Chapter 1.17
A Successful ERP Implementation Plan:
Issues and Challenges

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ABSTRACT

This chapter commences with a brief description of Enterprise Resource Planning (ERP), followed by a discussion of the benefits provided by an integrated ERP system. Next, the chapter describes several critical issues that managers must consider before making the final decision to integrate all the business functions in the organization. These issues are categorized under fundamental issues, people, the organizational change process, and the different approaches to implementing ERP. A well-defined plan is the first step to a successful ERP implementation. Therefore, the chapter concludes with a flow chart, depicting many of the activities that must be included in an ERP implementation plan.

INTRODUCTION

The vision of an integrated information systems started in the 1960s, evolving from the inventory tracking systems to Materials Requirements Planning (MRP), and finally to Enterprise Resource Planning (ERP) (Brady, Monk & Wagner, 2001). Today, almost every organization integrates part or all of its business functions together to achieve higher efficiency and productivity.

ERP is the process of integrating all the business functions and processes in an organization to achieve numerous benefits. First, a single point of data entry helps to reduce data redundancy while saving employees time in entering data, thereby reducing labor and overhead costs (Jacobs & Whybark, 2000). Second, the centralization of

information, decision-making, and control leads to increases in efficiencies of operations and productivity, as well as coordination between departments, divisions, regions, and even countries. This is especially true for multinational corporations (MNC), in which global integration could result in better communications and coordination around the world. The global sourcing and distribution of parts and services could also provide appropriate benchmarks for operations around the world. Third, the sharing of a centralized database provides business managers with accurate and up-to-date information to make well-informed business decisions. Further, it reduces data redundancy while improving data integrity at the same time. Fourth, functional integration will consolidate all sorts of data, such as financial, manufacturing, and sales, to take advantage of bulk discounts. ERP is especially important for companies who are "intimately connected" to their vendors and customers, and who use electronic data interchange (EDI) to process sales transactions electronically. Therefore, the implementation of ERP is exceptionally beneficial to businesses such as manufacturing plants that mass produce products with little changes (Brady, Monk & Wagner, 2001). Nevertheless, the revolutionary and innovative ERP software system quickly expands into other business areas such as finance and retailing. ERP also provides companies with a competitive advantage over their competitors.

IMPORTANT ISSUES TO CONSIDER BEFORE IMPLEMENTATION

Before integrating business functions, managers must consider several important issues that will help them decide whether an ERP integration is the right choice for their organization (Lau, 2003). These pertinent issues are classified under the following categories: fundamental issues, organizational change process, people, and the different approaches to implementing ERP.

Fundamental Issues

First, managers must consider the fundamental issues of system integration by analyzing the organization's vision and corporate objectives (Jacobs & Whybark, 2000). For instance, does management fully understand its current business processes, and can it make implementation decisions in a timely manner? Is management ready to undertake drastic business process re-engineering efforts to yield dramatic outcomes? Is management ready to make any changes in the structure, operations, and cultural environment to accommodate the options configured in the ERP system? Is the organization financially and economically prepared to invest heavily in an ERP implementation?

Next, management needs to decide on the key related implementation and business issues and how to proceed. Certainly, ERP is not suitable for companies that are experiencing rapid growth and change in an unstable environment, are undergoing change in the corporate management and philosophy, or that will be experiencing merger or liquidation in the near future. Understandably, there will be more foreseeable system integration problems if one of the merging companies is in the midst of an ERP upgrade because it must deal with scalability, a new IT infrastructure, and a different corporate culture simultaneously (Radcliff & LaPlante, 1999). Further, ERP integration is not recommended for companies which require a lot of flexibility to succeed or which manufacture products that are constantly changing (Jacobs & Whybark, 2000). Similarly, companies that have very little experience with formal information systems or have constantly changing information systems requirements will not benefit from an ERP implementation.

Finally, organizations need to exploit future communication and computing technology to

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