# Online Knowledge Sharing by Chinese and American Users in a Multinational Corporation: What Differences Does Culture Make?

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# **Research Objectives**

Despite the importance of cross-cultural considerations in knowledge sharing, the literature is almost silent in its cross-cultural dimensions (Glisband & Holden, 2003) and only very few recent studies have explicitly concentrated on the discussion of national cultural factors that influence knowledge sharing (Ford & Chan, 2003; Hutchings & Michailova, 2004). To better understand cross-cultural knowledge sharing and encourage employees from different countries to use knowledge sharing systems, we need to know: how people from different countries are using the systems, what is being shared through the systems, and what factors influence employees' online knowledge sharing in cross-cultural contexts. To date, little empirical research has been done in these areas. Thus, little is known about what knowledge is being shared through these systems or what factors influence people's knowledge sharing behaviors in these systems.

My research objectives are to (1) address the current research gap in cross-cultural knowledge sharing through online systems, and (2) generate recommendations and guidelines for practitioners from multinational corporations in designing knowledge sharing systems that can facilitate cross-cultural sharing. I try to reach these objectives by studying what are the employees' knowledge sharing behaviors found in global knowledge sharing systems, based on objective, system-recorded data and what factors impact employees' knowledge sharing behavior in global knowledge sharing systems.

# **Research Setting and Methods**

To approach these research problems, I chose to begin with studying the interaction of Chinese and American culture within a knowledge sharing system. A study was conducted in a multinational Fortune 100 company (to maintain confidentiality, a pseudo-name, XYZ, will be used for this company). XYZ has an online global knowledge sharing system, pseudo-named Knowledge Everywhere (KE). In the KE, users can browse, search, ask questions, answer questions and post what they think valuable for colleagues. Participants in the KE are from many counties, including China and the U.S. Thus KE provides a suitable context for studying online knowledge sharing behavior in a cross-cultural environment. This study used a mixed methodology which included content and activity analysis and semi-structured interviews. During the first stage, content and activity analysis, system-recorded knowledge sharing behaviors of selected Chinese and American users were analyzed both quantitatively and qualitatively. During the second stage, the Unified Theory of Acceptance and Use of Technology (UTAUT) (Ventakesh, Morris, Davis & Davis, 2003) was customized for the specific context in this study to form an overall conceptual framework. This framework was taken as a starting point and tested it qualitatively by using data from forty-one semi-structured interviews (twenty with Chinese users and twenty-one with American users). This study took a bottom-up strategy to study whether national culture plays a role in knowledge sharing through the KE, and if so, how. This method granted participants opportunities to bring out whatever factors they perceived important in impacting their participation in the KE, instead of being confined by pre-designed questions. The bottom-up strategy distinguishes this study from previous research in that it did not prejudge that national cultural difference would be the cause of observed differences of knowledge sharing behaviors by people from different countries.

### **Recent Findings**

The first stage sought to study Chinese and American employees' knowledge sharing behaviors in the KE based on the log data automatically kept by the KE. The data included how frequently the selected users used certain functions in the KE, and the postings contributed by the participants during the specified one-year period (06/01/2005~05/31/2006). In terms of the frequency of "consuming" knowledge in KE, such as browsing and searching, Chinese users and American users were not very different although American users were a little more active; however, in terms of the frequency of "contributing" knowledge to the KE, such as answering questions and posting materials, Chinese users were significantly less active than American users. The postings were content-analyzed to see what kinds of questions were asked and what types of materials were shared through the KE. The results implied that the inquirers primarily were using the KE to go beyond their personal networks and ask help from colleagues globally. The shared materials were mainly meeting-related documents, announcements, project-related materials, personal experiences or insights that might help others prevent or solve similar problems, training and workshop materials, etc.

The interview data showed that the UTAUT needed to be further refined for studying knowledge sharing in crosscultural settings. While insightful findings were identified for each of the four behavior influencing areas (e.g., Performance Expectancy, Effort Expectancy, Social Influences, and Facilitating Conditions), truly meaningful conclusions emerged in three specific areas: (i) there was a perceived disconnect between knowledge sharing system usage and daily job performance; (ii) language was primarily a one-way barrier to knowledge sharing; (iii) cultural conservatism and perceived differences in practices hindered Chinese users' willingness to share and as a result gives the false impression that Chinese employees hoard information. Some Chinese participants did mention several culture-related reasons for not posting. However, among the reasons for not posting much, the most significant one was that KE was too new to Chinese users and they did not well understand how the KE worked; while American users were exposed to KE much longer and so they knew KE better, felt more comfortable about posting. According to Rogers' (2001) Diffusion of Innovation theory, KE was on different diffusion stages for Chinese and American users. More interestingly, participants from both cultures mentioned similar factors time and again for using or not using the KE, such as using the KE in order to gather general information/opinions from a broad audience, and taking advantage of personal networks first while turning to the KE as a last line of defense. The findings could be associated with the influence of the company's strong organizational culture and the recent rapid changes of the overall Chinese cultural patterns. Therefore, the phenomenon of "less active Chinese users" was not necessarily a national cultural consequence.

# **Methodological Challenges**

Although I have designed some procedural tools for data collection and analysis that are appropriate for studying knowledge sharing in online and cross-cultural contexts, I have faced some methodological challenges as well. The following are specific issues: (1) How to study cultural factors and system factors together in a systematic way and still be able to identify which factor makes what differences? (2) How to develop or find a better cultural model that can guide future research in culture and collaborative technologies? (3) How to approach participants from different cultures by using the same instrument that can insure comparability and also make all participants feel comfortable to talk as much as possible? (4) How to more efficiently transcribe non-English interviews into English and still ensure accurate representation for non-English speakers? (5) Based on the findings from smaller qualitative studies, how to develop instruments, such as survey questions, for larger-scale studies, and how to deal with the possible under-representation/over-representation of knowledge sharing behavior when self-reported data are used?