

# Chapter 61

## Roles of Culture for Knowledge Sharing in Asian Virtual Teams: A Case Study

**Jinghuai She**

*Capital University of Economics and Business,  
China*

**Xi Zhang**

*Tianjin University, China*

**Patricia Ordóñez de Pablos**

*University of Oviedo, Spain*

**Weiguang Wang**

*Chinese Academy of Sciences, China*

### ABSTRACT

*Knowledge sharing is a critical component for successful knowledge management. For multi-culture virtual teams, the difference of culture and the limitation of virtual organization make it especially harder for knowledge-sharing management. This chapter addresses the culture and structure for knowledge sharing in virtual teams. Then, the case of Asian virtual teams is studied to show evidence for the established model. Discussion focuses on managing conflict and maximizing contribution.*

### 1. INTRODUCTION

Knowledge sharing in virtual teams is complex. (T. Carte & L. Chidambaram, 2004). A number of research questions arise from the interplay between elements of structure and culture in global virtual team contexts:

- To what degree can we find evidence of the influence of selected variables?
- To what extent is the influence of proactive intervention?

- What is the impact on team dynamics (with special attention to knowledge sharing) of the interplay between aspects of adaptive and proactive structure?

This chapter uses data collected in conjunction with an Asian virtual team project to empirically examine aspects of adaptive and proactive structure to contribute to knowledge in this area. Propositions and associated evidence are provided. The study is exploratory by nature with implications for future research.

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## **2. LITERATURE REVIEW**

Aspect of structure theory (AST) combine with culture to provide a background for the study at hand with special attention to knowledge sharing and the role of technology. This review is kept purposely brief and, by no means, is comprehensive. Rather, it serves to provide a background to salient issues addressed in the study at hand.

### **2.1 Structure Theory**

Giddens' structure theory focuses the study of communities from an institutional perspective albeit without particular attention to IT (Giddens, 1979). AST provides a "model that describes the interplay between advanced information technologies, social structures, and human interaction" (DeSanctis & Poole, 1994). DeSanctis and Poole posit that socio-technical outcomes are based on the social interaction derived from the combination of four sources of structure: technology (features & "spirit"), task (task knowledge or rules), organizational environment (social knowledge or rules of action), and the group's internal system (e.g., styles of interacting) (DeSanctis & Poole, 1994). These four sources of structure interact to create boundaries around teams, and the incentives and disincentives for developing relationships with team members.

Manzevski and Chudoba (2000) classified AST constructs especially suitable for virtual team study. They go on to study three global virtual teams and draw a number of observations positively supporting aspects of AST. They recognized global virtual team dynamics as a series of interaction incidents with emergent patterns supporting (when effective) a relatively limited number of structures. In this sense their work is consistent with the perspective of Gersick (1988; Gersick, 1989) who noted a punctuated equilibrium nature of team interactions in face-to-face

teams. Manzevski and Chudoba (2000) conclude that "within interaction incidents the medium and form are selected to match the function, but across incidents over time, the function is modified to match the medium and form." This dynamic has also been noted by Rutkowski et al. (Rutkowski, Vogel, Bemelmans et al., 2002; Rutkowski, Vogel, Genuchten et al., 2002).

DeSanctis and Poole (1994) proposed that organizational actors should be able to manage AST's "mutual influence of technology and social processes" such that certain outcomes are more likely to result than if the systems were allowed to evolve on their own. This sets the base for proactive structure through management intervention in the context of knowledge management. Griffith (2003) suggest technology and organizational practices in ways likely to create better knowledge flow acting as a "trigger" for adaptive structure. Griffith et al. (2007) note that organizational practices and technology tools can be used to adjust the situation such that knowledge capabilities can be increased in high tech environments.

### **2.2 Culture**

Culture is an important aspect of virtual team work. Saunders, et al. (2004) consider culturally based perspectives of time in the context of virtual team interactions. This is also consistent with the dynamics noted by Rutkowski et al. (Rutkowski, Vogel, Bemelmans et al., 2002; Rutkowski, Vogel, Genuchten et al., 2002). Vogel et al. (2001) especially note the influence of professional culture as well as national culture in global virtual teams which further complicates knowledge sharing. For example, engineers may have difficulty in sharing knowledge with marketing professionals based on professional norms of behavior and expectations. The impact and implications of culture can fill volumes of any book. No further explanation is presented here to more detail on the current study.

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