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The global village: online cross-cultural communication and HRM

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Abstract

Purpose – The purpose of this paper is to examine relational and task dimension of online communication and the associated emotional experience.

Design/methodology/approach – This paper examines four categories of work outcomes: emotional experiences of work, work attitudes, work dynamics and work behaviours; and links each to the cross-cultural online communication context.

Findings – It was found that diversity-oriented HRM can reduce the cultural fault-lines between individualist and collectivist (IC) cultures, and thereby positively moderate the relationship between cross-cultural online communication and affective, cognitive and behavioural outcomes.

Practical implications – Diversity-oriented HRM can capitalize on an organisation's cultural diversity and avoid cross-cultural misunderstandings. In a more practical sense, the research purports that combined use of IC HRM practices can produce greater efficiency and effectiveness in online communications worldwide.

Originality/value – The paper provides an insight into the potential implications of increased use of information technology on cross-cultural communication, and human resource management. The significance of diversity-oriented human resource management in managing these implications is also highlighted.

Introduction

In today's knowledge based global economy, online communication is increasingly valued by organisations as a way to efficiently respond to dynamic competitive markets. Internet usage shows no signs of slowing down. Statistics show that approximately 1.1 billion e-mails are sent out daily in the USA and 88 million employees are connected to the Internet (HR Focus, 2003). From 1993 to 1996 alone, the number of Internet hosts grew from 1.3 million to 9.5 million (Gray, 1996). Furthermore, estimates of the Asia-Pacific region's contribution to global business-to-business e-commerce in 2004-2005 range from \$US616 billion to

\$US1,500 billion (Bajaj, 2001). As time passes it is likely that Internet usage will continue to expand amongst members of each subsequent generation worldwide (Negroponte, 1995).

As a backdrop to the increase in online activity, organisations today operate on a supranational level, trading across national barriers and in different parts of the globe. As network competence has shown a strong positive influence on the inter-intra organisational online collaborations, and on a firm's product and process innovation success (Ritter and Germünden, 2003), the effectiveness of cross-cultural online communication is critical to business success today.

In past decade technology has affected the way people communicate to accomplish work, which has in turn brought impetus for changes in culture and society (DeFillippi, 2002). Although online communication has fostered an information and knowledge based culture, it could destroy individual and/or group performance if it is poorly planned, developed, and implemented by the organisation (Martinsons and Chong, 1999). Such people related cultural issues have profound implications for HRM (Miller, 2003; Moffett *et al.*, 2003).

Some cultural diversity literature on the Internet show extreme polarity of views. Some assert that the new technology reduces cultural diversity in what has been termed the “MacWorld” effect where developing countries aspire to a Western consumer lifestyle (Barber, 1992). Some cultural diversity literature on the internet shows extreme polarity of views that new technology either reduces cultural diversity in what has been termed the “MacWorld” effect where developing countries aspire to a Western consumer lifestyle (Barber, 1992); or reinforces cultural fault-lines whereby cross-border communication technology retains cultural groupings (Barnett, 2001). In an online communication context where Westerners’ independent values and Easterners’ interdependent values are evoked and exchanged (Hofstede, 2001), online communication is predicted to elicit perceived value dissimilarity, reducing work effectiveness online.

Recent research findings imply that the value differences between Westerners and Easterners manifest in different perspectives, attributes and communication patterns that tend to produce significantly poorer perceived performance, more coordination costs, lower satisfaction and lower commitment to cross-cultural communication (Ishida, 1986; Jehn *et al.*, 1999; Nadler *et al.*, 1985). Diversity oriented HRM, namely, the combined use of individualist and collectivist (IC) HRM practices is thus proposed to positively moderate the effect of cross-cultural online communication between Westerners and Easterners (see Figure 1).

Individualism-collectivism online

Within a global context, the most important dimension of cultural differences is the relative emphasis on individualism versus collectivism (Triandis, 1990). The concept of individualism and collectivism (I/C) was first discovered by Hofstede (1980), who studied the work-related values of more than 117,000 IBM employees across 66 countries. Hofstede's definition of I/C has been identified as the most distinguishing characteristic of national cultures, and has been studied widely in cultural and cross-cultural research (Hofstede, 2001; Hui and Triandis, 1986; Oyserman *et al.*, 2002; Triandis, 1990).

While there are multifaceted definitions of cultures (Kroeber and Kluckhohn, 1985), Hofstede defines culture as the collective programming of the mind that distinguishes the members of one group or category of people from another (Hofstede, 2001). The collective programming of the mind refers to shared patterns of beliefs, values and ideas that shape human attitudes and behaviours (Bochner, 1994; Earley and Gibson, 1998; Marsella *et al.*, 1985; Shweder and Bourne, 1982; Triandis, 1994). Specifically, Hofstede's I/C definition is about cognitive differences between nations, within which individuals, through socialisation, develop a shared pattern of beliefs, values and ideas (Hofstede, 1994).

I/C are found to be indicative of large work value differences (Hofstede, 1980). Values are defined as a higher-order concept thought to provide a structure for organising attitudes (Hogg and Vaughan, 1998). Value dissimilarity, therefore, refers to the underlying social psychological differences in cultures, such as conceptualisation of favourable attitudes, social values, core work activities and work purposes (Jehn *et al.*, 1999; Milliken and Martins, 1996).

Individualism refers to societies in which an “I” consciousness is emphasised through independent values such as right above duties, primary concern for personal goals and immediate family (Hofstede, 2001). The independent values subsequently manifest loosely connected behavioural patterns between individuals and groups. Collectivism, on the other hand, refers to societies in which a “WE” consciousness is emphasised through interdependent values such as cohesive in-groups, mutual obligations and concern for one's groups with unquestioning loyalty (Hofstede, 2001). Interdependent values manifest closely connected behavioural patterns between individuals and groups (Bochner, 1994; Hofstede, 1980, 1991; Hsu, 1981; Kitayama *et al.*, 1997; Triandis, 1994, 1995).

Hofstede (1994) found that Western nations were high on individualism, in which the USA and Australia are respectively ranked first and second (Hofstede, 1980). Notably, Asian, Middle Eastern, Hispanic and African nations, which were found to be high on collectivism, comprise the majority of new entrants in the workforce in both the USA, UK and Australia (Arredondo, 1996; Nankervis *et al.*, 1999).

Although Hofstede's I/C ranking of nations was established almost two decades ago, social scientists believe that individualist values are rooted in hunting, gathering or industrial-based Western societies where personal freedom, individual rights and a unique self are valued. Collectivists' values, in contrast, are rooted in developing (e.g. East Asian, African and South American) or agricultural-based (e.g. Japanese) societies where interdependence and an other-focused self are valued (Sampson, 2001; Triandis, 1989). It is believed by some that collectivist societies will shift to individualist societies as their national wealth grows and their conduct and values become more industrialised (Hofstede, 1994, 2001; Triandis, 1986).

Although it is acknowledged that distinguishing values of I/C can increasingly be found within any given culture (Markus and Kitayama, 1991; Oyserman *et al.*, 2002; Triandis, 1995; Triandis *et al.*, 1985), the key tenet of the paper is to examine the effect of Hofstede's definition of I/C within the context of cross-cultural online communication. Cultural value is the chosen focal point of the paper because differences with respect to cultural values dominate an individual's experience within the online environment. This paper uses the term individualists to refer to people representing independent Westerners, and collectivists to refer to people representing interdependent Easterners (cf. Hofstede, 2001). The paper uses the acronym “ICs” for the term “individualists and collectivists”.

Paradoxical effect of cultural diversity online

In addition to extreme decentralisation and interactivity, the Internet could genuinely be described as something no previous technology could lay claim to: being global in nature. Previous communication technologies could not overcome the barriers of distance and time the way the Internet can; newspapers, radio and most television networks were in effect restricted to audiences of national and passive users.

Although the Internet began as an experiment by military researchers in the USA (Hafner and Lyon, 1996; Negroponte, 1995; Poster, 1999), its use accelerated throughout the world at astonishing speeds. It became a technology that swept across geopolitical borders and out of the jurisdiction of national governments (Poster, 1999). What are the consequences of global information flow and usage on cultural values? If changes in technology affect society through changing the way people communicate, how does that change in communication display itself through cultural values? To date, there are two distinctive schools of thought, which state that:

1. technological progress causes cultural homogeneity (Hillis-Miller, 2001), and
2. technology progress reinforces cultural fault-lines (Hall, 1996; Zahir *et al.*, 2002).

Next, we explore the paradoxical effects of cultural diversity online based on these two dissimilar schools of thought.

Technology progress causes cultural homogeneity

According to convergence theory, which has existed since pre-Internet times, advances in technology that bring the world closer together diminish cultural diversity. In effect, this theory articulates the fear that new technology causes people to start speaking, dressing, working, and behaving in more uniform ways (Hillis-Miller, 2001). A stark example of this is the rapid spread of Western-style clothing after the introduction of television and the adoption of the five day week with Saturdays and Sundays away from the workplace among Eastern countries. This phenomenon has been termed the “Mac World” effect (Barber, 1992). As more families in developing Eastern countries could afford television sets, they chose to abandon (for the large part) their traditional clothing for attire that represented progress, because economic development would mean that cultures should begin to become more similar in values, social organisation, class structure and family characteristics (Zahir *et al.*, 2002).

Value similarity within organisations is expected to produce less ambiguity, less conflict, more coordination, more satisfaction and more commitment. This is so because value similarity among members facilitates clear communication about what effective, behavioural and cognitive responses are expected of individuals (Fisher and Gitelson, 1983; Kluckhohn, 1951). For example, Meglino *et al.* (1989) found that value similarity between subordinates and their supervisors was positively related to employee satisfaction and commitment. In other words, once I/C members recognise values dissimilar to their own in an online communication, they may project negative stereotypes and prejudices on the dissimilar

values, and subsequently display discriminatory behaviours toward culturally dissimilar counterparts (Raven and Rubin, 1976). Consequently, perceived value dissimilarity is predicted to reduce the effectiveness of cross-cultural online communication.

Technological progress reinforces cultural fault-lines

Contrary to cultural convergence theory, cultural diversity might be maintained and even reinforce cultural fault-line by way of new technology. A fault-line refers to a hypothetical dividing line that identifies subgroups within a workforce based on similarities in one or more attributes (Lau and Murnighan, 1998). For example, Internet portals in different countries, while uniform in design, may have culture-specific content (Zahir *et al.*, 2002), producing unconscious or conscious cultural fault-lines in an online world. A pertinent example is Singapore – a tightly controlled society that has grappled with issues of Internet freedom as it builds a knowledge-based economy (Ho *et al.*, 2002). While alternative political and religious community websites make use of the Internet to access and publish non-government endorsed views, at the same time Singaporean society's conservatism about gay issues reflects itself in the smaller number of websites dealing with alternative sexuality, demonstrating Singaporean culturally specific values (Ho *et al.*, 2002). In Hawaii, online communication is one method of maintaining linguistic diversity of indigenous language groups (Warschauer, 1998).

A new technology can thus be adopted in different ways. Instead of leading to cultural homogeneity, there is the real chance that each new medium, like the Internet, is adopted by different cultural groups within a culturally specific context (Zahir *et al.*, 2002). Consequently, it is oversimplifying to say that the Internet makes everyone the same and that its users are consumers who dress and act similarly (Hall, 1996). Within the cross-cultural online communication context, IC's dissimilar values could evoke cultural fault-lines thereby negatively influencing its effectiveness. We predict that cultural differences migrate to the online world, underlying the importance of knowledge about intercultural communication and best HRM practice that minimizes fault-line effects.

Although values refer to implicit differences and are not easily detected, actual dissimilarity in cultural values was found to have great influence over organisational outcomes (Harrison *et al.*, 1998; Jehn *et al.*, 1999). The theoretical perspectives from organisational behaviour (Schneider, 1987), sociology (Allport, 1954; Amir, 1969; Berger *et al.*, 1980) and social psychology (Byrne, 1971; Newcomb, 1961) support the idea that, during the initial stage of interaction, group members categorize other group members based on stereotypes prompted by overt characteristics. However, as members interact with one another, stereotypes are subsequently replaced by a deeper level knowledge of the psychological features of one another (Harrison *et al.*, 1998). In other words, value differences of ICs are expected to produce enduring effects for cross-cultural communication, and the organisations, to which they belong (Shaw, 1990).

Recently, research found that in comparison with social category differences within workgroups, value differences produced significantly poorer perceived performance and lower satisfaction and commitment to the group (Jehn *et al.*, 1999). Culturally diverse workgroups were found to produce more coordinated costs because of differing perspectives, attributes, and communication patterns caused by their dissimilar values, namely the

independent orientation of individualists and the interdependent orientation of collectivists (Nadler *et al.*, 1985).

For example, when a Japanese manager of collectivists operated an overseas company of individualists, his collectivist orientation often conflicted with their preference for individualism over collectivism (Ishida, 1986), reducing the effectiveness of the whole operation. Furthermore, research suggests that in order for US firms operating in China to be maximally effective, they need to minimize value judgments based on their cultures and maintain an open mindset to Chinese management practices (Xing, 1995). For this reason, value dissimilarity of ICs exhibited online is expected to have a significant negative impact on cross-cultural online communication in the short-term as well as in the long-term (cf. Shaw and Barrett-Power, 1998).

Value dissimilarity online is expected to produce negative effects such as negative affect (e.g. stress), negative attitudes (e.g. less trust), negative group dynamics (e.g. social integration) and negative work related behaviours (e.g. deviance from online communication). In particular, it is argued that differences in values elicited in the independent orientation of individualists, and the interdependent orientation of collectivists, may act as a powerful deterrent to achieving positive outcomes.

Based on the preceding discussion, we propose a third school of thought, which has not been largely explored within the context of HRM. Namely, we suggest that HRM and technology can be used synergistically to create understanding between members of different cultures while capitalizing on diverse knowledge, innovation and talent.

The Internet's defining features – its decentralised nature, interactivity, and global reach – make it the ideal technology to build bridges between culturally diverse members of organisations and between organisations stemming from different cultures. When faced with the challenge of understanding cultural differences, the Internet can help to alter mindsets (Ramsomair, 1997) through its global reach and accessibility. Because of the breadth of material that is available online (and the speed with which it can be retrieved or transferred), it is possible not only to come across different types of information, but also to realize different ways of interpreting that information, and to experience the benefits of mixed cultural input and output on the Internet.

In comparison to a decade ago, value dissimilarity online is predicted to produce greater knowledge, innovation and quality decision making processes to deal with the complex global world. Although several studies predict negative outcomes of value diversity, there is some research that shows that members who are dissimilar in values and beliefs can develop more creative and better alternatives in problem solving, and higher quality decisions than similar members (Cox *et al.*, 1991; Ely and Thomas, 2001; Ling, 1990).

We, however, argue that the Internet's potential depends on its users' perception toward dissimilar cultural orientation online. Paradoxical effects of culturally diverse work found in several research studies reveals the costs involved with ineffective HRM in relation to culturally diverse work processes (Fujimoto *et al.*, 2004; Jackson *et al.*, 1993; Jehn *et al.*, 1999; Ishida, 1986; Nadler *et al.*, 1985; Watson *et al.*, 1993). In light of the preceding discussion, we propose that diversity oriented HRM, namely, combined use of IC HRM practices, will maximise the organisations' culturally diverse adoption of the Internet.

Cross-cultural online communication: collectivists' online resistance

As stated in the beginning of the chapter, individualism refers to a holding of values and beliefs that individuals are clearly distinguishable or separate from their social environment. In contrast, collectivism refers to the holding of values and beliefs that individuals are defined by the social context to which they belong (Bochner, 1994; Triandis, 1989).

Cross-cultural differences make themselves known through the adoption of the Internet. Within collectivist cultures, such as those in East or Southeast Asia, there was more resistance to the use of the Internet. China took a strong stand against the Internet fearing that unregulated access by its citizens to non-official news sites would jeopardize the country's stability (Abbott, 2001) by letting citizens have access to Western values. In addition, several sites within China, whose operators were familiar with the cultural and political climate of censorship, self-regulated their content to stay on the right side of the authorities (Abbott, 2001). From a Western legal perspective, such regulation infringed on an individual's rights to access the Internet, however from an Eastern collectivist society, the regulation was tolerated in the name of stability or national relationship-building (Weber, 2002). Some of the fear surrounding the Internet was exacerbated by a lack of informed knowledge by governments in collectivist cultures about the decentralised nature of the medium. For example, Malaysia unsuccessfully tried to filter the content of Internet service providers (Abbott, 2001). The preceding discussion on collectivists' resistance towards the Internet insinuates their in-group or social group orientation, which can hinder their online communication with individualists.

In the business communication literature, there has been a significant amount of interest in cross-cultural communication and high-low context cultures (Guffey, 2003; Locker and Kaczmarek, 2001; Mohan *et al.*, 1996), which signifies the importance of the study of cultural perspectives toward online communication. Low context cultures tend to refer to individualist group members (Singelis and Brown, 1995), who value direct confrontation and clarity (Bové *et al.*, 2003; Guffey, 2003; Locker and Kaczmarek, 2001; Mohan *et al.*, 1996). Examples of low context cultures include German, Scandinavian, North American and English cultures (Bové *et al.*, 2003; Hall, 1976). High context cultures tend to refer to collectivist group members (Singelis and Brown, 1995), who value indirectness, politeness, ambiguity and group membership (Bové *et al.*, 2003; Guffey, 2003; Locker and Kaczmarek, 2001; Mohan *et al.*, 1996). High context cultures include Eastern nationals, such as Japanese, Chinese, Arab, and Greek societies (Bové *et al.*, 2003).

Because trusting relationships are more significant than business transactions in high context cultures, they have low reliance on written words but high reliance on multifaceted communication means including contextual factors, oral agreements, situational cues, and nonverbal behaviours (Bové *et al.*, 2003; Guffey, 2003; Locker and Kaczmarek, 2001; Mohan *et al.*, 1996). The rules of everyday life are learned via situational cues and spiral logic is employed (Bové *et al.*, 2003; Guffey, 2003; Locker and Kaczmarek, 2001; Mohan *et al.*, 1996). For example, the two years of perplexity experienced by a Swedish businessman before formalising a contractual relationship with the Saudis has been explained as demonstrating the need to become first known and trusted (Hofstede, 1991). The experience can be explained equally well from a culture context perspective as an example of indirect,

spiralling social interaction in which a trusting relationship takes precedence over the actual business transaction.

Because transparency and directness in relationships are valued in low context cultures, the emphasis is on business transactions where there is only one level of meaning, where only written agreements are binding, everyday rules are explicit and logic is applied with linear precision. There is a high reliance on words, especially in written words, and specific details, but low reliance on contextual factors and nonverbal aspects. Trust relationships are less significant than business transactions (Bové *et al.*, 2003; Guffey, 2003; Locker and Kaczmarek, 2001; Mohan *et al.*, 1996).

Examples of the affect of cultural perspective on online communication abound. For example, recent research findings show that Chinese websites have a higher frequency of high context orientation whereas US websites show higher low-context orientation (Singh *et al.*, 2003). Research findings indicate that collectivists tend to avoid directness in writing (Beamer, 1994). Moreover, Hong Kong students were found to be reluctant to write directly about required business outcomes (Perotti and Bridges, 1993). Chinese speakers were found to use spatial, and correlational logic writing style whereas English speakers used linear, cause and effect logic and writing styles (Beamer, 1994).

The critical importance of the cross-cultural dimensions of high-and low-context cultures is evident in recent research which analysed the communication aspects of the current crisis in US-Arab relations (George, 2003). Research found that the US low-context culture's reliance on explicit verbal communication was perceived as less credible by Arabians of high context culture. Similarly, high-context and low-context cultures were found to have different preferences for managing conflict either discretely, subtly (i.e. the preference of the high context Arab culture) or via open confrontation (i.e. the preference of the low context US culture) (George, 2003).

Individualists' low context nature and collectivists' high context nature is expected to permeate into online communication contexts. Within online communication contexts where emails tend to require only the written form of direct, short and succinct messages, collectivists are predicted to show more resistance to online communication whereas individualists are predicted to show favourable attitudes toward online communication. Collectivists are, thus, predicted to produce more stress and tension in online communication than their individualist counterparts. Consequently, they may demonstrate deviance behaviour from online communication and prefer to communicate matters in person.

In suggesting strategies for improved intercultural and international communication, communicators first need to understand the cultural uniqueness of a country before they can identify the most appropriate and effective message, format, and channel of communication (George, 2003). This includes understanding both the language and the culture context.

1. *PI*. The low context nature of online communication will be more favourably reacted to in terms of use, attitudes toward, and emotional responses.

In order to avoid cross-cultural misunderstandings, messages should be tailored to mirror cultural contexts and differences between the sender and the audience. Hence, communication between people from low context cultures (i.e. individualists) and persons from high context cultures (i.e. collectivists) must consider both form of communication and

the perception of the wording or language used (George, 2003). Thus, we contend that the combined use of IC HRM practices would facilitate the most effective message, format and channels of communication that both cultures can understand in an objective manner, while simultaneously, capitalizing on culturally diverse knowledge and talents.

Key outcomes for individuals, groups and organizations

As our preceding discussion implies, the key outcomes of intercultural interactions are affected by an individual's culturally shared interpretations of organisational culture (Louis, 1992; Barak, 2000). When individual employees perceive that their values and norms are not supported and appreciated within the organisational culture, the outcomes of intercultural interactions are more likely to be negative (Barak, 2000). A key tenet of this paper, therefore, is that diversity oriented HRM is crucial for culturally diverse employees to perceive that their values and norms are supported and appreciated within the cross-cultural online communication context.

According to Jehn and colleagues (1999), the aim of diversity research should be to link diversity to organisationally valued outcomes. Following a review of diversity effects, we classified the outcomes as affective, cognitive or behavioural (Milliken and Martins, 1996).

The task dimension and relational (or social) dimension are two important features of works (Bales, 1950). For this reason, this research examines the relational and task dimension of online communication. Furthermore, as diversity is strongly associated with emotions (Jordan *et al.*, 2002), the research also examines the emotional experience of online communication (Ashkanasy *et al.*, 2002). In sum, the paper presents four categories of outcomes: emotional experiences of work, work attitudes, work dynamics, and work behaviours, and links to each the cross-cultural online communication context.

Emotional experiences of work are categorized into positive and negative emotions, in which negative emotion refers to depression, situational anxiety, stress, and job tension, whereas positive emotion refers to organisational based self-esteem, confidence in skills and knowledge, and hope (Jordan *et al.*, 2002). In terms of the cross-cultural online communication context, because the low-context of online communication matching the culture perspective of individualists, they are expected to be more emotionally expressive online, which in turn, is likely to lead to negative emotional responses by collectivist counterparts.

Work attitudes refer to the outcomes of emotional experiences at work, in terms of members' affective and cognitive commitment toward the group or the organisation, such as value commitment (Jordan *et al.*, 2002). Again, the low-context nature of online communication is likely to produce negative work attitudes in collectivists unless individualists attend to matters of context.

The work dynamics category refers to the effectiveness of the relationships among members such as social cohesion, communication integration and trust. People's emotional experiences and consequential attitudes at work influence the group dynamics or online cross cultural communication. For example, individualists' independent behaviour may leave collectivists vulnerable to feelings of alienation and negative emotions such as situational anxiety

(Spencer, 1985). Consequently, collectivists may feel less committed to their group and may cease integrating with individualists as much as they do with other collectivists.

Work behaviours refer to positive behaviours and withdrawal behaviours (O'Leary-Kelly *et al.*, 1996; Organ, 1988; Robinson and Bennett, 1995). Positive behaviours refer to organisational citizenship behavior and task performance where task performance refers to the quality, creativity, and efficient completion of the task. Withdrawal behaviours, in contrast, refer to deviance from online participation with persons with dissimilar cultural origin (Tsui *et al.*, 1997). These work behaviours tend to be influenced by an individual's emotional experience of work and employee work attitudes (Folger, 1987, 1993). For example, when people feel stressed about communicating online with other work members, they feel less committed to it and may be inclined to manifest deviance from participating in online communication, which decreases task performance (Milliken and Martins, 1996).

HRM implication on technology management

Technology has revolutionized HRM in organisations (Miller, 2003). Technology and HRM can provide organisations with a highway for growing human capital. For example, recent research across 208 organisations found that HRM and technology investment enhanced human capital development (Youndt *et al.*, 2004). Technology, however, could destroy individual and/or group performance if it is poorly planned, developed, and implemented by the organisation (Martinsons and Chong, 1999).

Today, technology is not just being managed by the technical experts. The emergence of personal computers, friendlier commercial software and multi-user networks have led to the fact that technology can be managed at the individual, group and organisational level (Martinsons and Chong, 1999). In order to succeed in multifaceted technology management, HRM plays a vital role in managing social, structural, and psychological issues addressed by technology (Martinsons and Chong, 1999).

While the HR-Technology literature mainly discusses the technology implications of HRM practices (e.g. HRIS, e-recruitment), there is little attention given to the HRM implications of technology management (Lengnick-Hall and Moritz, 2003; Miller, 2003; Shrivastava and Shaw, 2004; Singh and Finn, 2003; Townsend and Bennett, 2003). As technology impinges upon organisational culture, affecting people's work style (DeFillippi, 2002), HRM plays a crucial role in the management of technology.

Research findings repetitively indicate that poor SHRM can hinder technology management (Bikson and Gutek, 1984; Chong, 1993; Ives and Olsen, 1984; Raheb, 1993; Willcocks and Mason, 1988; Martinsons and Chong, 1999). The common causes of technology failures are documented as HR issues, namely, organisational culture, performance management, change management and conflict resolution process (see Martinsons and Chong, 1999). Despite such findings, in practice, the role of SHRM as part of the technology management process (i.e. planning, development and implementation) has been given little attention to date.

Within the online cross cultural communication context, we contend that diversity oriented HRM will help reduce misunderstanding and conflict between ICs thereby maximising the potential of their diverse knowledge.

Diversity oriented HRM

In the culturally diverse context, top management needs to comprehend the interdependent role of culturally diverse end-users (i.e. ICs) and online input/output (cf. Martinsons and Chong, 1999). Diversity oriented HRM can recommend an appropriate sequence of sound culturally sensitive behavioural principles. According to contingency theory, the magnitude of IT benefits will be influenced by organisational design factors (cf. Martinsons and Chong, 1999). In other words, the integration of diversity oriented HRM with organisational IT cultures largely determines the effectiveness of online cross-cultural communication at work (cf. Schnitt, 1993; Martinsons and Chong, 1999).

As the scope of this paper focuses on I/C, we propose that diversity oriented HRM, specifically the combined use of I/C, will positively moderate the online intercultural communication effect.

Individualist HRM practices, such as clearly defined task responsibilities and equity in reward allocation, and rewards for individualism rather than group performance (Deutsch, 1968) promote concern for one's welfare over that of the group (Brickson, 2000). However, when organisations emphasise personal achievement, it encourages employees to focus on personal welfare and demotivates them from pursuing others' welfare (Batson, 1998). Such practices alone may exacerbate the effect of individualist values online.

On the other hand, with collectivist HRM practices such as equality in reward allocation, performance is measured and rewarded not on the basis of individual achievement but on the individual's group's achievement (Ramamoorthy and Carroll, 1998), which motivates individuals to enhance their group's welfare over their own welfare (Brickson, 2000; Sherif, 1967). Such practices alone may exacerbate the effect of collectivists' value online. Consequently, it is proposed that a combination of IC practices within an organisation will have the most positive influence on key outcomes, particularly in comparison with the presence of one or the other of the practices alone. For example, effective business strategies to overcome cultural barriers between Chinese and Westerners have been suggested as Chinese strategies to focus primarily on rational and professional negotiation (i.e. less relational) and Western strategies to focus on Chinese collective values and system constraints (Sheer and Chen, 2003). The distinctive strategies to bridge cultural fault-lines insinuate the importance of adopting a combination of IC HRM practices.

Organisations worldwide need to proactively manage online information exchanges with a view to the impact of value dissimilarity of ICs. However, it is important to note that organisations should give priority to accommodating collectivists' values online as they tend to evoke more resistance to online communication or fail to communicate accurately online. The combined use of IC HRM practices is, however, expected to positively moderate the effect of cross-cultural online communication on key outcomes. Based on the preceding arguments, we offer three propositions:

1. *P2*. Online communication between ICs will have both negative and positive effects on the use of online communication, attitudes to different cultural orientation, emotional responses to online cross-cultural communication, productivity and decision-making quality.

2. *P3*. Online communication between ICs will have a greater negative effect on collectivists than on individualists on the criteria identified in *P2*.
3. *P4*. Combined ICs HRM practices will positively moderate the relationship between online communication between ICs and the key criteria identified in *P2*.

Conclusion

Cultures have been categorized as those promoting individualism (where individuals are separate to the whole) or collectivism (where the overriding principle is that individuals are defined by social contexts to which they belong). The use of online communication increases as organisations continue to adapt and utilise new technology. Given the value dissimilarities between ICs, such value dissimilarities across cultures could manifest in online environments. If not properly managed, organisations may face negative outcomes such as increased costs and reduced productivity. Diversity oriented SHRM, namely, the combined use of IC HRM practices is proposed as a potential factor that will produce greater efficiency and effectiveness in online communications worldwide.

Figure 1. Diversity oriented HRM system on cross-cultural online communication

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