Organizational Impacts of an ERP System Migration

Capstone Project Report: Public Summary

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Table of Contents

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Vienna, 09 June 2025 Rebecca Segura

Introduction

An enterprise resource planning system, also known as an ERP system, is a software package which integrates business processes and functions that span across the organization. They have the capabilities to be multifunctional, handle real time data, and share information (Mossa, Smith, & Bland, 2025). Core areas of business supported by ERP systems include finance, human resources, procurement, IT, and operations. This project examined an ERP system migration from an outdated system to a newer one at a public-sector utility organization. The organization recently transitioned to the new system to increase efficiency, gain data autonomy, lower costs, and modernize IT infrastructure. The old system, which was hosted by a different company, was costly and posed data privacy challenges. The aim of this project was to examine the initial reasons for the ERP system change, as well as to analyze the short and long-term financial and operational effects of the migration.

Methodology

To evaluate the impacts of the ERP system change, a pragmatic mixed-methods approach was adopted, with a qualitative emphasis. The data for this project included academic articles, including real-world case studies, data provided by the organisation, a cross-departmental survey with both likert-scale and open-ended questions, and semi-structured interviews with departmental representatives. Three different models were used to structure the evaluation of the data, namely the Balanced Scorecard, Shang & Seddon's ERP Benefits Framework, and DeLone & McLean's IS Success Model.

The Balanced Scorecard consists of four categories: financial, customer and stakeholder, internal process, and organizational capacity or learning and growth (Kaplan & Norton, 1992). Shang and Seddon's ERP Benefits Framework is made up of five categories: operational benefits, managerial benefits, strategic benefits, IT infrastructure benefits, and organizational benefits (Shang & Seddon, 2002). Finally, DeLone and McLean's IS Success Model contains six categories: system quality, information quality, service quality, system use, user satisfaction, and net benefits (DeLone & McLean, 2014). Each category contains metrics for determining what benefits arise from the new system. Survey and interview questions were designed to align with these model categories, enabling a comprehensive analysis of the ERP system transition from various perspectives.

Key Findings

Implementing or transitioning to a new ERP system poses many challenges. In addition to high up-front costs, organizational changes and proper training must be undertaken strategically to ensure the system's success. Even with a successfully implemented system, many benefits can take over a year to materialize, and short-term productivity slowdowns are common after the implementation. Despite these challenges, as well as the recentness of the transition, the company has already noticed improvements across several operational areas.

Operational and financial efficiency was gained through the increased use of automation and system consolidation. Users can create reports independently, reducing the reliance on third-party service providers which previously charged additional fees. The use of AI and automation allows processes to be completed quicker, saving costs in staffing, even as the company's customer base grows about 1% annually. Cost savings also arise from the reduction of legacy software, as they were expensive and operations have now been consolidated to the new ERP

system. Additionally, findings from the literature review suggest that many cost savings arise from productivity gains, while financial metrics such as profit margins, return on assets, inventory turnover, and accounts receivable turnover have been found to improve following an ERP system adoption. Digital infrastructure and system quality also saw improvements. With one unified database, departments can easily share information and reduce knowledge gaps. The new system's interface is more logically structured compared to the old one, making it more user friendly and easy to navigate. Workflows and tasks can be entered into one system, even offline, supporting field operations and making it easier to keep track of processes. Although there were some initial training gaps, there is a strong willingness among the staff to continue adapting to the new system. Most transitions such as this take time before the workforce is fully trained and confident with the new system (Osnes, Olsen, Vassilakopoulou, & Hustad, 2018).

Conclusion

The evaluation of the new ERP system's impacts on the company support findings from the literature and case studies, revealing that ERP transitions can generate significant cost savings and long-term value. For a successful implementation, it is important to thoroughly train staff and offer ongoing support, as well as adapt the system as problems arise. ERP system projects are not just technical changes, but strategic transformations within an organization. Proper change management and technical support lead to greater system flexibility and increased process optimizations. As the system continues to be further integrated into company operations, more cost savings and efficiency gains are expected to arise.

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