Chapter VI

Lines of Advance in Global Information Technology Management: American/West European Approach

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ABSTRACT

During the last decades, numerous theoretical frameworks have been developed in the field of general management. Each theoretical framework has proved useful to explain specific questions about the structure, processes, or performance of the modern firm. In this study we try to propose some connections between general management literature and IT literature. Some of the most important management theories, such as the Transaction Costs Economics, the Agency Theory, the Resource-Based View, and the Knowledge- Based View can be useful to explain specific IT issues. The final goal of this chapter is to propose several lines of advance in global IT using different theories or frameworks as the basis for future research.

INTRODUCTION

Information technology (IT) has proved to be an engine for social and economic change in the last few decades (Castells, 1998). Organizations at the beginning of the 21st century have not only played a part in technological change but have constituted the principal agent of modernization and progress in society in general. Various researchers in management have studied the effects of IT on organizations, leading to a growing body of work in this area.

Thus, among areas of research, the structural effects of IT have been studied (Orlikowski & Robey, 1991), the links between investment in IT and performance (Brynjolfsson, Malone, Gurbaxani, & Kambil, 1994), and the interrelations between the human element and IT (Ross, Beath, & Goodhue, 1996; among others). From a global perspective of business, the IT implementation and diffusion (Palvia, 1997) with emphasis in different cultures and countries (Davis, 1999; Enns & Huff, 1999; Palvia, Palvia, & Whitworth, 2002) have been analyzed. From the formal point of view, the new technologies have been analyzed from practically all approaches and aspects of Economic and Organizational Theory. However, despite the variety of work done, there has been little effort at integration to put forward a complete and global view of the knowledge accumulated during the past few decades.

In this chapter we attempt to make up for this lack of research and give a synopsis of previous work in an attempt to advance our understanding. We propose a series of future lines of research, the majority of them previously unexplored. To do this, we have structured the work into a first part in which we analyze the specialized literature, pointing out the different theoretical perspectives from which the effects of IT on businesses have been studied. Second, we organize the proposed research according to various formal criteria and with regards to content. We end this chapter with an analysis and discussion of the proposed areas of research, and we draw some final conclusions.

APPROACHES IN THE STUDY OF IT IN MANAGEMENT

IT has long ceased to be a specialized area restricted to qualified professionals of strictly technical backgrounds. Even as early as the 1960s, a number of studies appeared that attempted to analyze – although in a very speculative manner – the importance that IT might have in the future in aspects such as inter-organizational communications (Kaufman, 1966) or the generic impact in human communication and business (Licklider, 1960; Licklider & Taylor, 1968). Other authors were interested in problems concerning the management of information administration systems or more generally in general information systems (Ackoff, 1967; Dearden, 1966). Research began at that point which, from the point of view of management, tried to explain the behavior of the new technologies in the business system and the effect it might have on the different characteristics of the company, such as size, structure, processes and performance (Barney, 1986; Prahalad & Bettis, 1986).

Specifically, the literature has been concerned with studying three questions related to the presence of IT in the company (see Table 1). First, there was the need to resolve questions arising from the introduction of the new technologies into the companies, from a purely descriptive point of view, based on innovative companies and normally on the direct experience of the author. The question being answered was *what does this type of technology do, or what can it do in the company*, paying attention to the different functions it carries

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