

Enterprise resource planning (erp)



Definition of ERP

ERP system is a packaged business software system that allows a company to automate & integrate the majority of its business processes, and share common data and practices across the entire enterprise (Seddon, Shanks & Willcocks, 2003). Klaus (2000) further defined the concept of ERP in an easy-understood way.

It can be viewed from a variety of perspectives. First, and most obviously, ERP is a commodity, a product in the form of computer software. Second, and fundamentally, ERP can be seen as a development objective of mapping all processes and data of an enterprise into a comprehensive integrative structure.

Third, it can be identified as a key element of an infrastructure that delivers a solution to business. This concept indicates that ERP is not only an IT solution, but also a strategic business solution. As an IT solution, ERP system, if implemented fully across an entire enterprise, connects various components of the enterprise through a logical transmission and sharing of data (Balls, Dunleavy, Hartley, Hurley & Norris, 2000). Cited in (Li Fang & Sylvia Patrecia, 2005)

When customers and suppliers request information that have been fully integrated throughout the value chain or when executives require integrated strategies and tactics in areas such as manufacturing, inventory, procurement and accounting, ERP systems collect the data for analysis and transform the data into useful information that companies can use to support

business decision-making. They allow companies to focus on core and truly value-added activities (Nah, 2002).

These activities cover accounting and financial management, human resources management, manufacturing and logistics, sales and marketing, and customer relationship management. As a strategic business solution, it will greatly improve integration across functional departments, emphasize on core business processes, and enhance overall competitiveness.

In implementing an ERP solution, an organization can quickly upgrade its business processes to industry standards, taking advantage of the many years of business systems reengineering and integration experience of the major ERP vendors (Myerson, 2002). ERP systems are important tools to help organizations change business and gain sustained competitive advantages via their opponents. Cited in (li Fang & Sylvia Patrecia, 2005)

Characteristics of ERP systems

ERP system has a set of specific characteristics, so these characteristics is derived and based on the literature search on ERP system characteristics in general and the comparisons with traditional IT project. Therefore, in this work the unique features of ERP project were identified and used as a help to understand what they are, what they can do, how they differ from other IT packages, and what characteristics of an ERP development methodology.

This paper identifies the main characteristics of ERP systems such as complexity, integrated and packaged software, which perform number of applications through a number of functions, and manage the organization with the integration of business processes.

For a better understanding, the ERP characteristics regrouped under three dimensions according to their classifications, namely technical, organizational and informational as described below:

Technical dimension includes flexibility, complexity and openness; it refers to the capabilities for applications development offered by ERP systems in comparison to traditional systems. Organizational dimension includes integration, best practices, completeness and change process; it refers to the system's deployment in the firm that is the best reflect impact of system on organization. Informational dimension includes software package relates to the quality and usefulness of the information provided by the system.