

Chapter 60

Enterprise Information Systems Adoption in Iberian Large Companies: Motivations and Trends

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ABSTRACT

Information Systems (IS) and Technologies assume a wide variety of roles within companies, ranging from operational to strategic support of the company. This fact puts pressure on managers, who are required to manage these investments properly. This chapter presents a study conducted with several Chief Information Officers from large Iberian companies with the purpose of identifying and characterizing the roles played by IS and the motivations currently behind their adoption. The findings of this study reveal the reasons why IS and technologies are being adopted by Iberian companies are evolving and that, while the adoption of certain types of systems such as Enterprise Resource Planning systems is now consolidated, the adoption of other systems like Business Intelligence is expected to increase significantly in the near future.

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INTRODUCTION

Over the last few decades Information Technologies and Information Systems (IT/IS) have played very different roles within organizations: much has changed from the time when computation surged, where IT/IS were used merely for operational support, to the most recent role of being one of the drivers of an organization's competitiveness (Varajão, Trigo, Figueiredo, Barroso, & Bulas-Cruz, 2009)

Companies currently use multiple solutions of IT/IS to support their activities at all management levels and few of them try to conduct their businesses without seeking to exploit the advantages of IT/IS solutions (Trigo, Varajão, Figueiredo, & Barroso, 2007). Among the systems adopted by companies we can find Enterprise Resource Planning (ERP) systems, Customer Relationship Management (CRM) systems, Business Intelligence (BI) systems and many others.

The great diversity of IT/IS applications implies a great diversity of motivations for their adoption. For instance, the inherent set of motives for the adoption of a CRM system will probably be different from the set of motives for investing in a new version of an operational system. Unlike, the motives for adopting a specific system of BI could be the same as those leading to the acquisition of a particular expert system.

Nevertheless, there is a set of generally inherent motivations to IT/IS adoption that is important to identify and understand in order to conduct investments. These motivations may serve as a guide to maximizing the degree of satisfaction with IT/IS investment initiatives, given the generally significant sums involved in these investments.

In this chapter, we present the results obtained from a study carried out with Chief Information Officers (CIOs) of Iberian companies, namely: current motivations for IT/IS adoption; current implemented systems; current role of IT/IS; and trends for IT/IS adoption.

Next, after a literature review, we present the scope, the research process, the analysis and discussion of the results obtained as well as some conclusions.

BACKGROUND

A common approach to examine the types of IT/IS solutions used within organizations is to categorize their roles at various management levels within the organizational structure (Belle, Eccles, & Nash, 2003; Laudon & Laudon, 2005), according to Robert Anthony's (1965) pyramid of operational control, managerial control and strategic planning.

At the lowest level of the organizational hierarchy we find the transaction processing systems (TPS), which support the day-to-day activities of the business. These applications are normally the first to be computerized and are characterized by large numbers of transactions, updating the corporate database. These systems are usually used by clerical staff, who conduct routine daily business activities such as issuing of invoices, following well-defined business procedures. Low-level managers and supervisors, responsible for monitoring transactions and dealing with any problems that may arise, occupy the next level in the organizational hierarchy. Management Information Systems (MIS) use the data collected by the TPS to assist the operations and line managers with the control of business process activities, usually by means of standard, regular reports. Tactical management occupies the next level in the organizational hierarchy. These managers are responsible for ensuring that plans and targets set by senior management are achieved. They decide on budgets, set targets, identify trends and develop short-term business plans. To achieve this, tactical managers need to have more interactive applications that actually assist them with the decision making process of middle management.

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