

## Association for Information Systems AIS Electronic Library (AISeL)

---

ECIS 2011 Proceedings

European Conference on Information Systems  
(ECIS)

---

Summer 10-6-2011

# EXPLORING THE ERP PRE- IMPLEMENTATION PROCESS IN A SMALL- AND-MEDIUM-SIZED ENTERPRISE: A CASE STUDY OF A NORWEGIAN RETAIL COMPANY

Eli Hustad

Dag Hakon Olsen

Follow this and additional works at: <http://aisel.aisnet.org/ecis2011>

---

### Recommended Citation

Hustad, Eli and Olsen, Dag Hakon, "EXPLORING THE ERP PRE-IMPLEMENTATION PROCESS IN A SMALL-AND-MEDIUM-SIZED ENTERPRISE: A CASE STUDY OF A NORWEGIAN RETAIL COMPANY" (2011). *ECIS 2011 Proceedings*. 8.  
<http://aisel.aisnet.org/ecis2011/8>

This material is brought to you by the European Conference on Information Systems (ECIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in ECIS 2011 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

# **EXPLORING THE ERP PRE-IMPLEMENTATION PROCESS IN A SMALL-AND-MEDIUM-SIZED ENTERPRISE: A CASE STUDY OF A NORWEGIAN RETAIL COMPANY**

Hustad, Eli, University of Agder, Gimlemoen 25A, Kristiansand, Norway,  
eli.hustad@uia.no

Olsen, Dag Håkon, University of Agder, Gimlemoen 25A, Kristiansand, Norway,  
dag.h.olsen@uia.no

## **Abstract**

*This study examines the ERP pre-implementation process in a Small-and-Medium-Sized Enterprise (SME), and identifies critical issues in this process. The ERP pre-implementation phase comprises issues of selecting ERP software, vendors, and consultant. It is a critical process especially for SMEs which normally have limited resources and IT competencies. Interesting findings from this study demonstrate that ERP pre-implementation in a SME is a demanding process which required a high level of knowledge and competencies about the system, and tough negotiation processes between project leader, vendor, resellers and consultants. By using the CEO's business network to check the resellers' track records, and invite prospective resellers for auditions, the project team was able to find a proficient reseller and consultant. In addition, the company organized business case scenarios to test the competencies of consultants. Building a long term partnership and trust between the company, the reseller and the consultant was considered critical. Thus, to choose the most sufficient actors for implementing and supporting the system, seemed to be just as critical as selecting the system itself.*

**Keywords:** ERP pre-implementation, ERP selection, SME, negotiation, audition, agency

# 1 Introduction

This study focuses on the pre-implementation process of an Enterprise Resource Planning (ERP) system implementation project carried out in a small-and-medium-sized enterprise (SME).

ERP systems are integrated software solutions building upon best practices offered as off-the-shelf packages from different vendors (Davenport, 1998). The systems are used to manage organizational resources by integrating information flows across departments and functional areas. Organizations seek to achieve benefits such as increased efficiency, and improved communication across the enterprise (Akkermans & Van Helden, 2002). Moreover, the aim is to reduce costs and data redundancy by replacing incompatible silos of legacy systems with an integrated ERP solution and real time data (Robey *et al.*, 2002). Companies can gain the above-mentioned benefits by implementing an ERP system, though it can be a hard and painful process (Davenport, 1998, Ross & Vitale, 2000). ERP-systems are technically complex and imply organizational challenges when implemented in a company (Markus, 2004). The organizational and human consequences and the required changes in business processes are often underestimated (Volkoff *et al.*, 2007). Despite challenges and high implementation costs, ERP systems of several types have become increasingly popular, and the systems are widely implemented in both small and large organizations.

Empirical studies have identified certain critical success factors that are important for gaining benefits and a successful implementation (Somers & Nelson, 2001, Somers & Nelson, 2004). However, the cost of an unsuccessful ERP implementation is high (Sun *et al.*, 2005). Especially in SMEs, poor outcomes from an ERP implementation may threaten the existence of the company, since such companies will have limited financial resources. To increase the chance for succeeding, former research suggests that SMEs should pay more attention to critical actors involved in the implementation process as well as being aware of different pitfalls (Loh & Koh, 2004). Normally, SMEs have limited human resources and internal IT competencies available compared to larger enterprises (Fisher *et al.*, 2004). Consequently, they face problems with configuring ERP packages and they often lack knowledge and experience about how to lead and organize enterprise-wide projects such as ERP projects. Hence, SMEs need to rely on external consultants and support from resellers and vendors to carry out ERP projects (Chen *et al.*, 2008). Very few SMEs will have the required skills in-house for implementing and configuring the ERP system, and they will usually need to hire implementation consultants throughout the whole implementation process. Hence, for SMEs it is important to pay attention to the pre-implementation phase to avoid the above-mentioned pitfalls.

So far, there is limited research focusing on the pre-implementation phase of ERP projects in SMEs. Accordingly, there is a need for more empirical studies that focus on this topic. Moreover, it is important to identify critical issues in this phase and to achieve an understanding of how SMEs tackle upcoming challenges. To fulfil this purpose, we conducted a case study in a small Norwegian enterprise operating in the boat equipment retail industry. The aim was to follow the pre-implementation process which focused on several important selections and related negotiations for the company: 1) the selection of the ERP software (the system vendor), 2) the selection of the reseller (local partner representing the vendor), and 3) the consultant employed by the reseller. We followed this process through observations, by conducting interviews, and by doing document reviews. The following research questions have guided this research:

*How is the ERP pre-implementation phase carried out in a SME?*

*What are the critical elements in this process?*

The SME setting is particularly interesting since these companies usually will be severely constrained by their lack of resources, such as competence to carry out company-wide IT projects. Also, limited financial resources would imply that such companies usually do not have the same ability to afford

failures and budget overruns as large companies. We should therefore expect that the SME setting may contain issues that differ from that of large enterprises.

The paper is organized as follows. In section two, we briefly present a review of former ERP research. Section three presents the research site in which this study was conducted and introduces our research design. Section four presents the findings, while section five analyses and discusses those. Conclusion and implications for research and practice are presented in section six.

## 2 Related Research

This section provides a briefly overview of relevant ERP research. Since the ERP literature is huge, a selection of studies mostly related to ERP lifecycles and particularly the pre-implementation process is highlighted.

In the ERP literature, lifecycle models are developed to illustrate central phases during an ERP project. These models consist of three to six different stages and have similarities in terms of emphasizing pre-implementing, implementing and post-implementing phases (Aloini *et al.*, 2007, Esteves & Pastor, 1999, Markus & Tanis, 2000, Ross & Vitale, 2000). In short these phases comprise 1) Pre-implementation; planning investment of an ERP system in terms of strategic planning (how is this investment linked with the business strategy), invite tenders from different system vendors and select software package, define requirements, 2) Implementation; includes activities related to software rollout, configuration, data conversion, integration, testing and stabilization, and finally 3) Post-implementation; encompasses maintenance, upgrading, new-release management, and evolution (Aloini *et al.*, 2007, Markus & Tanis, 2000, Ross & Vitale, 2000). Training of super-users and end-users typically occurs during the implementation and post-implementation period.

The pre-implementation phase of an ERP project has proved to be a particular critical stage (Markus & Tanis, 2000, Verville *et al.*, 2007). In this phase a project team is set up to plan the project. The phase normally completes with choosing an ERP system which the company finds appropriately. Related activities, challenges, and problems differ among these phases, and thus it is important for a company to know what they should focus on during different phases of the project. Problems which remain unsolved in one phase may amplify in a later phase (Markus & Tanis, 2000).

For instance, failures in the pre-implementation period may escalate in the next phase and throughout the project, and the company might end up with a non-suitable and non-adoptable system without achieving the expected benefits (Markus & Tanis, 2000). This can cause serious problems for companies and particularly SMEs with limited resources. Examples of problems are; misfits between the business processes and the best practices embedded in the system (Lee & Lee, 2000, Wagner *et al.*, 2006), costly customization of the system or the business processes (Davenport, 1998, Luo & Strong, 2004), and resistance among the users and workarounds to avoid use of the system (Allen, 2005). Implementing an ERP system is regarded as a long term investment (on a 10-15 years basis), and in many cases these systems control and discipline the organization in how to carry out tasks. After implementation it is normally too costly to modify the system or go back to old systems and routines (Newman & Westrup, 2005). On the other hand, a well-done phase at an early stage increases the chance for proceeding that way throughout the project, while failures in an early phase could lead to the opposite i.e. an overall unsuccessful implementation (Velcu, 2010).

Since the first phase of the ERP life cycle seems decisively in obtaining a successful project, an increasing body of research has paid attention to issues in the pre-implementation phase (Bernroider & Koch, 2001, Lall & Teyarachakul, 2006, Verville & Halington, 2003, Verville *et al.*, 2007). In this literature, however, the main focus is mostly on evaluation techniques and evaluation criteria related to the ERP acquisition process. In addition, there are several mathematical models developed to support selection of vendor and ERP-package mainly developed for larger enterprises (e.g. Wei *et al.*, 2005).

Only a few studies have focused on selection criteria that SMEs would emphasize when choosing an ERP system. In a study conducted in Northern European SMEs, the fit between organization business processes and the business rules embedded in the system package, was emphasized as the most important selection criteria for SMEs (Everdingen et al. 2000, cited in Haddara & Zach, 2011). Other important criteria mentioned here were local support, investment costs, and vendors' knowledge regarding the business domain in question. Some researchers have advised SMEs to consider in-house solutions instead of standardized packages (Olsen & Sætre, 2007). An in-house solution may be a better choice since standardized ERP solutions can introduce rigid structures and inflexibilities in a SME. Rigidity and inflexibility are well-known consequences imposed on larger companies implementing ERP packages (Newman & Westrup, 2005, Robey *et al.*, 2002)

There are few empirical studies, however, focusing on the *actual processes* SMEs go through in the ERP pre-implementation phase and few lessons learned regarding how these companies should prepare to meet upcoming challenges. There are, however, some studies conducted in larger firms, which document challenges in the pre-implementation process (Verville & Halington, 2003, Verville *et al.*, 2007). One example is the six-staged model illustrating the ERP acquisition process (MERPAP) developed by Verville and Harlitten (2003). Figure 1 depicts this model consisting of the following interdependent processes: Planning, information search, selection, evaluations, choice, and negotiations. These processes interrelate with each other and all sub-processes are iterative in nature - except from the sub-process "choice" which is the point when the final decision is taken.

This model was mainly developed based upon findings from the acquisition process in four large enterprises. In this study, however, we use this model as a reference for analysing our findings in the SME under study.

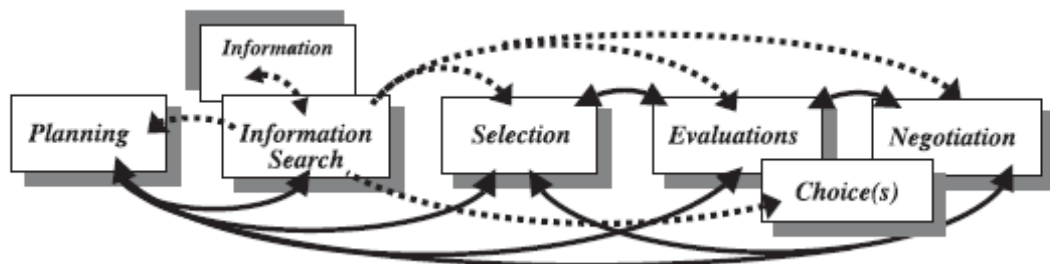


Figure 1. Model of the ERP acquisition process (MERPAP). The dotted lines in the diagram indicate the flow of information between the processes. The solid recursive arrows between the processes and the planning process indicate the on-going nature of activity/feedback/adjustment/input between them (adapted from Verville and Halington 2003).

### 3 Research Site and Method

This section provides a description of the context in which this research was conducted as well as the methodological approach applied in this study. This study is part of a larger project which aims to build a competence center for Enterprise systems. One important objective in this project is to develop knowledge about how different stages of ERP projects are carried out in the context of SMEs.

### 3.1 Research site

The research site is one of Norway's largest boat equipment retailers. The company dates back to 1984 and has departments in six geographical locations in Norway. The company is a SME with approximately 50 employees, and the business has an annual turnover of 130 million (NOK). The company sells all kinds of accessories to boats such as life vests, wet suits, sailor cloths, equipment for sailing ships, mooring equipment and lines, booms, and engine fixtures. In addition, they offer services in terms of boat lay ups and boat maintenance. The sales channels are internet, mail orders, and traditional shops.

The existing information systems in the company consisted of separate systems; one ERP system that handled logistics, finance and accounting and an integrated module offering software for handling mail orders and point-of-sales (POS). In addition, the mail order department used a CRM system delivered from another vendor. Moreover, the company's e-commerce solution, and the CRM solution were integrated with the old ERP system.

The overarching goal of the new ERP project was to exchange the existing systems with a more efficient, integrated and competitive ERP solution. They aimed to increase their efficiency by providing a better e-commerce solution, better logistics, and improved integration across their departments and shops. E-commerce supported by the web shop solution was recognized as the most critical system to obtain a competitive position in the market since many customers preferred to do online trading of products and services offered by the company. One objective was to transform the older architecture to a more modern technical platform that supported integration of different systems as well as automation of core processes. Thus, the company looked for a new system that enabled integration with their web-solution, the POS, and the CRM-system and secondly, a system that externally supported integration with external financial institutions. Additionally, the new ERP system should hold sufficient logistic functionalities and a good document repository.

### 3.2 Research method

This research builds upon an interpretive single case study approach (Walsham, 2006). Interpretive research focuses on the complexity of human sense as the situation emerges (Klein & Myers, 1999). In information systems (IS) research, it is important to understand the context of the IS, and the interaction between the system and the context (Klein & Myers, 1999, Walsham, 1995). Moreover, interpretive design gives the possibility for a built-in flexibility that allows for discoveries of new and unexpected empirical results and for growing sophistication. This makes the design iterative for the researcher and opens for improvisation and flexibility during the research process.

An interpretive case study approach is a suitable approach due to the exploratory design of this study and the nature of the research questions; e.g. *how* is the ERP pre-implementation process carried out in a SME? Additionally, we try to understand/interpret what the critical elements are in this process. A second reason for choosing a case study approach was that we felt the existing body of literature did not adequately describe the phenomenon under investigation (Eisenhardt, 1989b).

We chose a *single* case to gain a more comprehensive in-depth study of the ERP pre-implementation process in one organization. The specificity, which is unique for this organization, could then be looked into more carefully. Thus a single case study is an important source for generating knowledge and detailed descriptions (Stake, 2000).

In this study we used inductive data collection techniques comprising observation, interviews and documents. The observations consisted of five day-long meetings during the pre-implementation process. The project leader and different representatives from the resellers and the consulting firms participated in these meetings. The requirement specifications for the ERP system, business case

scenarios and contracts were discussed. These meetings gave valuable and rich information, and provided also important contextual insight regarding the overall atmosphere and chemistry between the actors (humour, high temper, conflicts, trust and so on).

In addition to observation, two formal interviews were conducted with the project leader based upon a semi-structured interview guide. The interviews lasted between one and three hours. In addition, there was regularly communication with the project leader through several informal conversations. Finally, secondary data sources in terms of documents were used in the analysis. The documentation consisted of requests for proposals for various ERP systems, offers from different vendors and resellers, requirement specifications, email discussions and negotiations between the project leader and the resellers, consultants and vendors, project plans, budget, contracts, and the final pre-project report.

The observation meetings and the interviews were taped (total duration was approximately 50 hours) and fully transcribed. The empirical data was further systemized and reduced (Miles & Huberman, 1994), to obtain meaning condensation (Kvale & Brinkmann, 2009). The process of data collection and analysis proceeded iteratively, allowing themes to emerge and then to be examined more deeply as relevant. The coding was concept-driven by using concepts from existing literature (Gibbs, 2007); we utilized the sub-processes from the MERPAP framework to present the findings in a systematic manner (Verville & Haltingen, 2003).

## 4 Results

We present the major issues that surfaced during our meetings with the company. We follow the phases in the MERPAP model introduced in figure 1. We see that this company had some of the key characteristics of a SME, such as limited competence, skills and personnel resources to assign to the project. The company did however manage to deal with these challenges in appropriate ways.

### 4.1 The planning and information search processes

The project started in 2005. The CEO decided that they would need to replace the legacy ERP system within a few years. He had experience from the boards of several SMEs, and had experienced that ERP implementation projects in these companies were riddled with problems. He also had experience with previous information systems acquisitions, among these a CRM system. They had not received the functionality that they had been promised in this system, and the system was not stable enough. They had also been promised seamless integration with another system from the same vendor. Again, the vendors' reseller was not able to fulfil these promises. ERP system vendors such as SAP, Oracle and Microsoft will usually not deal with the individual customers. Instead they will channel the requests to their certified resellers. Such resellers will typically market various ERP solutions and offer implementation assistance, usually through their own consultants.

Therefore, the CEO was quite skeptical to the promises from the resellers' sales people. Also, from his experience from other SMEs, he conjectured that they focus too little on the track records of the resellers and the implementation consultants. He found that most SMEs lack the skills necessary to select the most appropriate vendor and proficient resellers and consultants. Therefore he conjectured that the company needed several years to prepare for the ERP acquisition.

To build the internal ERP competence, the CEO attended an annual ERP conference that targeted the ERP user community. He attended the conference for three years, 2005-2008. This conference would give an overview of the vendors and systems, and guidelines for how to acquire ERP systems. A template for the acquisition process was included in the conference material. This template proved to

be handy for structuring the acquisition process, and the acquisition plans were developed according to the template.

The project team, consisting of the CEO and the CIO, was appointed by the company board. It was decided that these two people would be the most competent and skilled to carry out a successful ERP acquisition and implementation project.

## **4.2 The selection, evaluation and choice processes**

The project team started surveying vendors, resellers and ERP packages from the very start of the project (started spring 2005). This went on until they had compiled a short list in the middle of 2008. All the significant vendors had stands at the ERP conference, and the CEO established contacts with a number of potential resellers. He asked the resellers for customer references, and used these to identify the best resellers. He also used his professional network to assess how good the various resellers and systems were. He found out that several of the SMEs had reported that they had been talked into acquiring systems that did not fit the company requirements. The resellers' sales representatives had used a lot of effort in promoting the sale. The resellers would send sales people who were more proficient in making sales than in the systems specifications. Often the sales people would promise more than they could hold, and they would underestimate the technical challenges. Another problem was related to the resellers' consultants. They would usually send junior consultants, and only brought in the senior consultants when the implementation got into trouble. This could therefore be quite expensive for the customer. The resellers' junior consultants would get their hands-on training through such projects, billing the customer. Therefore, the CEO did not trust sales representatives.

The CEO had conjectured that it would be crucial to sign up with an implementation consultant that had an excellent track record. He had found that a number of projects had failed due to the consultants. In several of the companies they needed to replace the consultants, at an extra cost. The CEO therefore used a lot of time to search for the best implementation consultants. He conjectured that testing of demos, demonstration of systems, and an audition would help unveil weaknesses in the proposed systems solutions and the consultants' proficiencies.

Six ERP systems were invited for further assessment, and the resellers demonstrated how these systems would address the system requirements. The project group involved people from various departments in the evaluation of systems demos. This was done to ensure that the systems had the required functionality. They involved people that they knew were very proficient in their work tasks, and included one from warehouse and logistics, one store manager, and one from accounting. One of the resellers pushed one particular system even though it clearly did not fulfil the requirements. The CEO was certain that the reseller's sales people knew better, but that they pushed the only system they were authorized to sell. It was determined that only two of the systems would be appropriate for further assessment.

The company conducted auditions with resellers and their consultants. The project team had gone thoroughly through the ERP packages, and they created assignments that the consultants were asked to solve. The company was only interested in signing contracts with consultants who could solve the assignments during the meeting. This worked well to unveil the knowledge and skills of the various consultants. For one of the ERP systems, they had auditions with five different resellers. Several of these resellers did not have good enough skill levels. Some of the vendors had sent people with high selling skills but inferior system skills. They would be of little value to the company.

Two of the resellers performed well at the auditions. One of the consultants excelled particularly, and demonstrated impressive skills. The project team decided to hire that consultant and his company as the reseller.



### 4.3 The negotiation process

The internal competence building that took place in the preparations for the ERP acquisition, gave the company a stronger position in the negotiations with the chosen reseller. The CEO had learned at the ERP conference that there would be a competence asymmetry between the reseller and the company regarding the content of the contract. Furthermore, he conjectured that neither the company nor the reseller would know exactly what would be required in the system. He decided that they would need to specify a pre-project to be able to make more informed decisions. It would make them able to make a more complete specification, and it would be an opportunity to further assess the ERP system and the consultant. There should also be an option to abandon the project after the pre-project.

The company was offered a standard contract by the reseller. This contract was difficult to comprehend, and the CEO conjectured that it would be difficult to abide by the contract. The company would rather have a contract that they could abide by. They also revealed that the standard contract had provisions that made it possible for the reseller to renegotiate various issues at a later stage. Therefore, the company insisted that the contract should be revised. The resellers' sales representatives at several occasions tried to coerce the CEO to accept the standard contract, and that they otherwise would decline the project. The CEO refused every time, and told the reseller that he would cancel the project if the contract was not changed. The reseller sent new sales representatives several times, but none of these attempts succeeded. Finally, the vendor's sales director entered as the negotiator. The company eventually succeeded in making the vendor accept changes to the standard contract. The resellers were not authorized to make such changes.

The selected consultant was quite popular among the reseller's other customers, and it was evident that he knew that he had a strong position in the negotiations. The project team pressed on for a comprehensive pre-project that would solve all issues, but the consultant refused to provide that much level of detail in the pre-project. He argued that it would make it easier to replace him in the main project. The project team accepted these concerns and accepted a shallower pre-project.

## 5 Discussion

This case explores the pre-implementation process of an ERP system in a retail SME. Several critical elements surfaced, and we will discuss four of them in more detail. Firstly, this company had little competence and skills related to ERP implementation. Several studies have demonstrated that SMEs generally have little competence related to IT and ERP acquisition (Chen *et al.*, 2008, Fisher *et al.*, 2004, Laukkanen *et al.*, 2007). However, the CEO of this company had important experience as a member of the board of several SMEs and from earlier IT projects in the company. We conjecture that this company had a better starting position than most SMEs. The CEO knew that there were many pitfalls that could put the project in peril. The company therefore took steps to build the internal ERP competence on ERP acquisition and implementation. We should expect that the typical SME will in a worse position, and may easily end up with the wrong system and paying a larger bill than necessary. These are the findings in several studies (Chen *et al.*, 2008, Laukkanen *et al.*, 2007).

Secondly, we saw that agency theory issues were significant (Eisenhardt, 1989a). Agency theory describes the setting where a company (the principal) engages another party (the agent) to perform a service, and where some decision making authority is delegated to the agent. Companies acquiring ERP systems will usually enter into a long term relationship with the reseller and the implementation consultants. They may however, be motivated by different agendas, such as maximizing their income from the project. An SME thus enters into a principal-agent relationship with the reseller and the consultant. There were significant information and knowledge asymmetries between the company and the resellers. Resellers were the experienced part and approached the company with seasoned sales techniques. The crucial part for the reseller was to land the contract. Once the contract was signed,

junior consultants could be assigned to the rest of the project. This corroborates Skok and Legge (2002), who found that some consultants would lack experience from ERP implementation projects. The consultants would not always be honest about their skill levels. Several studies have demonstrated that SMEs will often be convinced by the resellers' sales pitches (Fisher *et al.*, 2004). A customer, who signs the standard contract, will be in a weak position if the project does not proceed as expected.

Thirdly, the company invited the resellers to auditions to demonstrate their ability to solve certain assigned tasks. We argue that this was a very good way to distinguish between the resellers, and that it should serve as an example for other SMEs. The CEO also used his business network to collect information about the proficiency and track records of the resellers. In this way he identified a very proficient consultant. The company was therefore able to select a proficient reseller and consultant with a very good track record. However, they realized that in the end they would have to trust that the assigned consultant would act professionally. Skok and Legge (2002) found that consultants are very important to the ERP implementation. They also found that the consultants would often follow their own agenda. Haines and Goodhue (2003) noted that companies should be aware of the consultants' agendas and motivations – such agendas could hurt the company.

Fourthly, the negotiation with the selected reseller was crucial, but quite difficult and time consuming. The company was clearly in a weak position as the inexperienced party. We conjecture that the boldness of the CEO ameliorated the company's weak negotiation position. The vendor had provided the resellers with standard contracts that would protect the interest of the vendor and the resellers. The vendor did not allow the resellers to make major changes to the standard contract.

We argue that resellers' sales people are motivated by sales quotas and bonuses. Their job is to land the contracts, and they may have too little focus on the technical challenges. They may even be motivated to underestimate the challenges, presenting only best case scenarios – that would prove to be unrealistic. If that is the case, it should not be a surprise that most ERP implementation projects are significantly over budget. We argue that there is a need for an independent third party to help SMEs locate proficient resellers and appropriate ERP systems. Finding the most appropriate system and avoiding the implementation pitfalls are quite challenging. Very few SMEs will have the necessary competencies and skills to do this alone. They risk being seduced by experienced sales people who will “move on to the next kill” when the contract has been signed.

## 6 Conclusion and Implications

We found that this company entered the ERP pre-implementation process from a disadvantaged position. They faced experienced ERP resellers with significant higher understanding of the pitfalls of ERP acquisition and implementation. We saw that the company and the resellers, including their consultants, will have different objectives. Such differences can lead to detrimental results for the customer. By using the CEO's business network to check the resellers' track records, and inviting prospective resellers for “auditions”, the project team was able to find a proficient reseller and consultant. We have utilized agency theory to highlight the unbalanced relationship between the principal; the client company, and different agents; resellers and consultants.

Our research was exploratory and has a number of limitations, thus providing possibilities for future research. This research study can serve as input for subsequent qualitative studies of ERP acquisition and implementation in SMEs. Future studies should explore the issues related to ERP acquisition in SMEs further. It would also be interesting to see if our findings are generalizable to other SMEs as well as see what the differences are. Specifically, studies of the issues of the competence and power asymmetries between the resellers and SME customers. We would also like to see studies that shed more light on protecting the interests of SMEs in light of vendors' self-interest and vendors' distractions by other priorities. These issues should eventually be addressed in a quantitative survey to provide generalizable results.

The results should have some interest for practice. Lessons learned from this case study could be transferred to other companies supporting them in tackling upcoming challenges during an ERP pre-implementation process. We propose that the market for resellers and implementation consultants should become more transparent. One possible venue is to make a web based service, much like hotels.com, that publishes client reviews and/or rankings of customers' satisfaction. This would help companies identify the most successful resellers and consultants. It would thereby motivate vendors, resellers and consultants to better serve the interests of their clients.

Even if we cannot generalize the findings, the case and the main issues should serve to enlighten other SMEs about possible pitfalls and about how they can handle the tough negotiations during the acquisition and pre-implementation process of an ERP system.

## References

- Akkermans, H. & Van Helden, K. (2002). Vicious and virtuous cycles in ERP implementation : A case study of interrelations between critical success factors. *European Journal of Information Systems*, 11(1), 35-46.
- Allen, J. P. (2005). Value conflicts in enterprise systems. *Information Technology & People*, 18(1), 33-49.
- Aloini, D., Dulmin, R. & Mininno, V. (2007). Risk management in ERP project introduction: Review of the literature. *Information & Management*, 44(6), 547-567.
- Bernroider, E. & Koch, S. (2001). ERP selection process in midsize and large organizations. *Business Process Management Journal*, 7(3), 251-257.
- Chen, R.-S., Sun, C.-M., Helms, M. M. & Jih, W.-J. (2008). Role negotiation and interaction: An exploratory case study of the impact of management consultants on ERP system implementation in SMEs in taiwan. *Information Systems Management*, 25(2), 159 - 173.
- Davenport, T. H. (1998). Putting the enterprise into the enterprise system. *Harvard Business Review*, 76(4), 121-131.
- Eisenhardt, K. M. (1989a). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57-74.
- Eisenhardt, K. M. (1989b). Building theories from case study research. *The Academy of Management Review*, 14(4), 532-550.
- Esteves, J. M. & Pastor, J. A. (1999). An ERP life-cycle-based research agenda, paper presented at the First International workshop in Enterprise Management and Resource Planning: Methods, Tools and Architectures – EMRPS'99, City.
- Fisher, D. M., Kiang, M. Y., Fisher, S. A. & Chi, R. T. (2004). Evaluating mid-level ERP software. *Journal of Computer Information Systems*, 45(1), 38-46.
- Gibbs, G. (2007). *Analyzing qualitative data*, London, Sage.
- Haddara, M. & Zach, O. (2011). ERP systems in SMEs: A literature review, paper presented at the 44 th Hawaii International Conference on System Sciences, City.
- Haines, M. N. & Goodhue, D. L. (2003). Implementation partner involvement and knowledge transfer in the context of ERP implementations. *International Journal of Human-Computer Interaction*, 16(1), 23-38.
- Klein, H. K. & Myers, M. D. (1999). A set of principles for conducting and evaluating interpretive field studies in information systems. *MIS Quarterly*, 23(1), 67-93.
- Kvale, S. & Brinkmann, S. (2009). *Interviews: Learning the craft of qualitative research interviewing*, Los Angeles, Calif., Sage.
- Lall, V. & Teyarachakul, S. (2006). Enterprise resource planning (ERP) system selection: A data envelopment anaysis (dea) approach. *Journal of Computer Information Systems*, 47(1), 123-127.
- Laukkanen , S., Sarpola , S. & Hallikainen , P. (2007). Enterprise size matters : Objectives and constraints of ERP adoption. *Journal of Enterprise Information Management ( Formerly : Logistics Information Management )*, 20(3), 319-334.

- Lee, Z. & Lee, J. (2000). An ERP implementation case study from a knowledge transfer perspective. *Journal of Information Technology*, 15(4), 281-288.
- Loh, T. C. & Koh, S. C. L. (2004). Critical elements for a successful enterprise resource planning implementation in small-and-medium-sized enterprises. *International Journal of Production Research*, 42(17), 3433-3455.
- Luo, W. & Strong, D., M. (2004). A framework for evaluating ERP implementation choices. *Engineering Management, IEEE Transactions on*, 51(3), 322-333.
- Markus, M. L. (2004). Technochange management: Using it to drive organizational change *Journal of Information Technology*, 19(1), 4-20
- Markus, M. L. & Tanis, C. (2000). The enterprise systems experience - from adoption to success, in: R. W. Zmud (Ed.) *Framing the domains of it research: Projecting the future...Through the past*. Cincinnati OH, Pinaflex Educational Resources, 173-207.
- Miles, M. B. & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*, Thousand Oaks, California, Sage.
- Newman, M. & Westrup, C. (2005). Making ERPs work: Accountants and the introduction of ERP systems. *Eur J Inf Syst*, 14(3), 258-272.
- Olsen, K. A. & Sætre, P. (2007). ERP for SMEs – is proprietary software an alternative? *Business Process Management Journal*, 13(3), 379-389.
- Robey, D., Ross, J. W. & Boudreau, M.-C. (2002). Learning to implement enterprise systems: An exploratory study of the dialectics of change. *Journal of Management Information Systems*, 19(1), 17-46.
- Ross, J. W. & Vitale, M. R. (2000). The ERP revolution: Surviving vs. Thriving. *Information Systems Frontiers*, 2(2), 233-241.
- Skok, W. & Legge, M. (2002). Evaluating enterprise resource planning (ERP) systems using an interpretive approach. *Knowledge & Process Management*, 9(2), 72-82.
- Somers, T. M. & Nelson, K. G. (2001). The impact of critical success factors across the stages of enterprise resource planning implementations. *Proceedings of the 34th Hawaii International Conference on Systems Sciences (HICSS-3)*. Maui, Hawaii.
- Somers, T. M. & Nelson, K. G. (2004). A taxonomy of players and activities across the ERP project life cycle. *Information & Management*, 41(3), 257-278.
- Stake, R. S. (2000). Case studies, in: N. K. Denzin & Y. S. Lincoln (Eds) *Handbook of qualitative research*. Thousand Oaks, California, Sage Publications, Inc., 435-454.
- Sun, A. Y. T., Yazdani, A. & Overend, J. D. (2005). Achievement assessment for enterprise resource planning (ERP) system implementations based on critical success factors (CSFs). *International Journal of Production Economics*, 98(2), 189-203.
- Velcu, O. (2010). Strategic alignment of ERP implementation stages: An empirical investigation. *Information & Management*, 47(3), 158-166.
- Verville, J. & Halington, A. (2003). A six-stage model of the buying process for ERP software. *Industrial Marketing Management*, 32(7), 585-594.
- Verville, J., Palanisamy, R., Bernadas, C. & Halington, A. (2007). ERP acquisition planning: A critical dimension for making the right choice. *Long Range Planning*, 40(1), 45-63.
- Volkoff, O., Strong, D. M. & Elmes, M. B. (2007). Technological embeddedness and organizational change. *Organization Science*, 18(5), 832-848.
- Wagner, E. L., Scott, S. V. & Galliers, R. D. (2006). The creation of 'best practice' software: Myth, reality and ethics. *Information and Organization*, 16(3), 251-275.
- Walsham, G. (1995). Interpretive case studies in is research: Nature and method. *European Journal of Information Systems*, 4(2), 74-81.
- Walsham, G. (2006). Doing interpretive research. *European Journal of Information Systems*, 15(3), 320-330.
- Wei, H.-L., Wang, E. T. G. & Ju, P.-H. (2005). Understanding misalignment and cascading change of ERP implementation: A stage view of process analysis. *Eur J Inf Syst*, 14(4), 324-334.