Abstract

The Enterprise Resource Planning (ERP) implementation projects have high failure rates. Any conflict done during the ERP implementation process leads to errors in business decision making, decrease productivity and profitability, and can affect the project success. The main purpose in this paper using Failure Modes Effects Analysis (FMEA) approach to deal with help in increasing the success rate of ERP implementation projects. This achieved through defining main failures and failure factors related to ERP implementations. The ERP projects are divided into three stages; Pre, during and post implementation. Each stage analyzed to define its main characteristics and its different failures and failure factors. Many risks can affect and lead to failure in ERP Implementation. The risk management techniques are very useful before, during and post ERP Implementation phases. The FMEA approach assesses and evaluates the defined failures and failure factors providing a quantitative measure for each risk of failure. Our study describes how to reduce ERP Failures by decreasing the risk value, so the researchers enhance the FMEA approach by a Proposed Enhanced FMEA approach to measure the risk. Based on the four organizational critical areas the researchers’ uses four sub categorization
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aspects, Financial, Customer, Legal & Regulation, and Business Operation. The Enhanced FMEA approach leading to success of ERP implementation.

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Index Terms

Computer Science

Information Systems

Keywords

Information and Communications Technology (ICT), Information Technology Transfer (ITT), Critical Failure Factors (CFF), User Requirements Specifications (URS).