

3.8 Framework for Evaluating Enterprise Resource Planning Systems

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ABSTRACT

Business organizations are entities engaged in creating value for stakeholders by utilizing the investments made by shareholders. Therefore, organizations in today's business world are concerned about how the shareholders' investments are managed in order to maximize shareholder wealth.

As part of a company's overall business strategy, capital investments are made on various projects. Due to rapid development in the information technology sector and its impact on businesses, organizations have heavily invested on information systems to improve their competitiveness. The literature on the success of implementing large scale information systems around the world is divided; one group says that there is no return at all and the other group says there is substantial evidence to prove that these investments provide long term returns. However, the majority is in the opinion supporting the view that there are positive returns generated from investments made on information systems. Further, it is theorized that most of the perceived benefits or returns are in intangible (soft or non-financial) form & only a few of the returns are tangible (hard or financial). This is considered as the possible reason for the basis of the first group's argument.

We chose Enterprise Resource Planning (ERP) systems because they have an organization-wide scope and because they are large scaled investments. Employing a meta-analysis of literature, we were able to identify that the return of investment is evident in strategic, tactical & operational levels. For example, the ability to create more value for shareholders (measured by ROCE or EPS) is an indication of a strategic return, while improvements in IT supported decision making (measured by ability to plan, schedule & drill-down analysis) is a return experienced at tactical level. Similarly, improvement in process efficiency (measured by processing time, reduction of data entry errors & throughput) is identifiable as a benefit experienced in the operational level. Based on such factors, we have proposed a theoretical framework which can be used to evaluate the performance of ERP systems in the local context.

Keywords: Enterprise Resource Planning systems, investments, return on investments