

# Critical Successful Factors of ERP Implementation

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Implementation of an ERP system is a major investment and commitment for any organizations. The size and complexity of the ERP projects are the major factors that impact the cost of ERP implementations. Different companies may implement the same ERP software in totally different approaches and the same company may integrate different ERP software applications by following the same procedures.

However, there are factors common to the success of ERP implementation regardless the ERP systems they implement and the methodologies they use.

## Project Planning

ERP implementation starts with project planning - setting project goals, identifying high level business requirements, establishing project teams and estimating the project costs. The project planning offers the opportunity to re-evaluate the project at great details. If the ERP project is not justified at the planning phase, organizations shouldn't hesitate to cancel the project. For every successful ERP projects, there're projects that are canceled before implementation.

## Architectural Design

While high level architectural decision is made in the process of ERP vendor selection, it remains a critical successful factor in integrating ERP with other e-business applications, ecommerce applications or legacy systems. Choice of middleware, interface software or programming languages drastically impact the implementation cost and release date.

## Data Requirements

Unlike in-house e-business applications, much of the packaged ERP implementation involves the integration of ERP systems with existing e-business software (CRM, SCM and SFA) and legacy information systems. Appropriate level of data requirements is critical for an ERP to interact with other applications. Data requirements usually reflect details of business requirements. It costs ten times to correct a mistake at later phase of ERP implementation than the effort to correctly define requirements at analysis and design phase.

## Phased Approach

It is important to break an ERP project down to manageable pieces by setting up pilot programs and short-term milestones. Dependent on the IT experience, some organizations choose the easiest piece as the pilot project, while others may implement a mission-critical application first. The pilot project can both demonstrate the benefits of ERP and help gain hands-on ERP implementation experience.

## Data Conversion

Second generation ERP systems use relational database management systems (RDBMS) to store enterprise data. If a large amount of data are stored in other database systems or in different data formats, data conversion is a daunting tasks which is often underestimated in ERP implementations. A two-hour data conversion task could be turned into to a two-month efforts as the result of DBA group's lack of technical experience and management's incompetency or ignorance.

## Organization Commitments

The involvement of ERP implementation goes far beyond IT department to many other functional departments. The commitment and smooth coordination from all parties is the key to the success of ERP project. The commitments come from the understanding of how ERP can benefit each functional department. For example, if the warehouse staff isn't completely sold on the inventory control module's benefits, they may not input the kind of usage data that is essential to the project's success