Chapter IV

A Framework for Research into Business-IT Alignment: A Cognitive Emphasis

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ABSTRACT

Contemporary empirical research into business-IT alignment is almost entirely behavioral in its focus. It explores the alignment issue by examining the ways in which organisations behave. In contrast, few studies have attempted to investigate the issue from a cognitive perspective. Managerial cognition is an area of growing interest and importance in strategic management. This chapter proposes a framework to guide research into business-IT alignment. It reviews alignment research and also considers some of the cognitive theories and methodologies that may be appropriate for the study of alignment.

INTRODUCTION

One of the top two concerns of business and information systems (IS) executives is the need to improve alignment between information technology (IT) and business strategy (Galliers, Merali, & Spearing, 1994; Watson &

Brancheau, 1991). Known as business-IT alignment, this issue is an important concern within the practitioner community.

The 1990s saw great strides in the conceptual development and in the empirical examination of different aspects of alignment. A frequently cited conceptual work on alignment is Henderson and Venkatraman's (1992) Strategic Alignment Model. This framework describes the interplay between IT and business domains. Bulk of the empirical investigations on this subject focuses on relationships between business strategy domains and IT strategy domains and their impact upon firm performance (Burn, 1996; Chan, Huff, Copeland, & Barclay, 1997; Tan, 1995, 1997). These studies agree that alignment is important to IS effectiveness and firm performance. Another aspect of alignment research concerns the conditions under which alignment may be achieved. Several studies have examined factors that influence alignment (Broadbent & Weill, 1993; Luftman, Papp, & Brier, 1999; Reich & Benbasat, 2000). All the above studies may be considered behavioral in nature and have largely ignored the impact of managerial cognition on organisational action.

Cognition in organisations is an area of growing interest and importance in strategic management and research (Huff, 1990; Walsh, 1995). The emergence of this research perspective in strategic management stems from a growing acceptance of the notion that organisations possess cognitive capabilities and that organisational development is dependent upon collective or shared managerial cognition (Stubbart, 1989). Other works on cognition within organisations have inferred that a link exists between managerial cognition and organisational action (Axelrod, 1976; Calori, Johnson, & Sarnin, 1992; Weick, 1984). Furthermore, there are those who contend that organisations consist of systems of interpretation with organisational members attempting to make sense of their constantly changing environments (Weick, 1995, 2001).

A relatively small but growing body of cognitive research can be found in the IS field. It primarily addresses the areas of development, implementation, and use of IT (DeSanctis & Poole, 1994; Griffith & Northcraft, 1996; Orlikowski & Gash, 1994). Despite increasing acceptance of cognition in IS research, it is not apparent that a cognitive stream exists within the discipline of business-IT alignment.

This chapter calls for increased cognitive emphasis in business-IT alignment research. It proposes a framework guiding business-IT alignment research. The framework takes into account the behavioral/cognitive contrast in strategic management and hopes to offer researchers in the field some guidance in the study of alignment from a cognitive approach.

The chapter begins with an introduction to business-IT alignment—a definition and a historical overview. A framework summarizing recent alignment research is then presented. Noteworthy literature is discussed using this framework: types of published alignment research are identified, and areas that need further attention are suggested. Next, we consider some of the cognitive

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