

Chapter 7.9

Elements that Can Explain the Degree of Success of ERP Systems Implementation

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ABSTRACT

The implementation of an Enterprise Resource Planning System (ERP) is a risky and high cost action, even more when we are dealing with small and medium sized enterprises. Although many studies have shown the importance of paying attention to critical success factors in ERP implementations, there is still a high degree of failures and bad experiences around ERP implementations. Most literature has shown experiences of success and failure coming from large sized firms. But there is a lack of information of what has happened in the area of small and medium size firms, and for some economies, they are essential. In this chapter, we try to show a model containing the main elements that can better explain the degree of success and of failure in ERP implementations by providing

examples mainly affecting to the circumstances of small and medium size firms. In our model, we propose 5 main groups of variables affecting final results in ERP implementations.

INTRODUCTION

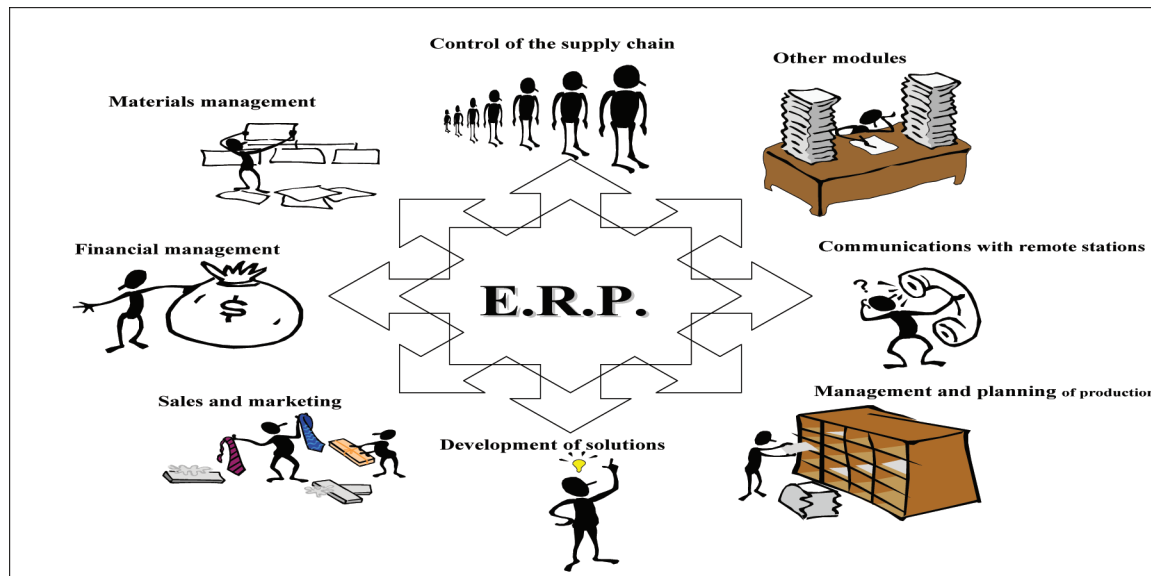
In the last years, many firms have implemented ERP systems, particularly in the industrial sector.

ERPs, enterprise resource planning systems are software packages that allow a complete management of the different processes in a firm. This way by using a modular system, the ERP systems also support different functional areas such as production, sales, distribution, finance, human resource management, maintenance, and so on. (Rashid, Hossain and Patrick, 2001).

They make easier the planning and controlling of all the resources, material, financial and human

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Figure 1. An ERP schema



ones, by warehousing the whole information for the firm's decision making process in a unique centralised database (Mabert et al., 2003:303).

The main objective that firms usually seek in ERPs systems is to integrate their activities and organise their processes to make the best of information and communication technologies. However, the implementation of an ERP system has some risks, mainly derived from the great quantity of different resources that the process demands (human and material ones) and the uncertainty in the deadlines. Both questions are directly affected by the way in which the process of implementation is taking place. It is then important to analyse the key factors that can offer better possibilities of achieving success when implementing the system.

In this chapter we try to describe the main causes that can affect to the final results in an ERP implementation. For that reason first of all we include a brief explanation on the literature on ERP system benefits, after that we offer a more detailed discussion about the literature appeared on critical success factors for ERP's implementation, finally we propose a model for firms to take into account ERP's Critical success factors.

The main literature reviews on these factors are the research coming from Clausen and Koch (1999), Holland and Light (1999), Koch (2001), Fui-Hon et al. (2003), Umble, Haft y Humble (2003), Al-Mashari, Al-Mudimigh y Zairi (2003), Finney and Corbett (2007), Kumar et al. (2008), Wang et al. (2008).

The methodologies often used to know about critical success factors are the following ones,

- the studies normally apply surveys and interviews with managers,
- the workers and the external agents implied in the decision making, implementation and use of the system are questioned too.

THE LITERATURE ON ERP SYSTEM BENEFITS

From the nineties, the ERP systems have been one of the greatest investments in IT for the organisations. They are considered one of the best systems that firms can have in order to increase their competitiveness.

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