### Chapter 6

# Factors Affecting Usage of Information Technology in Support of Knowledge Sharing:

A Multiple Case Study of Service Organizations in Hong Kong

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### **ABSTRACT**

This study explores key factors affecting the usage of information technology (IT) tools in support of knowledge sharing in service organizations in Hong Kong. In a case study of five firms, the usage of IT tools is influenced by an array of factors acting as enablers, barriers, and motivators. The findings support extant theories on knowledge management (KM). This research discovers relationships between multiple factors and the usage of IT tools for knowledge sharing at various hierarchical levels. Operational factors like perceived usefulness, perceived ease of use, staff capability, and nature of work induce higher usage of IT for knowledge sharing. These findings and related analyses have managerial implications for firms engaging in service business.

#### INTRODUCTION

Hong Kong, a Special Administrative Region of the People's Republic of China, is a free economy with service industries as the main pillar, covering sectors like finance, trading, property development, IT and telecommunications, tourism and logistics. Hong Kong serves as a "leading gateway into China" with growing and deepening economic ties with the Mainland (Congressional Research Service, 2007). A leading business hub in Asia, Hong Kong is also the third global financial centre according to Chen (2010).

With the widespread use of the Internet and telecommunication technologies comes a whole new age of globalization and levels the playing

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field as never before (Friedman, 2005). Hong Kong has to widen its economic base and to speed up the development of a knowledge-based economy. Firms in Hong Kong have to explore ways to enhance competitive edge in doing business, including the need to strengthen organizational capabilities and staff competency in utilizing IT in knowledge sharing.

Service organizations employ a relatively large proportion of knowledge workers than other types of organizations. Know-how held by individuals in service organizations is an intangible but essential part of the service process and could become a competitive advantage; it is therefore desirable for knowledge to be replicated and shared within a firm, in particular for service organizations with comparatively more knowledge workers, which seek opportunities for growth (Johnston & Clark, 2008). As service organizations form a core part of the Hong Kong economy, it is necessary to know how local service organizations are positioned in the use of IT in support of knowledge sharing and how they can create value to stay competitive in a dynamic and customer-oriented environment.

Literature on KM shows that social, cultural and operational factors affect the use of IT for knowledge sharing. However, there is little research on the interplay of these factors, the relative impact of each of the factors and how they affect the different hierarchical levels in an organization. Given the practical concerns highlighted in the above paragraphs, it is imperative to identify the missing links.

This paper examines KM from the resource-based perspective and the use of IT in a KM context. Research questions focus on cultural and operational factors and their impact on the usage of IT in support of knowledge sharing within firms. Findings of the case study are analyzed and evaluated against insights gained from extant literature. This study casts light on how to better utilize IT tools in support of knowledge sharing when managing businesses in Hong Kong.

### LITERATURE REVIEW

### Knowledge as a Resource to Increase Competitive Edge of Firms

Differential firm performance is attributed to variance in resource endowment (Penrose, 1959). According to Resource-Based View, a firm achieves competitive advantage with its unique resource (Barney, 1991). Knowledge is regarded as the most significant resource of a firm (Alavi & Leidner, 2001). The ability to integrate the knowledge of firm's employees is a distinctive capability (Grant, 1996) and a dynamic resource (Spender, 1996), thus improving firm performance and enhancing its competitive advantage (Bogner & Bansal, 2007; Connell, 2004; Gold et al., 2001; Kogut & Zander, 1992; Sharkie, 2003; Zack, 1999).

Explicit knowledge is "knowing what" that is codified and can easily be communicated, while tacit knowledge refers to "knowing how" in a subject matter which can only be revealed through application (Grant, 1996). Knowledge is created through dynamic interactions among individuals in the form of socialization, combination, externalization and internalization (Nonaka, 1994). Exchange of information may also generate knowledge (Nahapiet & Ghoshal, 1998). Information is converted to knowledge once it is processed in the mind of individuals (Alavi & Leidner, 2001).

### **Effectiveness of IT for KM**

KM is defined as a means to acquire, organize, sustain, apply, share and renew an organization's knowledge with a view to enhancing performance and creating value (Davenport & Prusak, 1998). An effective KM strategy to out-compete rivals is to integrate knowledge from individuals at the middle and junior management level to bring about innovations in technology and/or strategies for products and services (Grant, 1996; Sharkie, 2003; Zack, 1999).

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