BOOK REVIEW

Implementation Strategies for SAP R/3 in a Multinational Organization:
Lessons from a Real World Case Study

Reviewed by Ruiliang Yan, Virginia State University, USA

Chetan S. Sankar and Karl-Heinz Rau
Implementation Strategies for SAP R/3 in a Multinational Organization: Lessons from a Real-World Case Study
Cybertech Publishing, IGI Global
345 pages
Copyright 2006

This book is essentially an extended case study in a global company that provides instructive insight into the complex process of enterprise resource planning (ERP) implementation and various strategies for SAP R/3. ERP is an information system designed to integrate internal and external members of the supply chain. Core processes include production planning and control, inventory management, purchasing, and distribution (Reid & Sanders, 2007). It makes sense that a case study on this topic would encompass an entire book since an ERP implementation is extremely complicated (Arora, 2005). In addition, no two implementations are the same and thus a single strategy would not be practical as a lesson for professionals or business people looking for guidance. The main example used in the book is the case of Robert Bosch GmbH’s implementation of SAP R/3. The authors studied Bosch before, during, and after the implementation to analyze what they did, why they did it, and what their expectations were vs. their results. Along with the examples from Bosch and other companies, the book provides an overview of the nature of multinational companies, ERP systems, and the concepts of change management.

ERP systems were originally implemented only in the largest companies. The costs involved are very large and the benefits do outweigh them, but only on very large scales (Ptak & Schragenheim, 2003). In recent years, there have been scaled down versions of several ERP systems, but the large ones like SAP R/3 are still primarily used by large firms. Chapter I is a brief introduction of the book. The pedagogical approach has been explained. This book is specifically focused on multinational
companies, so it soon begins with an overview of how multinational companies are structured in Chapter II. Since it is difficult to coordinate and standardize business units around the globe, an integrated IT structure is beneficial by providing a basis for local operations to work from.

Next the concepts of ERP systems are discussed, beginning with a look at the predecessors of ERP—MRP and MRP II (Chapter III). ERP systems consist of many modules that are integrated to reduce time lags and information gaps from various areas of the business. The three main groups are financials, logistics, and human resources. Each of these groups is then broken out into their various modules, such as general ledger, sales and distribution, and compensation. Finally an overview of the main ERP vendors is discussed with an emphasis on SAP since that is the focus of the book.

Chapter IV is dedicated to the topic of change management. Implementing an ERP system introduces a lot of change to a business and it is essential to the success of the implementation that the employees as well as the management are prepared. Employees need to understand that their actions now directly affect other areas of the business both in function and location. Data are shared throughout functional areas such as finance and production as well as different countries. Management also needs to support the new systems and business processes in order ensure that appropriate resources are dedicated to the implementation and to keep the project on track.

Chapter V illustrates the basic concepts of database management systems and defines many relevant terms. After this background information is provided, the book moves into the Bosch case study (Chapters VI-IX). The first part of the case study reviews the period from 1992-1999, when SAP R/3 implementation strategy was first developed. It describes how Bosch was structured and why they needed a global IT division to support their various business units around the world. The case goes on to describe how the US division began to deviate from the rest of the company’s implementation strategy. This raised concerns from the central IT division and they eventually intervened to ensure that the US implementation would be fully effective in the global context.

The next period that is discussed, from 2000-2004, is when the first business units began to implement SAP R/3. There were several major changes to the management team of Bosch and some changes were made to the implementation strategy even after the first business units began their implementation. The most important thing that came out of this time period was the harmonization of the business processes and standardization of data elements across the different business units. Without this, the implementation could have failed.

Chapter X points some future directions and trends of ERP solutions. The enterprise service architecture (ESA), a new concept based on a general understanding of service oriented architecture (SOA), is presented. Actually, NetWeaver, the product portfolio of SAP that enables flexible integrated solutions, has supported this ESA concept.

Chapter XI offers a shorter case study of an SAP R/3 implementation at Sidler GmbH. Sidler is a smaller company than Bosch, but they operate globally and were in need of a central IT solution. They opted for an SAP R/3 system, primarily using consultants to develop their implementation strategy. Many ERP providers, including SAP, are now offering solutions for small and mid-sized companies that cannot afford to implement the older, more complex systems in their entirety. SAP now offers
their NetWeaver platform which gives the company more flexibility to customize their system with only the modules they really need and still provide the benefits of a larger ERP system.

Conclusions come with Chapter XII. The change management processes adopted by Robert Bosch using the change management life cycle theory has been analyzed. In a nutshell, key management issues in designing and implementing ERP systems have been identified.

Overall, I found this book to be very informative about SAP R/3 implementation strategies. The sections in the first part of the book are very useful as it provided a thorough background on multinational companies, ERP systems, and change management. As the authors suggest, the lessons learned at Bosch are valuable to business people and graduate students looking to implement an ERP system. Also, the Sidler case provides insight into a smaller implementation. Certainly, a reader should be aware that every company will have its own unique problems to deal with and overcome. A copycat may suffer.

REFERENCES


Ruiliang Yan is an assistant professor of marketing at the School of Business, Virginia State University. He received his PhD degree in marketing from the University of Wisconsin, Milwaukee, MS degree from Sichuan University, China and bachelor’s degree from Southwest Agricultural University, China. He specializes in e-marketing, retailing and supply chain management.