cultural pattern that consists of closely-linked individuals who see themselves as belonging to one or more collectives – e.g., family, organizations – and who are motivated by the norms, duties and obligations thus imposed (Bhagat et al., 2002, 208, Triandis 1994, 1995, 1998). On the basis of a number of cultural studies (see e.g., Kagitchibisi 1997, Markus and Kitayama 1991, Markus et al., 1996, Triandis 1995, 1998), Bhagat et al. (2002) argue that the collectivism-individualism dimension strongly influences what kind of information people prefer and are more prepared to process.

By way of a gross generalization, it could be said that collectivists are more sensitive to relatively tacit knowledge, such as organizational history and norms, and systemic or embedded knowledge. In other words, they are used to high-context communication, where information must be interpreted through the cultural context (Usunier 1996). In contrast, persons in individualist cultures are more likely to focus on knowledge as relatively explicit attributes of phenomena, and are more concerned with rationality than collectivists are. Communication tends to occur primarily with in-group members in collectivist cultures, while in individualist cultures people communicate more easily with anyone within the organization.

The vertical and horizontal dimensions (related to the traditional power-distance construct) add an important aspect to the collectivist-individualist classification. Bhawuk (2001) and Triandis (1995, 1998) suggest that people in vertical cultures consider their

"self" to be different from that of others in terms of social status, whereas people in horizontal cultures consider their "self" to be more or less the same as that of others. These authors postulate that the processing of information and knowledge takes place on more hierarchical lines within organizations in vertical cultures. Triandis and his colleagues refer to the concept of extant knowledge in their suggestion that the four cultural patterns derived by combining these dimensions – vertical-individualistic (VI), vertical-collectivist (VC), horizontal-individualistic (HI), horizontal-collectivist (HV) – strongly influence how information and knowledge may be selectively transferred and processed (Bhagat et al. 2002).

Knowledge Sharing in Multicultural Nets

We combine the strategic-net classification (Möller et al., 2002a), the nature of knowledge (tacit versus explicit), and the four cultural patterns of Bhagat et al. (2002) in our proposal for a model for knowledge sharing in multicultural nets, depicted in Figure 2. Each of these combinations is discussed by using the net types as "driving typologies"; in this we are greatly indebted to Bhagat et al. (2002) and Möller et al. (2002b).

Stable, Well-Specified Demand/Supply Nets

In principle, communication and knowledge sharing are easiest in stable and often hierarchical strategic nets as they contain primarily codifiable, explicit knowledge. Such nets have several knowledge-related characteristics that influence knowledge management. The end product or system must be decomposable into smaller subunits requiring specialized resources and value activities from the actors. In spite of the high level of specialization – enabling the actors to reach efficiency gains –knowledge of the components and of the value activities should be relatively codifiable, facilitating its sharing among the members of the net. The level of specialization and the codifiability of the resource specifications are dependent on the inherent characteristics of the technologies involved and on the evolution history of the field and the specific net. Highly integrated demand-supply nets can be constructed only when the underlying value system has reached a prominent level of codiafiability, transparency and stability.

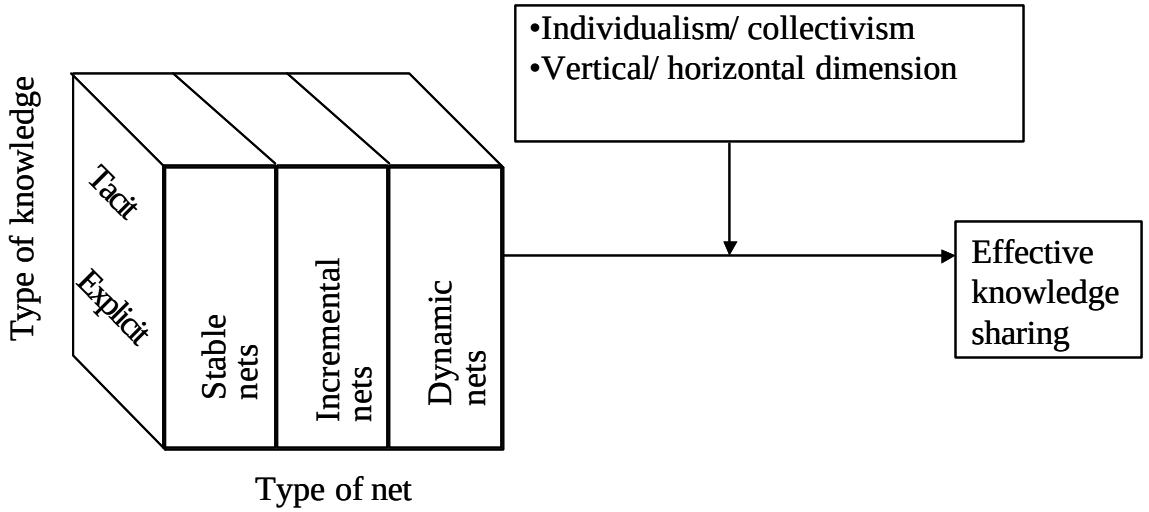


Figure 2. The Influence of Culture, Net Type and Knowledge on Cross-cultural Knowledge Sharing in Business Nets

The characteristics identified seem to favour strategic nets that are constituted by actors from individualistic cultures preferring explicit knowledge, linear reasoning, and analytical modes of information processing. These are to be found in countries such as Australia, Denmark and Sweden (horizontal individualism), and in France, Germany, the United Kingdom and the United States (vertical individualism). The motivation and coordination of individualistic and independent actors may, however, be difficult if the net requires highly hierarchical governance. This condition tends to favour nets with actors from horizontal (Japan) or vertical collectivist cultures (China, Korea, Singapore and India), who tend to be loyal to the net if it can establish a legitimate position. It is not an accident that hierarchical supplier nets were first introduced, and excelled, in Japan (Dyer and Nobeoka 2000).

If actors with different cultural backgrounds constitute stable nets, much emphasis should be placed on knowledge sharing especially among horizontal-collectivists and vertical-individualists, whose communication orientations are furthest apart,. For example, Australian SMEs building long-term supplier relationships with larger Japanese buyers find it difficult to adapt to the rigorous quality and monitoring culture, and the formalized systems, of the their Japanese partners (Cooray and Ratnatunga 2001), even though the knowledge shared is primarily explicit.

<u>Established Value Nets – Incremental Knowledge Creation</u>

The strategic nets positioned in the middle of our value-system continuum are relatively well determined, but are purposefully modified through intentional incremental and local change processes. Most multi-actor R&D nets, as well as those pursuing business-process modifications, share these characteristics. Temporal multi-actor business projects, typical in the construction industry and in project business, and involving the establishment of major plants and information systems, resemble the nets of this category. From the knowledge perspective, local development nets require a balance between knowledge exploitation and exploration.

What is also relevant is the existence of specialized knowledge held by each actor's specific community of practice. This spreading of special, partly tacit knowledge, mostly embedded in people and routines, emphasises the capability to bridge different communities of practice. Bridging is essential in creating new specialized knowledge resulting in product and process improvements and customer-service systems, for example (Dyer and Nobeoka 2000). Bridging requires an ability to cross professional language and cultural barriers, as shown by experts in product and process technologies, software developers, and marketing and business managers, for instance, (Blomqvist 2002, Dougherty 1992, Happonen 2001).

These characteristics tend to give preference to nets whose actors can process and absorb tacit and systemic knowledge, and make it explicit through co-operation. Examples of the successful transfer of knowledge are to be found among Japanese companies establishing developmental relationships with companies in Korea and India, whereas knowledge sharing between successful Japanese companies such as Honda, Canon and Matsushita and U.S. organizations has met with more difficulties (Bhagat et al., 2002, Nonaka and Takeutchi 1995). According to Bhagat et al. (2002), horizontal collectivists value knowledge that is historically and contextually grounded. This gives actors from these cultures an edge in the creation of new incremental systemic knowledge through trustful cooperative relationships.

The issue of trust and legitimacy is highly relevant in operating with actors in a collectivist culture. Building trust is a precondition for well-functioning business nets with Chinese or Japanese partners. The Chinese emphasise personal relationships and do not distinguish trust from business situations. They are concerned about being exploited by foreigners, which requires long-term orientation from the Western actors and the grad-

ual building up of a trust base through personal relationships. Person and family networks are essential for extending business relationships. Mutual favours are expected from this network of social relationships, or "guanxi."

This concept of personalism and "connections" does in Asia what commercial law does in Western cultures; it reduces uncertainty in business relationships and serves to guarantee new actors' reliability (Nair and Stafford 1998, Narayan and Radjadhyaksha 1996, Redding 1995).

Emerging Value Nets – the Creation of New Knowledge and Radical Innovations

The value systems on the right end of our value continuum (Figure 1) are in varying stages of emergence. Actors aiming to develop new technologies, products or business concepts create strategic nets with these system characteristics. These nets are future-oriented in the sense that their economic value potential is generally fully realized only in the future. The Bluetooth coalition and other nets competing over the introduction of mobile services provide good examples. Emerging value nets involve complex collaborative learning processes. Uncertainty and ambiguity related to value activities and to actors and their capabilities are inherent features of this landscape, exemplified by converging information, communication and e-content fields.

From the perspective of knowledge sharing, emerging value systems involve several new challenges for the development of strategic nets. An essential aspect is the tacit and dispersed character of ideas in the emerging system. Ideas refer to beliefs about how new knowledge structures can be utilized. They are often fuzzy, in other words there is ambiguity about the possible cause-and-effect relationships between existing and emergent knowledge. Vague ideas do not yet involve a clear indication of how to proceed. Ideas may also be uncertainly held - the holder cannot articulate the roots or logic, but feels that the idea captures something important of the emerging reality. Scharmer (2000) discusses this kind of knowledge, or ideas, and views it as "not-yet-embodied" tacit knowledge, based simultaneously on the inner experience and interpretation of the actor and on the perceived "outer" reality. It is a reflection or idea about "not-yet-enacted reality."

Again, the knowledge characteristics of emerging value nets described above share certain characteristics with the knowledge- and information-processing orientations provided by the cultural patterns. At least two divergent propositions emergebe derived.

First, the tendency of actors from collectivist cultures to excel in understanding complex, tacit and systemic knowledge seems to make them ideal partners in strategic nets aiming to produce radical innovations and new business concepts. This is reflected, for example, in Japanese companies' learning behaviour in their technology-sharing alliances with European competitors. Japanese firms generally request more information about European market and technology conditions involving detailed technology, market structure and customer analysis and reports. They also tend to send in their personnel for extensive periods in order to achieve a contextual and systemic view of the technology-application potential. In contrast, European firms tend to trust more in analysing technology more concretely, such as in licensing documents, technology reports, articles and workshops (Bhagat et al., 2002). This suggests that the Japanese or collectivists gain a more systemic view, whereas more individualist actors may penetrate more deeply into the core of technological innovation.

Collectivism may, however, also be a handicap in net collaboration aiming at innovation. The uncertainty-avoidance aspect, with new ideas and views having to be "sanctioned" by the collective norms, suggests that collectivist actors may be better partners in incremental innovation nets and in the systemic implementation of already explicated knowledge than in co-producing radically new knowledge. It seems that actors in a vertical individualist culture with high risk-taking characteristics (e.g., North American firms) are culturally better qualified to effect research-based innovations and their pioneering commercialisation. This is related to the individualist's preference for abstract, analytical reasoning, and more uninhibited combination of different types of knowledge, which emphasises greater variety in radical innovations (Bhagat et al. 2002, Glenn and Glenn 1981).

Given the positive aspects and limitations of actors with a collectivist or individualist culture, a seemingly ideal solution would be to try to construct strategic-innovation nets containing both, and to develop the functional responsibilities to match the cultural knowledge-development and sharing competencies. This may be very difficult due to the communication barriers between actors with different cultural backgrounds, especially between vertical individualists (e.g., German, U.K. and U.S. firms) and horizontal collectivists (Japanese companies), and between horizontal individualists (e.g., Dutch, Danish and Swedish firms) and vertical collectivists (e.g., Chinese, Hong Kong and In-

dian firms). The potential for crossing these cultural barriers in knowledge sharing is addressed in the next section.

HOW TO CROSS CULTURAL BARRIERS IN BUSINESS NETS

This final section starts with the managerial implications of the study, and proceeds briefly to consider the main theoretical conclusions and the limitations. Suggestions for future research conclude the paper.

Managerial Implications

Cultures are highly complex phenomena and we should not be surprised that they produce managers faced with paradox-like dilemmas in the business-network context. How can we benefit from the differentiated knowledge-processing and producing capabilities of actors from different collectivist and individualistic cultures if they impose high barriers in terms of sharing knowledge and cooperating? In our brief discussion we focus on identifying the factors that enable net actors to overcome, or at least lower, these barriers.

Cultural patterns are deeply ingrained, generally unconscious orientations that influence our sense making, situation framing, knowledge preferences, and knowledge processing and sharing. As pointed out above, they provide their beholders, with special skills in "knowledge work", but simultaneously act as barriers to understanding between different actors. The overriding implication of our framework is that management should be sensitive to both the knowledge requirements posed by different types of strategic nets and the cultural differences of actors potentially or actually involved in them. The management of business nets that contain tacit, systemic knowledge, embedded in their history and/or underlying technological platforms, poses the greatest challenges. However, the management of multicultural nets in general requires conscious analysis and specific measures to alleviate intercultural barriers.

Careful selection of persons responsible for boundary spanning between culturally different actors is an important starting point. Individuals with deep experience of the cultural types involved are invaluable. Tolerance of ambiguity, cultural sensitivity and empathy are further characteristics that improve intercultural communication (Bhagat et al., 2002, Lord and Maher 1991). Boundary spanners should match their counterparts in terms of authority, age, and preferably also gender.

Another aspect is the time perspective in establishing net relationships. The gradual development of trust and legitimacy is emphasized in the development of business relationships with firms and individuals representing collectivist cultures. This is often impossible in the high-speed world of the ICT sector, but even then Western actors should understand the requirement for systematically creating personal relationships with the key actors of their Chinese, Japanese or Korean partners.

Well-specified networks emphasise the transfer of explicit, analytical knowledge under assumptions of linear causality. However, even in this kind of net it is advisable to carefully go through all the managerial information and monitoring systems and their underlying logic with the key partners, as these generally contain much tacit and embedded information and unconscious, culturally-related assumptions.

In sum, there is no shortcut for effective intercultural knowledge sharing in business nets. Net partners can only gain from the richness provided by different cultural knowledge orientations through careful, long-term cooperation with their partners, and conscious selection and cultural training of their personnel and key managers.

Theoretical Conclusions, Limitations and Future Research

The aim in this paper was to combine two different research streams, industrial-network theory examining organizational networks and their properties, and cultural studies focusing on cross-cultural communication and knowledge transfer. Our main conclusion is that the network theory would benefit greatly by being opened up in two directions. The first involves the role of knowledge and the challenges of "knowledge management" in different types of business nets; and the second refers to cultural studies examining the influence of different cultural patterns in inter-organisational communications and behaviour. It was in this area that we found the synthesis recently provided by Bhagat et. al. (2002) immensely valuable.

Our conceptual framework was based on classifications of business nets and cultural patterns. Obviously, many other aspects also influence the effectiveness of knowledge sharing in intercultural business nets. Bhagat et al., (2002) propose that the following dimensions of cognitive style moderate the influence of cultural patterns: tolerance of ambiguity, and a holistic versus an analytic mode of thinking. We believe that working experience in different cultural contexts is also a relevant moderator, as it should enhance an individual's capacity to make sense of cultural cues, providing him or her with

a better base for cross-cultural communication. Another potential moderator is organizational culture. We might speculate that organizations that are sensitive to the challenges of multiculturalism may have developed a working orientation facilitating intercultural business communications by the careful selection and training of their employees. The professional culture forms a further moderating construct. We speculate that engineers with different cultural backgrounds, for instance, may have lower communication barriers between themselves than, say, engineers and marketing managers.

We hope that our brief conceptual analysis will pave the way for programmatic empirical research on the relevance of different cultural patterns in knowledge sharing and creation in multi-cultural business nets. A comparative design incorporating variation in the net types and cultural backgrounds of the major actors would offer a seemingly efficient starting point.

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