A Case Study of a Fast Track SAP R/3 Implementation at Guilbert

NICOLA GIBSON, CHRIS HOLLAND AND BEN LIGHT

INTRODUCTION

In order to cope with a challenging market environment, organizations are having to make fundamental changes to their business methods. Hammer (1990) proposes reengineering, the use of modern information technologies to radically redesign business processes and in turn achieve dramatic improvements in their performance. However, only a few of these corporate change efforts have been successful (Kotter 1995). It is well known that IT projects, with or without reengineering, often run into problems. An IT survey by the Standish Group (1996) showed that 40% of software projects fail. In an effort to reduce the risk of IT projects, many companies are moving away from bespoke development and are purchasing package software. Deloitte and Touche (1997) state that over 70% of the replacements for critical applications are standard package products. The trend, in particular, is for enterprise resource planning (ERP) software which automates corporate activities such as manufacturing, human resource, finance and supply chain management. Organizations that have implemented ERP software recount many benefits such as increased competitiveness, improved control, improved communication and a constant state of the art IT capability. However, ERP is not without problems. It is estimated that at least 90% of ERP implementations end up late or over budget (Martin 1998). The integrated nature of ERP software makes implementation complex from an organizational and technical perspective and is the major reason for the associated high costs. Enterprise consensus is required to reengineer a company’s core business processes to align them with the model implicit within the software. Companies that do not adopt this philosophy are likely to face major difficulties.

The research question then is; How can ERP implementation be facilitated and are there alternative approaches to the problem? Although this is an emerging area, different modes of implementation can be seen in practice. This paper examines the approach of Guilbert, a European stationery company, which has chosen a fast track, skeleton implementation strategy. This approach is now being recognized by larger organizations that in the past have opted for a slower, full functionality implementation. The Guilbert implementation is analyzed from a critical success factors perspective and the paper presents ideas on the future direction of ERP implementation.

Abstract

This paper examines the approach of Guilbert, a European stationery company, which has chosen a fast track strategy towards implementation of enterprise resource planning.

Authors

Nicola Gibson graduated from the University of Keele in management and computer sciences, where she subsequently gained her PhD for research into the quality of information in the National Health Service. Nicola is a research fellow at Manchester Business School, and her main research interests are the design and implementation of Enterprise Resource Planning (ERP) systems.

Christopher P. Holland graduated in Computer Systems Engineering from the University of Warwick. After working in product marketing for an IT firm, he joined Manchester Business School as ICL research associate. After lecturing at the IT Institute, University of Salford, Chris returned to MBS where he is Senior Lecturer in Information Management. His research interests are focused on a number of areas: information systems in global business; implementation of large-scale systems; new forms of organization and banking. He has published widely. He is chair of the IS in global business at the Hawaii International Conference on System Science, associate editor of Communications of the AIS and the International Journal of Electronic Markets. He regularly contributes to international academic and business conferences and has consulted with a wide range of international firms on IT strategy.

Ben Light is Research Fellow at Manchester Business School, UK. His research interest is information systems strategy particularly legacy systems, Enterprise Resource Planning systems and Business Process Reengineering. He is currently working on the UK EPSRC Systems Engineering For Business Process Change programme of research. The project is concerned with the strategies organizations employ to overcome legacy problems. Prior to embarking upon his academic career, Ben was employed in Human Resource Management. He has also undertaken consultancy and research within national and international firms.

Keywords: architectures, of EM, assessment, of business processes, transactions, business to business, enterprise resource planning
CRITICAL SUCCESS FACTORS

Slevin and Pinto (1987) argue that in order to manage projects successfully, project managers must be capable both in strategic and tactical project management. They propose ten project-management ‘critical success factors’ that fall in either the strategic or tactical phases of a project. Strategic issues specify the need for a project mission, for top management support and a project schedule and are most important at the beginning of the project. Tactical issues gain in importance towards the end of the project and include communication with all affected parties, recruitment of necessary personnel for the project team and obtaining the required technology and expertise for the technical action steps. User acceptance, monitoring and feedback at each stage, communication to all the key project people and trouble shooting are also classified as tactical issues. Strategy and tactics, however, are not independent of each other and strategy should be used to drive tactics. Projects that exhibit a high quality in both strategy and tactics are likely to be successful. Similarly, Benjamin and Levinson (1993) believe that a systematic process for change must be developed and that technology, business processes and organization must be mutually adapted. They recognize that a vision is required which is decomposed of a number of future states and that the vision is reached by managing transition from present state to future state. Once a transition has been made then support must be provided for the new culture resulting from the implementation. Change managers need to understand how all the organization elements must change and what action and resources will bring them back into equilibrium. It is also proposed that organizations must determine whether the energy for change can be mobilized, analyse the size of the change effort and nominate a project champion. In a study of IS Implementation failure, Kotter (1995) examines why transformation efforts fail and lists principles for transforming an organization successfully. These include establishing a sense of urgency, forming a powerful guiding coalition, which can teach by example, and creating a vision that must be communicated. He believes that people must be empowered to act on the vision, improvements must then be consolidated and further change produced. Bashein et al. (1994) cite the need for a cross-functional team for reengineering projects with empowered members. After the project they then specify that collaborative team members are required to carry out the redesigned business processes on an ongoing basis. James (1997) describes how to avoid IT disasters. He advocates a sensible project scope, user ownership of the design implementation and testing processes, adequate testing and training, the sparing use of consultants and management involvement.

It is clear that ERP implementation involves a complex transition from legacy information systems and business processes to an integrated IT infrastructure and common business processes throughout the organization. The Guilbert case provides a contemporary example of how a leading European business has transformed its international operations and information systems. The case data are presented and analysed using the critical success factors model based on Slevin and Pinto’s seminal article on project management and implementation (Slevin and Pinto 1987).

THE CASE: GUILBERT

Guilbert is the biggest supplier of office stationery in France. The stationery market is highly competitive with increasing competition from American companies, who have established themselves in UK and are intending to expand into mainland Europe. Guilbert decided to expand into mainland Europe and also obtain a presence in the UK. As part of this strategy, two UK stationery supply businesses were acquired; Ofrex in 1992 and Niceday, a subsidiary of WH Smith, in 1996. Niceday comprised a number of autonomous businesses and although it had started to integrate, had been beset with problems. At the time of the acquisition, Niceday were running several different IT systems. Ofrex also had their own bespoke IT system. None of these systems were capable of running an integrated business or were year 2000 compliant.

Project Objectives

Guilbert decided to implement the SAP R/3 ERP system throughout Europe in order to establish a common IT and business process infrastructure throughout the business. Their intention was to implement the system in the UK, to get their operations in the UK working as one business and then roll out the system to the rest of Europe. Since Niceday had suffered problems integrating, Guilbert recognized that they could have problems creating a single UK business and therefore decided to focus on change management issues. The company’s objectives for their project included being on time and on budget by doing a fast track implementation. This approach was intended to eliminate non-value added business activities, enable common processes within the business and exploit the functionality of SAP R/3 with as little disruption to the business as possible. Guilbert wanted to implement SAP R/3 innovatively so that it was unique to them without carrying out bespoke development. They therefore planned to add further functionality in the future, via an extranet.

Implementation Strategy

The strategy for implementing SAP R/3 was to implement a basic infrastructure and build functionality gradually. All of the businesses would implement a common system that
at least matched existing functionality, and in some cases exceeded it. The first site to go live was given a system that enabled them to provide the same service to customers as they had with the old system. However, as subsequent sites have been implemented, additional functionality has been added. Once all the sites in the UK are on a common platform, Guilbert then want to exploit the functionality of SAP R/3. The company has an idea of the ‘final picture’ of the system, but is building it in blocks which management feel is easier to implement in a short time scale and ensures that user acceptance is higher than would otherwise be the case.

The project was business driven, rather than IT driven, and hence a cross-functional project team was formed. A ‘team charter’ was created and everyone on the team had to ‘buy’ into this charter. One reason for creating this charter was that the team members would be privy to confidential information about the business and it was essential that the information was not leaked. Each member of the team was empowered and the team structure was flat rather than hierarchical. Projects can fail if it takes a long time to make decisions and with an integrated system, consensus is required between functional areas. Guilbert therefore created a form for rapid decision making where once a week the Managing Director was available to help in the decision-making process.

Guilbert looked at ‘R/3 partners’ to help with the implementation process. However, Guilbert’s management team felt that management consultants were unnecessary as it was of the opinion that the company’s cross-functional team would know the business better. They also felt that consultants were expensive and that consultancy costs can increase dramatically if the project takes longer to implement than expected. They did see the need for technical configuration consultants although they were wary of having consultants with limited SAP R/3 implementation experience. However, the SAP organization wanted to get involved in the project and therefore assigned eight of their highly experienced Platinum consultants to Guilbert.

Implementation Process

The implementation team had induction training on project management and change management to prepare them for the project. Each team member also received SAP R/3 training in their own functional area, giving them a good idea of the functionality it had.

The process of implementation was staggered throughout the sites in the business but each followed the same project life cycle. Each site had business champions who mirrored a functional member on the core implementation team. Meetings were held with these business champions during implementation to look at the business processes. The aim was to have everyone working the same way and to have ‘best business practices’. Although the majority of processes were the same between sites and generic processes were defined, some of the functionality of the processes differed depending on the customer requirements at a site.

Testing was considered very important because Guilbert were not running the new system in parallel with their old systems. Tests were carried out as the system was configured and then the whole system was tested by user trials. A test system was built (containing no data) which was a replica of the ‘go live’ system. A day’s work that had gone onto the old system was repeated and entered onto the test system. Reports from both systems were compared. The system is also tested with permutations of work to ensure that every way the system is required to work is tested. A replication of the ‘go live’ process is also done a couple of weeks before they actually ‘go live’. This process includes testing that data from the old system can be migrated into SAP. Guilbert believe that it was essential to put good data into the system and this required a cleansing process from their old systems. The test work was carried out at weekends so there was no disruption to normal business. Any problems could then be rectified before going live. A similar approach to implementation is being taken towards the roll out of the system throughout the rest of the European business.

Guilbert has highlighted that training is very important and the amount of training has increased substantially since the first site went live. Employees undergo one day per week of informal training in the classroom and a minimum of three hours practice per week. The company considers it important to maintain the standards established at previous implementation sites. Each site has super users who learn new functionality and are responsible for training the rest of their site. Change management is also viewed as a key component of the successful implementation. Guilbert feel that not enough emphasis was placed on this with the first implementation. They found that employees did not like change and that some employees tried to use the new system in the way that they used to work.

The first site in the UK went live six months after the project team started and all sites are expected to go live by June 1999. The project team do not consider that each implementation is getting easier as the culture, the calibre of people and the quality of existing data at each of the sites is so different. Once all the sites have gone live, SAP will be exploited further, by adding functionality that will be new to the sites. Guilbert feel that it will then be necessary to look at emerging technologies and how they can be used within the business.

CASE DISCUSSION AND CONCLUSIONS

This section applies success factors from the literature to Guilbert’s project implementation. The aim is to determine how closely Guilbert’s project fits with these success
factors and whether they have been equally effective in both strategic and tactical issues.

Guilbert has a clear project mission. They want one European business, rather than several autonomous national entities. It has also been clearly stated that the project is business driven rather than IT driven with clear goals of the system being delivered on time and on budget. Guilbert has top management commitment, with the Managing Director in particular being very supportive of the project. There is also a ‘sense of urgency’ for the project in that Guilbert is resolute that everyone must be on the same platform by June 1999. The project scope was not too ambitious. Guilbert decided to implement a skeleton system rather than one that exploited the full functionality of SAP, which it intends to do when the whole business has migrated to the common system platform. Implementation is also being staggered between sites. This method follows Benjamin and Levinson’s (1993) belief that the vision is reached by managing transitions between intermediate states and fulfils Slevin and Pinto’s (1987) specification of having a project schedule. These factors relate to the strategy or planning phase of the project (Slevin and Pinto 1987).

Guilbert recruited the necessary personnel for the team by taking managers out of the business to work full time on the project. The project team is cross functional and has a ‘team charter’ which the company feels has helped them through the bad times during the project. The project newsletter and consultation with ‘business champions’ at each site is also taking place. Slevin and Pinto (1987) also highlight the need to provide an appropriate network for communication. In this vein, Guilbert has set up weekly meetings so that decisions can be made rapidly. The technical expertise for the configuration side of the implementation was sought from skilled configuration consultants from SAP. User acceptance was obtained through user testing trials and training. Once each site has gone live, Guilbert feel it is then important to continue to maintain standards and anchor changes in the organisation’s culture (Bashein et al. 1994; Kotter 1995). Monitoring and feedback have helped Guilbert to identify issues relating to data quality, training and change management that were weak in their first implementation. They have been able to improve in these areas for subsequent implementations. They are also conducting testing of the system and have trial runs of ‘go live’ for each site for troubleshooting purposes. These factors relate to the tactical phase of the project (Slevin and Pinto 1987).

Guilbert has been effective in both the strategic and tactical aspects of the project so far. The approach of implementing the skeleton of the ERP system has given the company a fast-track implementation of SAP R/3, with the first phase being complete in six months. ERP systems are notorious for having a lengthy implementation and Guilbert is proving that they can be implemented quickly to provide a common platform for a business. This approach is proving to be one of the most effective ways of implementing ERP systems given the significant change management and technical issues it brings. Furthermore, ERP vendors and consultancies are recognizing this and incorporating it into their offerings. It is clear that this mode of implementation is likely to grow in importance although full functionality implementation approaches will still be apparent.

ACKNOWLEDGEMENTS

The authors would like to thank the Engineering and Physical Sciences Research Council who have supported the research reported in this paper under the Systems Engineering For Business Process Change Programme of research.

References


