Lessons Learned During a Decade of ERP Experience: A Case Study

Kristi I. Wenrich, Pennsylvania State University at Great Valley, USA
Norita Ahmad, American University of Sharjah, UAE

ABSTRACT

Enterprise Resource Planning (ERP) literature concentrates on critical success factors for implementation. More recently, published work relates to ERP maintenance and upgrade practices. In papers concerning all phases of the ERP lifecycle, researchers commonly gather material via case studies of organizations comparatively new to ERP implementation, maintenance, or upgrade projects. This article uses a literature review detailing critical success factors and best practices during all phases of the ERP lifecycle to frame a case study on a large company with a decade of experience in supporting an ERP system through implementation, two major upgrades, one major domestic business merger, and two international business acquisitions. This article catalogs the company’s departures and concurrences with the published best practices and success factors over time, as well as the positive and negative consequences of its decisions. The company’s experience shows that straying from generally accepted best practices can lead to a successful outcome, and that portraying some success factors too well can exacerbate problems in other areas.

Keywords: Critical Success Factors; Customization; Enterprise Resource Planning; ERP; Implementation, Maintenance; Strategies; System Upgrade

INTRODUCTION

Enterprise Resource Planning (ERP) systems are commercial software packages that embody and integrate any number of business processes involved in the operation of an organization including but not limited to manufacturing, supply chain, sales, financial, human resources, budgeting, and customer service activity. Academic research on ERP frequently involves finding critical success factors for implementing, maintaining, and upgrading these complex information systems. Many of these papers use case studies to gather research. Often, researchers choose case study organizations that are relatively new to the ERP implementation, maintenance, or upgrade process, or they choose to highlight only one phase of the ERP lifecycle during their research (Beatty, et al, 2006; Brehm, et al, 2001; Brown, et al, 2004;

The goal of this study is to examine a company with years of practice and considerable understanding of all phases of the ERP lifecycle in order to illustrate the good and bad consequences of drifting from recognized best practices. In addition, the study shows how decisions, behaviors, and practices established during the initial implementation phase compound over a ten-year period to amplify areas of success and failure. Finally, the case study shows that exemplifying some critical success factors can lead to or propagate continued failure in other areas. A review of ERP literature regarding behaviors and practices that aid in ensuring success in all phases of the ERP lifecycle provides a construct against which to compare the activities of the case study organization.

REVIEW OF THE LITERATURE

ERP literature uses the terms success and failure to describe the outcome of many ERP related activities. Measuring the results of any project is a subjective exercise that depends on the point of view of a project participant. ERP projects require the participation of functional and technical experts from every level of an organization. Each member of the team is likely to rate the effects of a project on aspects related to his or her role. For example, an executive may measure success based on return on investment while a database administrator may rate success on database architecture and performance. A manager may determine that a project is successful if it completes on time and within budget. An end user may consider the ERP endeavor successful if it improves job performance or convenience. The literature review continues the use of the terms success and failure with the same intent. Individuals rate the outcome of an ERP project based on their perspectives (Markus, et al, 2000).

During the ERP system lifecycle, implementers must overcome common obstacles on the way to successfully completing both small and large ERP related endeavors. The review examines common deterrents, as well as conventions to encourage and dissuade over the project’s entire duration. After the overarching critical success factors, the literature review highlights phase specific best practices from initial ERP system implementation through upgrade.

Throughout the ERP Lifecycle

There are practices to encourage and discourage throughout the ERP lifecycle. ERP teams should be vigilant to avoid and overcome common impediments to success that may occur at any time during implementation, maintenance, or upgrade.

Behaviors to Encourage

Organizational Change Management
Organizational change management is imperative throughout the ERP lifecycle. Change management includes user training on functional and system processes as well as commitment from executives to communicate project scope and goals to the affected employees in the organization (Brown, et al, 2004; Jarrar, et al, 2000; Mabert, et al, 2001; Markus, et al, 2000; Umble, et al, 2003). Communication and extensive training initiatives are critical to combat inevitable resistance to change. Communication and training activities fall under the umbrella of successful business process management (Jarrar, et al, 2000; Umble, et al, 2003). Do not underestimate the amount of training end users require. ERP systems have steep learning curves; heavy users need more training than light or occasional users (Jarrar,
Behavioral Intentions to Adopt Technological Innovations: The Role of Trust, Innovation and Performance
www.igi-global.com/article/behavioral-intentions-to-adopt-technological-innovations/116763?camid=4v1a