Chapter 34

The Importance of Information in the Generation of Competitive Value: Analysis of Investment Impact in Information Technologies

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ABSTRACT

Companies assume information systems, particularly information and communication technologies, as strategic tools for the generation of competitive advantages. However, it is in the information, as the main economic resources in the information society, that should be concentrated management attention. Only information can provide the achievement of competitive advantages. It is important that management, in the various organizational domains, can ensure that the information architecture satisfies the different functional requirements corresponding to the different organizational areas. It is also important to ensure that the investments made in systems and technologies generate economic value to the organization.

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INTRODUCTION

Currently, information is an important economic and social resource for organizations, namely in the planning of activities, in the organization and management of resources and control of objectives (Reis, 1993). Analysis of work processes, coordination and control of activities, simplification of procedures and reporting, among other examples, are management functions highly dependent of information and essential to the generation of efficiency and effectiveness in a highly competitive context (Anunciação, 2014). The high dependence that management functions has on information brings out the relevance of information management as a top management responsibility (Anunciação, 2008).

This dependence of information on the management functions highlights the importance of their management in the organizational context, since it is essential to ensure a permanent flow of knowledge appropriate to the needs of managers and to the economic sustainability of organizations.

The centrality of information in the management context is essentially felt at two levels. At the internal level, in the identification and control of organizational factors that condition the efficiency and effectiveness of organizational performance and, at the external level, in the identification of market requirements and competitive strategies. As the first level is easier to reach, since it is internal information to the organization that respects its activities, resources and performance, it constitutes, in the strategic and competitive domain, the first axis of intervention of the management (Freire, 1997). Because it is the first area of intervention of management, it is important to know the organization and, for this, it is necessary to access the information and be able to use it in order to benefit from the competences that it incorporates. This knowledge presupposes the existence of a reference architectural framework essential to its understanding, management and the generation of economic value.

This economic value, in the internal domain of the organization, must be the result of the management of a set of resources and organizational factors with a view to a superior competitive positioning of the organization in the markets where it operates (Kotler & Keller, 2012) (Porter, 1995). At the internal level, this value can be the result of economic gains in the search for process efficiency, efficient management of resources, optimization of cost structure, among other examples.

But the economic value of information must also be sought in the external environment, for example, in identifying customer needs and requirements, in differentiating products or services, in innovation of distribution channels, among other examples.

This demand for better competitiveness requires that information be classified as an economic resource and, as such, be properly managed (Zorrinho, Serrano & Lacerda, 2003). This is a management responsibility. As with any resource, information is also associated with a set of characteristics that must guarantee its value. Particularly, with regard to the decision-making process, the information must be reliable, timely, accurate and integrated. These are core attributes to ensure value in decision making and minimize risk in management.

This paradigm is most evident when we consider the globalization of economic activities and the emergence of the so-called Information Society. In them, information emerges as an economic resource on a global scale. The development that has taken place, in particular with the provision of products and services on a global scale, has allowed the development and dynamism of all sectors of the economy, and information and communication technologies are now the main driving force of the economic, social and even cultural policies (Anunciação & Zorrinho, 2006). Companies have technological tools of great potential in information processing, but, at the same time, they are more dependent on them, which pose
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