


Impact of Management Automation on the Processing of Business Information

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INTRODUCTION

Presently, the importance of information in companies is increasingly relevant. Information is a necessary and important resource which is generated, through each of the company's processes. The technologies acquired by companies have evolved over time, to become more sophisticated and necessary to achieve competitive advantages. Information systems have progressively become essential in any organisation, because, with regards to them, coordination is made easier among the people involved in it. Therefore, it is understood that the information system of an organisation is the set of people and material means, which allow the information to be available to whoever needs it, when it is needed and in the recognised format (Solana, 2014). An information system will perform the activities of data capture, storage, processing and distribution of the resulting information. It can be said that the main functions performed by these systems according to Arjonila and Medina (2009), will be to: provide information to the top management, collaborate in the achievement of objectives and achieve competitive advantages. They are essential to help managers keep their company in order, analyse everything that goes through it and create new products that place the organisation in a good place. Therefore, companies that use information systems will have a greater component of adaptability to changes and will be prone to the identification of niches in the market and improvements to processes (Laudon and Laudon, 1996).

Managers are responsible for designing the information system in the company and for users to adapt and use it in their work in the best possible way (Ewout and Per, 2018). One of the specific information systems that companies use generally is integrated software such as Enterprise Resource Planning (ERP) systems, which is responsible for planning resources and managing information, whose structured form can meet the demand of the management needs of the company (Benvenuto, 2006).

With this study, we seek to understand the extent to which new information and communication technologies aid the productivity of the company, while on the other hand, to see the great impact that it provokes in industrial relations. To this end, a process of implementation and the use of an ERP in a company has been observed. In addition to this, the study has focused on knowing the satisfaction and utility perceived by users of this system. Specifically, the study was carried out in a company in the winemaker sector located in Jerez de la Frontera (Cádiz, Spain).

DOI: 10.4018/978-1-7998-3473-1.ch073

In order to achieve the proposed objectives, the work was divided into different sections. First, it will explain the importance of information and the basis upon which information systems are based, as well as how they have evolved and the strategic role they play in companies. On the other hand, we delved into a specific information system, the ERP, carrying out a theoretical course on the concept of ERP, as it has evolved throughout history, the process of implementation and the reason for which the company decided to harness it and the advantages of using this type of system. Moreover, observing how its implementation benefits or affects the operation of the company and its employees.

BACKGROUND

The ERP

In the 60s and 70s of the last century, computer systems were introduced in organisations and companies dedicated to software development were founded. One of the biggest impacts carried out by the information systems was in the management of inventories and in the planning of production, specifically in the area of logistics, because thanks to these systems and the appearance of the computer, the management of sales and order distribution activities were facilitated (Orlicky, 1975). The provision of computers and systems capable of handling volumes of information at a speed that had never existed before, gave rise to companies' acquisition of systems such as Material Requirements Planning (MRP) as they were introduced. Companies began to acquire these types of systems to keep track of their activities in a precise manner. According to Cooper and Zmumd (1990), the objective with which the MRP methodology was developed was to replace the traditional information systems of production planning and control.

At the end of the 70s, the concept of MRPII (Manufacturing Resource Planning) was born, considering new processes associated with production, which were; the forecast of the demand, supply and the logistics of delivery. MRP systems evolved to help companies reduce the inventory levels of the materials they used because when planning their production requirements, premium is placed on only on what is demanded, resulting to reduced costs because they bought only what was necessary (Kapp, Latham and Ford-Latham, 2001).

Generally, the company that integrates an information system, seeks to improve its competitiveness, complete its decision-making process with increased productivity, as well as reduce its operating costs and delivery times. Menezes and González (2010) explain that in order to gain competitive advantage through ERP, a period of several years is usually necessary for implementation, which includes: The integration of existing information systems, the adjustment of the organisation with the ERP system, realisation of re-engineering and capacity of system configuration and its integration capacity.

Benvenuto (2006) defines ERP systems, as a global system of resource planning and information management, which in a structured way, can meet the demand of the company's management needs. Its optimisation leverages a firm's absorptive and adaptive capabilities (Groenewald and Okanga, 2019). ERPs are formed by modules that create workflows among different users which avoids repetitive tasks and improves real-time communication between all areas of the company. ERPs are information systems that employ Information Technology associated with business process engineering, for the redesign and integration of business processes and support operations within the framework of company strategy (Menezes and González, 2010). The ERP software plans and automates many processes, with the purpose of integrating information in the company and is responsible for eliminating the complexity of linking the different areas of the business (Hernández, 2006; Groenewald and Okanga, 2019). The article "The

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