

# Foreword

The widespread usage of large-scale software packages is a result of organizations' desire to replace older software systems and to achieve integration across functions and departments. These enterprise resource planning (ERP) systems are commercial software packages that help organizations overcome the fragmentation of existing administration systems, such as applications for finance and accounting, human resource information, supply chain information, and customer information.

ERP was a major success story of the 1990s. By 1998, 40 percent of multinational organizations with a turnover of \$1 billion had implemented ERP systems. Due to their pervasive nature and the adoption of this technology across markets, ERP systems are of interest to a wide range of professional and academic communities, but there is a lack of systematic studies that address the “soft” side of ERP implementation and the implications for organizations and users (Esteves & Pastor, 2001). The aim of this book is to improve the understanding of how these systems affect organizations and users, and observe the influence of “soft” factors on ERP implementation, usage, and success.

The implementation of ERP is problematic because of the packaged nature of the software. Packaged software should, if successfully implemented, satisfy the different information needs of different organizations and users in different industries. ERPs are said to follow the universal “best practices” of industries, and this claim is justified because of the significant work the software houses carried out in developing their ERP software suites. However, the cross-industry definition of best practice does not guarantee a smooth implementation, because unlike in-house system development, the organizations have to adjust their business processes to fit the package or to build extra functionality around the package. Prior to any of this, the correct package in terms of functionality and cost has to be chosen.

Following the example of large corporations, universities are increasingly replacing their outdated management and administration computer systems. The problems of universities are similar to a wide range of organizations, and the

standard tools for contemporary organizational analysis and management can be similarly applied at universities. These tools include computer systems, such as ERP systems (Pollock & Cornford, 2004). Implementing ERP is costly, but so are the alternatives. In Australia, the CASMAC (Core Australian Specification for Management and Administrative Computing) system dominated the higher education sector but was abandoned due to escalating costs in favor of ERPs (Vitale, 2000).

The trend of ERP adoption has continued into higher education around the world. The number of implementations is substantial, although very few successes, failures, and costs/benefits of ERP implementations in university environments have been presented in the professional literature. As well, very little research has been conducted regarding ERP implementations in the university environment, compared to the actual number of ERP implementations in the higher education sector worldwide (Orgill & Swartz, 2000), and specifically in Australia (CAUDIT, 2001). One of the few research papers is based in the United Kingdom and is written by Allen and Kern (2001).

This book addresses the gap in the scholarly literature and presents qualitative case studies of ERP implementations in a university environment in a number of countries, including Australia, Israel, Spain, and the United States. The book contributes to the literature on qualitative studies on the implementation of information systems in general and addresses the existing lack of research into ERP implementations in universities, making the book a welcome addition to the textbooks that could be used in information management courses at the tertiary level.

The book consists of in-depth research studies from a number of educational institutions at the tertiary level, the majority of cases (all but two) being in the higher education sector. Many of the cases presented in this book share the same research site [Beekhuyzen (Chapter 7), Goodwin (Chapter 11), Nielsen (Chapter 13), Chatfield (Chapter 14), Mayer (Chapter 15), and Morley (Chapter 16)]. These cases take varying perspectives on different phases of the implementation at Griffith University. The appendixes provide an overview of the Griffith University ERP implementation as well as a description of the evolution of the integrated systems for Australian universities, which preceded the adoption of ERP.

All case studies are fairly recent, discussing the ERP implementations in the late 1990s and early 2000s. The health-sector case study is about an ERP that was first introduced in 1991, providing a longer perspective and an interesting comparison to the ERP implementations in the higher education sector [McGinnis, Wiggins, Trimmer, & Pumphrey (Chapter 5)]. The case comparing ERP implementations in the electronics and building industries in two different countries provides a cross-cultural perspective [Romm Livermore (Chapter 6)]. All cases are post-implementation investigations of specific ERP modules or of the entire

implementation based on interviews with stakeholders supported by work practice observation and examination of documents. The interpretation of data in most cases is supported by the explicit use of appropriate theories of system success, organizational factors, and governance. All of the chapters provide rich descriptions of how organizations choose, acquire, and implement ERP systems and how the systems affected the organizations.

The chapters in this book were sourced through a focused call for contributions to the information technology and systems research community. All chapters were blindly peer reviewed by two information systems researchers as well as refereed by the three editors.

The book has three parts, each consisting of five to six case studies. Section 1 consists of a variety of ERP implementation approaches, including two contrasting grounded theory investigations, a study of communication during the implementation, a health-sector case using relational governance, and a description of ERP implementation in a complex environment of a consolidated college system. The cases in Section 2 all explicitly use cultural and political theories and concepts to interpret what is going on in each case. The cases in Section 3 discuss ERP system success. An overview of the cases is provided in the introduction chapter.

Universities have significant export capabilities, making the findings reported in the book relevant to other industries of similar standing in a country's economy. For example, Griffith University in Australia has twice won the state's export award in recognition of its contribution to the nation's export industry. We believe the book would be of interest to information systems management practitioners, including software companies involved in corporate systems development.

The contents of the book will be useful for final-year and postgraduate students in information systems management courses, providing insights into the organizational context of corporate systems and details on the conduct of research into organizational influences of such systems. For practitioners, the book provides helpful advice on implementation successes, failures, and costs/benefits.

We hope this book will assist in achieving a better understanding of the many issues of implementing an ERP system in tertiary education institutions, especially in universities.

## References

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