

# Chapter 15

## Why Information Systems Replication Strategy Fails in Transnational Operation

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### ABSTRACT

*In search of cheaper resources and being able to serve nearby market more efficiently in order to maintain and improve their market position in a global economy, companies relocate, extend, or establish new production facilities overseas. Because of this, how to manage the Information Systems (IS) that support transitional activities within companies has become an important agenda not only in the business but also in the academic community. At a glance, replicating information systems and value chain that a company already has in the new facility overseas is seemingly a cheap and easy option. Nevertheless, in practice, it is not a trivial task, and at its worst, the IS can become obsolete. This chapter explains why replication strategy does not always work, and drawing on the practice lens approach, it posits that any changes in technology-in-use are the outcome of an ongoing structuring process where people constitute and reconstitute the structure of an IS in use. The chapter demonstrates that the structure of an IS is not defined a priori but emerges from daily use of the system, along with people's understandings of the system, and of its role in the context of organisational routines. On this view, any challenges arising from the attempt to replicate the IS can be regarded as largely inevitable, since the structures embedded and enacted in the use of system, along with the practices that in turn recursively structure the use of the system would also have changed.*

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## **INTRODUCTION**

A distinctive characteristic of a global economy is the increasing number of transnational activities that are fuelled by fundamental economics of comparative advantage and by competition at both local and global level (King & Sethi, 2001). Companies relocate, extend, or establish new production facilities overseas in search of cheaper resources or being able to serve nearby markets more efficiently. Information systems (IS) no doubt play a significant role in supporting multinational corporations (MNCs) to perform transnational activities in particular coordinating value chain activities and information flows within and between companies. The strategic alignment literature emphasizes that the design of IS and the management of IS resources should reflect a company's transnational activities (Ives, Jarvenpaa, & Mason, 1993). For example, in the case where value chain configuration is high a company tend to replicate their existing value chain as well as the existing IS that have already been used to support the value chain activities in its overseas operation (Chow, 2004; Markus, Sia, & Soh, 2012; Niederman, Alhorr, Park, & Tolmie, 2012). Evidence however suggests that the replication of an IS from one location to another is seldom as straightforward as one might expect. The system interface may have to be changed for example, in order for it to be usable and accepted by local users (Burton-Jones & Gallivan, 2007; de Guinea & Markus, 2009); business practices supported by the system may have to be redesigned in order to accommodate local culture and work practices which in turn may affect system use (Hsiao, 2007); while specific rules and procedures built into the system may have to be modified, so that the system abides by local governmental directives (Zhu & Kraemer, 2005; Zhu, Dong, Xu, & Kraemer, 2006). Without addressing any required changes companies risk generating a quite different output from and ultimately non-acceptance of an information system in its new location.

This chapter aims to contribute to the existing knowledge and understanding of global IS management by demonstrating that managing and replicating value chain and an IS that supports it in MNCs is not a trivial task and at its worst the IS can become obsolete. To achieve this aim a qualitative case study was carried out to examine the process of replication of an e-procurement system within an MNC in Asia.

The chapter is organized as follows. The next section outlines the theoretical background to the study and introduces the concept of a practice lens. This is followed by a description of the research setting along with the research design, data collection and data analysis methods used. Section four presents the study's findings. The paper concludes with a discussion of the issues arising from the study and their implications for global information systems management.

## **RESEARCH PERSPECTIVES**

### **Theoretical Background**

Business-IS strategic alignment has long been argued as a critical success factor for successful IS adoption; and the studies of global IS management also stress the importance of such alignment (Ives, Jarvenpaa, & Mason, 1993; Katz & Townsend, 2000; King & Sethi, 2001; Mayasandra, Pan, & Leidner, 2011; Preston & Karahanna, 2009). Bartlett and Ghoshal's (1989) work on typology of MNCs is widely used in the research of global IS management to understand MNCs' overseas operation strategies and practices that are organized according to these strategies. Bartlett and Ghoshal (1989) categorise MNCs into four categories including: international, multinational global and, transnational corporations according to strategic role that overseas operations play in these companies. International corporations tend to view their overseas operations as distant outposts whose role is to support the parent company

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