

## Association for Information Systems AIS Electronic Library (AISeL)

---

AMCIS 1997 Proceedings

Americas Conference on Information Systems  
(AMCIS)

---

8-15-1997

# The Fit Between Business and IT Structure in Globally Competing Firms

Dinesh A. Mirchandani  
*University of Kentucky*

Follow this and additional works at: <http://aisel.aisnet.org/amcis1997>

---

### Recommended Citation

Mirchandani, Dinesh A., "The Fit Between Business and IT Structure in Globally Competing Firms" (1997). *AMCIS 1997 Proceedings*. 275.  
<http://aisel.aisnet.org/amcis1997/275>

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 1997 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

# The Fit Between Business and IT Structure in Globally Competing Firms

Dinesh A. Mirchandani

C.M. Gatton College of Business and Economics  
University of Kentucky, Lexington, KY 40506-0034

## Introduction

Jarvenpaa and Ives (1993) have studied the fit between business and IT structure in globally competing firms. On the basis of information processing theory (Galbraith, 1973), they predicted that the strategic orientations of these firms (which are reflected by their business structures i.e., multinational, global, international, and transnational), would be associated with specific ways IT activities were organized (i.e. respectively as independent operations, headquarters driven, intellectual synergy, or integrated IT).

They however found that in nearly half of the firms surveyed, the way IT activities were organized (i.e., the IT structure) was inconsistent with the way the organization was structured (i.e., the business structure). They explained this misfit by proposing contingency variables (such as quality of hardware vendor support, quality of software vendor support, senior management support, quality of local telecommunications support, IT management support, pressure for economies of scale in systems, and subsidiary resistance) that could possibly influence the IT organization of the firm. The influence of these contingency variables on the IT organization in globally competing firms is yet to be studied empirically.

This research builds on Jarvenpaa and Ives' (1993) work. Its purposes are to (1) test the information processing theory for business and IT structure in globally competing firms; (2) assess the potential influence of moderating variables - i.e., Jarvenpaa and Ives' as well as other contingency variables such as those of Deans (1989) and Deans *et al.*, (1991) on the fit between business and IT structure; (3) further test the information processing theory by assessing the effectiveness of IT management of those firms exhibiting and not exhibiting fit; and (4) finally, test the impact of the moderating variables on the effectiveness of IT management.

## Theory Overview

Information processing theory (Galbraith, 1973) implies that an appropriate organizational fit is achieved when the information processing capability provided by an IT structure matches the information processing requirements of a business strategy. Thus IT activities should be structured so as to harness the same strategic orientation as perceived to be harnessed by the organization's business structure (Jarvenpaa and Ives, 1993).

Firms that compete globally can choose to follow three distinct strategic orientations (Bartlett and Ghoshal, 1988): **local responsiveness**, **efficiency**, and **shared learning**.

**Local responsiveness** requires the firm to be able to deal with the varying needs of many different markets, products, suppliers, and customers. This is called a **multinational** firm. According to the information processing theory, decentralized, standalone information systems, i.e. **independent operations**, can provide the necessary capability to meet the requirements.

In following the second strategic orientation, i.e. **efficiency**, the **global** firm has great need for cross border information processing. The amount of information shared across country units is high, but the information flows are routine and structured (Jarvenpaa and Ives, 1993). According to the theory, standard operating procedures and vertical information systems will provide the necessary **headquarters driven** information processing across country units.

The third strategic orientation, i.e., **shared learning**, focuses on the development and diffusion of innovations from headquarters to subsidiaries. This type of firm, the **international**, requires rich

information processing mechanisms that can manage multiple perspectives, allow quick feedback, and provide broad bandwidth for verbal, audio, graphic and textual cues. Such mechanisms are referred to as **intellectual synergy**.

Firms that simultaneously develop **competency in all three strategies** are termed as **transnationals** (Bartlett and Ghoshal, 1988). Information processing theory predicts that these firms require **integrated IT**, i.e. formalized, highly structured information systems, integrated databases, high bandwidth systems, and local databases (Jarvenpaa and Ives, 1993).

### **Methodology Overview**

Subjects will be corporate chief information officers (CIOs) of firms with headquarters in one country and subsidiaries in other countries. They will complete a postal survey. The instrument will contain validated measures for identifying the business structure, dimensions of IT structure, moderating variables of IT structure, as well as effectiveness of IT management. Multivariate statistics will be used to analyze the data.

(References available upon request from author)