

Examining the impact of long-term consultant-client relationship in ERP projects

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Abstract

Many organizations took Enterprise resource planning system in use decade or even two decades ago. In many cases there is an external ERP supplier or consulting company helping in the implementation project. Since the initial implementation the client and consultant company might have been collaborating and conducting new projects together. Therefore, there exist many long-term ERP consultant-client relationships nowadays. This long history and past collaboration is likely to have an impact on the new projects that companies conduct together. However, in the past research this aspect has been mostly neglected and there is no previous research concerning how the long-term consultant-client relationship impacts on new ERP projects. The goal of this study will be examining this question and also to find out how consulting companies actually use this client specific history.

The research was conducted by first developing a deep understanding on the ERP field through broad literature review and identifying the central areas in the ERP projects. After this a multiple-case study design was selected for a research strategy. Professionals in the field of ERP consulting with experience from long-term collaboration with a client were interviewed using semi-structured interviews. In order to capture their perceptions a qualitative approach was chosen. Finally the results of the interviews were combined and analysis and conclusions made.

The results reveal that long-term relationship between the consultant company and client has a notable impact on the new projects. The impacts were analyzed through the areas defined by ERP project related critical success factors and the history seemed to have some kind on impact to all of these factors. The factors that were most impacted by the long history were project planning and goals setting, project management, communication and collaboration with the client and project team composition. In general, past knowledge and experience of the client was seen to facilitate new projects a lot. The identified reasons for this were improved communication, better understanding of client's business processes and people, and increased trust between the parties. Also some challenges were identified such as collaboration and communication between the parties becoming too informal, people getting too used to certain habits, inability to renew and come up with new ideas, excessive personification of personnel level relationships and keeping the profit margins high and consultants' knowledge level up to date. In addition, the results showed that the client specific history is used at some level but there would be still be more possibilities to exploit this information which in most cases tends to be in a tacit form.

Keywords ERP, consultant-client relationship, ERP implementation, case study

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1 Introduction

Enterprise resource planning systems have been almost two decades and still are a hot topic in the business world. Companies are either upgrading their current systems, taking new modules in use or implementing totally new systems. The promise of seamless integration of all information flowing through a company sounds very tempting to many companies (Davenport, 1998) and in today's business world ERP systems are regarded as a must have tool in order to guarantee effective business operations. ERP systems started to gain its popularity at the early 1990's and finally at the end of 1990's started to evolve from Material Resource Planning systems (MRP) to EPR systems as we know them today covering all inter-organizational activities (Shaul and Tauber, 2013).

ERP systems can be seen to be the largest and most demanding information systems and the implementation project as the largest IT investment including largest number of individuals and having the broadest scope and complexity (Chang et al., 2008). Implementing a totally new enterprise system contains many risks and even though companies spend millions on ERP projects, there is extensive evidence that they experience considerable problems, particularly during the actual implementation phase (Parr and Shanks, 2000). There are many failure stories from unsuccessful projects especially from the 1990's when the ERP systems started to really gain their popularity. Companies want to be sure that they will gain the expected benefits and they are not losing their money in unsuccessful implementation projects and therefore during the last twenty years a lot of work has been done in order to understand the factors behind successful ERP implementation. These factors are often referred as critical success factors. Because the area has been a lot studied, comprehensive lists of these factors has been identified and at this point every ERP vendor, third party consultant and company planning an implementation should be aware of these factors and therefore be able to succeed in the adoption of the system and avoid the pitfalls and risks in this phase.

Because these systems have been on use and studied for quite a long time already, the field of ERP research is concerned to be pretty mature and for example already in 2007 Jacobs and Weston concluded that “It is our judgment that ERP systems have now reached a level of maturity where both software vendors and users understand the technical, human resource and financial resources required for implementation and ongoing use. ERP systems should now enter an era of relatively “easy configuration” that takes days and weeks with

implementation completed in weeks, or at most 2–3 months.” However, still today it is common that the implementation does not go as planned and companies face notable challenges. The main problems are still the same as over ten years ago. For example Chang (2004) indicated that 90% of implementations exceed the planned time and budget and Zhang et al. (2005) stated that projects are 178% over the budget and exceed the planned time by 2,5 times. In addition, before mentioned studies showed that only about every third project is able reach the set goals or is perceived successful.

In traditional implementation of ERP system it is common that there are three parties involved in the implementation project. The implementing company (client), the provider of the ERP system (vendor), and the consulting company which helps the company in the implementation project (ERP supplier). Due to complex nature of ERP implementations and high risks and costs included it is very common that companies use external consultants to assist in the system implementation (Metrejean and Stocks, 2011). In many cases the consulting company and client collaborate closely in the project and can even form a long-term relationship where the consultant company takes care of the system updates and modifications, helps in implementing new modules or expanding the system to new locations of the client.

1.1 Research gap

As mentioned above the critical success factor research in the ERP field can be seen to have reached some kind of maturity. There exists also studies related to consultants’ role in the ERP projects and there is some research from collaboration between consultants and clients (e.g Metrejean and Stocks, 2011, Chang et al., 2013, Lech, 2013, Sammon and Adam, 2002). The long-term aspect of the relationship has not been much studied yet and Pekkola et al. (2015) are one of the few who have brought this viewpoint up. Most of the implementation related research is focused on projects where companies take ERP system in use for the first time. However, many large organizations took this step ten or even twenty years ago. Therefore, the focus of today’s research should be shifted more on examining the system development projects or implementation of new modules to the system to cover more operations.

It is very likely that these new ERP projects are conducted with the aid of the same consultant company as the initial implementation, as in many cases it is beneficial for both

parties to continue the collaboration. This kind of “long-term relationship” forms an interesting area for further research as they are likely to evolve over time and have an impact on the new projects between the two parties. One can assume that this kind of relationship will facilitate conducting new projects as well as cause different challenges compared to ERP projects without prior collaboration between the client and consultant. It would be also interesting to find out how consulting companies learn from the past experiences with the client, how this knowledge is transferred to new projects and how this information is actually exploited. In today’s business world long-term relationships are beneficial for the consultant company as they provide them with continuous revenues but also for the client as they have continuous support from the reliable partner.

1.2 Research objective

The objective of this research is to set the focus on a long-term ERP consultant-client relationship and analyze how the consulting company exploits the history with the client and how does it impact on the new ERP projects conducted with the client. The analysis will be done from the perspective of the consulting company to better understand how they perceive these kinds of relationships and potential benefits and challenges within those. As today there is likely to exist many long-term consultant-client relationships in the ERP field the goal will be broadening the understanding of this area and provide insights from the consultant company’s point of view.

The research questions are as follows:

- 1) From a consultant’s point of view how does a long-term relationship with a specific client impact on new projects conducted and collaboration within two parties
- 2) How is the client specific history used in new projects

To find answers to these questions first a broad literature review will be conducted in order to develop a comprehensive understanding of the area and to define how the impacts should be studied. After this, experts on the ERP field who have experience from long-term collaboration with one or more clients are interviewed. Finally, the results of these interviews will be combined to get a comprehensive picture and at the end conclusions will be drawn based on these.

1.3 Structure of the thesis

This thesis will consist of five chapters. In the introduction the motivation and background for the research will be presented as well as the research gap in the field and the objectives of this research. In the second chapter a broad literature review on the subject will be conducted presenting the research on the field and definition of main concepts. The goal will be providing the reader a good picture of the ERP systems, issues related to implementation of the system as well as present the key parties related to implementation projects and their roles. It will also form a basis for the empirical part conducted in the study. In the third chapter the methodology will be presented including research design and the analysis of the data. In chapter four the findings from the interviews will be presented and in chapter five these results will be discussed and conclusions made as well as theoretical and managerial implications drawn and limitations of the study discussed and future research possibilities in the area discovered.

2 Literature review

In this chapter the main concepts related to the field of ERP systems will be presented with the past research from the field. To provide the basis for understanding the subject the first part will describe the main characteristics of ERP systems, their benefits and evolution to be the systems as we know them today. This will be followed by discussion about different implementation models and implementation strategies to deepen reader's understanding on the area. After this the focus will be shifted on more specific issues such as research concerning factors enabling successful implementation, the main challenges in implementation projects as well as the main parties involved in the implementation projects and their roles in it. The goal of this chapter will be providing good insights on the studied subject and form the theoretical foundations for the empirical part conducted later.

2.1 Enterprise resource planning system

2.1.1 Definition

ERP systems are the software tools used for managing enterprise data (Sumner, 2005) They are integrated cross-functional systems that contain selectable software modules addressing a wide range of operational activities in the firm, such as accounting and finance, human resources, manufacturing, sales, production planning and distribution (Grabski et al., 2011). In other words ERP system is software that integrates all the data in one place and thus makes the flow of information inside the company more effective. Davenport (1998) defined the main functionalities of ERP system and in the figure below the ERP system is seen as the central database which gathers the information from different modules and then shares it forward for further use.

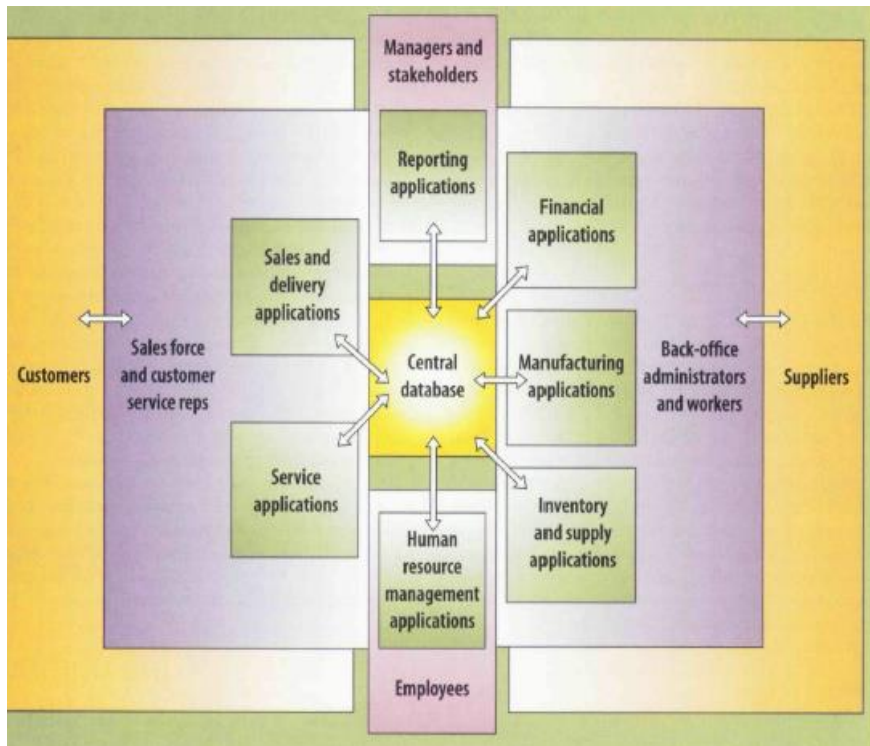


Figure 1: Anatomy of an enterprise system (Davenport, 1998)

Since the definition of Davenport (1998) the main characteristics of ERP system have remained the same but during the last years also some new functionalities has been added to ERP systems. For example most of the ERP providers offer today business intelligence and analytics possibilities for many functional areas. In addition governance, risk and compliance (CGR) functionalities have been added as they are especially important in highly regulated industries. The popularity of mobile ERP interfaces is increasing all the time meaning that the systems can be used also from mobile phones and tablets. Modern applications include also some social capabilities such as tools for in-house collaboration and with the customer. (Maurno, 2014)

According to O'Leary (2000) ERP systems are assumed to have following characteristics.

- ERP systems are packaged software designed for a client server environment, whether traditional or web-based
- ERP systems integrate the majority of the business processes
- ERP systems process a large majority of an organization's transactions
- ERP systems use an enterprise-wide database that typically stores each piece of data once

- ERP systems allow access to the data in real time

2.1.2 History and evolution of ERP systems

The first step towards ERP systems was in 1970s when the predecessors of ERP systems, Material requirements planning (MRP) systems were developed. The main purpose of those was to plan the parts or product requirements according to master production schedule. These systems were followed by manufacturing resource planning systems (MRP II) in 1980s. These systems were designed to synchronize the materials with production requirements and that way optimize the manufacturing processes. The first versions of ERP systems emerged at the end of 1980s and provided the possibility to integrate enterprise wide functions such as finance, human resources, operations and logistics, and sales and marketing. During the 1990s ERP systems started to gain more popularity and the system vendors started to provide add-on modules such as supply chain management, advanced planning and scheduling and e-business solutions such as customer relationship management in order to provide additional functionalities to customers. Through these functionalities it was possible to extend the system beyond one organization to include also business relationship parties to the same system and that way enhance the operations between the parties (Salo, 2007). These systems are referred as Extended ERP or ERP II. (Rashid & Patrick, 2002).

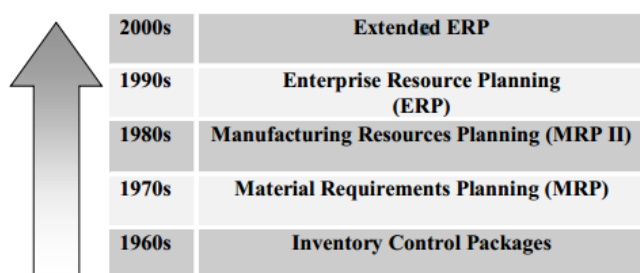


Figure 2: Evolution of ERP systems (Rashid & Patrick, 2002)

Today it has become more and more common to offer and use cloud based ERP systems and services. In cloud environment a third party vendor manages and controls the infrastructure where the ERP system and related data exists. When using a cloud service companies will not have need to install the system to local PCs or store the data in local servers but they can use the application through a web browser. This kind of system requires less hardware investments and fees and does not need as much effort related to system

maintenance and upgrade. Because of these reasons the cloud based ERP systems are increasing their popularity all the time and companies are considering these as an alternative to traditional on-premise ERP systems. (Peng and Gala, 2014, Elragal and Haddara, 2012)

2.2 ERP system implementation

2.2.1 Implementation models

Successful ERP implementation requires a multi-stage approach and different researchers have proposed different kinds of models for ERP implementation. Markus and Tanis (2000) developed a four-stage model for ERP implementation. This model included chartering phase, project phase, shakedown phase, and onwards and upwards phase. The chartering phase is a pre-implementation phase that includes building a business case, selecting a software package, identification of a project manager and approving a budget and schedule. In the project phase the actual implementation is been made and the new system gets “up and running”. The main activities consist of software configuration, integrating the system, testing, data conversion, training and rollout. In the shakedown phase the company moves from “go-live” to actually using the system in normal operations. Finally in the onward and upward phase, which can be seen as a post-implementation phase, the system should be totally integrated with the company’s operations and the company is able to achieve the actual business benefits. This stage includes also the maintenance, upgrading and user support.

Parr and Shanks (2000) developed a project phase model (PPM) consisting of three stages: planning phase, project phase and enhancement phase. The planning phase is quite similar to the Markus and Tanis (2000) chartering phase. It includes selecting the ERP package, determining the scope, assigning a steering committee, selecting a project manager and assigning resources. The project phase includes the tasks from identifying the ERP modules to installation and finally starting to use the system in normal operations. To better concentrate on the implementation itself, the project phase is divided into five sub phases: set-up, reengineering, design, configuration and testing, and installation. The enhancement phase again is similar to Markus and Tanis (2000) onward and upward phase including repairing, maintenance and the actual use of the new system.

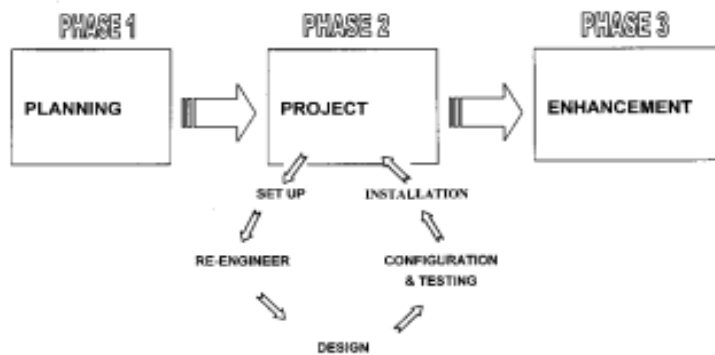


Figure 3: Project phase model (Parr & Shanks, 2000)

2.2.2 Implementation strategies

Basically the implementation of the ERP system can be executed in two different ways. The implementation can be conducted as a big bang, which means that the ERP system is implemented all at once to the whole organization. The other alternative is a phased approach which can be either executed as phased by module or phased by site. Phased by module strategy means that the modules are implemented sequentially and the next module is not implemented until the functioning of the previous has been tested. The phased by site instead relates to implementing the ERP system separately in to different sites of the organization.

The benefits of a big bang are that the installation time is shorter and the costs are much lower compared to phased approach. However the risk is quite high as number of things can go wrong when changing all at once. The phased approach in contrary includes less risk but is more expensive and takes more time. (Sumner, 2005; softwareadvice.com)

2.3 Benefits of the ERP system

The reason behind the popularity of the ERP systems are the notable benefits they are able to bring to companies. However, many companies have failed to achieve the wanted benefits due to unsuccessful implementation project. The benefits companies are hoping to achieve are not limited only to operational issues. For example Shang and Sheddon (2003) have identified ERP systems to bring benefits in the five following dimensions:

- **Operational:** ERP system is able to lead cost reduction, cycle time reduction, productivity and quality improvement and customer services improvement

- **Managerial:** ERP system enables better resource management, improved decision making and planning, and performance improvement
- **Strategic:** ERP systems are likely to support business growth and business alliance, build business innovations and cost leadership and generate product differentiation
- **IT infrastructure:** ERP systems enable building business flexibility, IT costs reduction and increased IT infrastructure capability
- **Organizational:** ERP system can support organizational change, facilitate business learning, empowerment and building common visions

2.4 Critical success factors for ERP implementation

ERP implementations have been popular subject among the researchers during almost the last two decades and a lot of work has been done in order to understand how to successfully implement an ERP system. The most popular area in this field has been studying the Critical success factors (CSFs) in ERP implementations (Grabski et al., 2011). An extensive list of these factors has been identified but the chosen factors seem to vary a bit between the studies and it seems that there is no common view on all the CSFs. Depending on the research, the number of identified CSFs varies between 6 and 22 and the ranking between them varies depending on the cases studied, context, culture and many other variables (Elragal and Haddara, 2012). Also some researchers have combined multiple factors together or created sub factors under the actual CSFs. Some of the studies have also combined many previous researches and that way identified the most common factors. In their study Shaul and Tauber (2013) summarized the past research related to critical success factors and developed a picture below where one can see the main areas of CSF research.

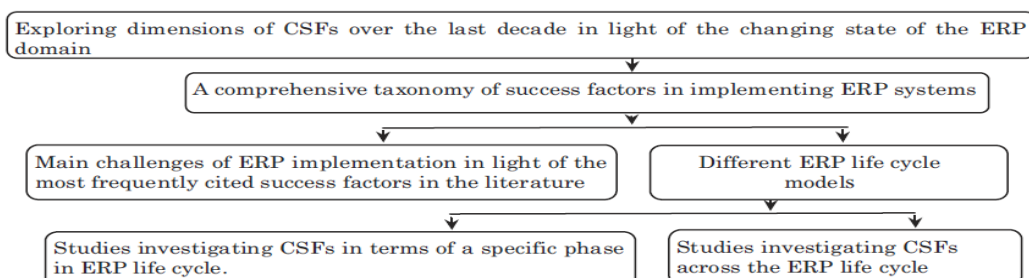


Figure 4: : Themes investigated in the present study (Shaul & Tauber, 2013)

2.4.1 Past studies

During the years different studies related to CSFs in the ERP context have been conducted. Researchers have been examining the interrelations between the factors and the importance of the factors in different phases of the implementation. The factors have been categorized in to different categories and different sub factors have been identified under the main factors. Most of the studies are concerned on identifying the CSFs in large company context but there are also some studies related to small and medium enterprise (SME) sector. In this section some of the most common studies will be presented and light shed on the main findings.

In their study Holland and Light (1999) identified 12 CSFs and divided those in to tactical and strategic factors based on their nature. The findings can be seen from the figure 5. The result of their study highlights the fact that in addition to the standard project management CSFs like top management support and clear business vision, the company has to pay attention to the legacy systems and selecting the right ERP strategy to be able to succeed in the ERP implementation.

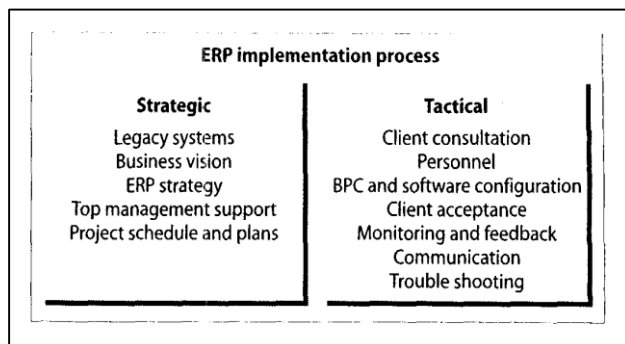


Figure 5: CSF categorization (Holland and Light, 1999)

Somers and Nelson (2001) studied the importance of the critical success factors in different phases of the ERP project. Based on a broad literature review and company interviews they identified 22 factors. These factors can be seen from the table in the appendices. After this they sent a questionnaire to 86 companies to see how they rate the importance of different factors. *The top five factors rated by the companies were top management support, project team competence, interdepartmental cooperation, clear goals and objectives and project management.* The importance of the factors was also examined in different stages of the implementation. As a result they were able to find out which factors had high importance only in some stage of the project and which factors had high influence

during the whole process. Figure 6 presents their findings. This study enables companies to see in which factors they need to put effort and when.

In their study Akkermans and Helden (2002) used a list made by Somers and Nelson (2001) and focused on finding the interrelations between the identified CSFs. In other words they wanted to find out how failing with some factor influenced to the other factors. They found out that the factors were highly correlated and thus, failing in one factor would cause problems with other factors also. This was noticed to work also vice versa and so succeeding with one factor will enforce the other factors. This study highlights the importance of being aware of all the CSFs as missing only one may weaken the outcome of the implementation notably.

<u>Stage: Initiation</u>	<u>Respondents</u>
1. Architecture choices	71%
2. Clear goals and objectives	63%
3. Partnership with vendor	61%
4. Top management support	61%
5. Careful selection of package	60%
<u>Stage: Adoption</u>	
1. Top management support	68%
2. Project team competence	61%
3. Use of steering committee	60%
4. Partnership with vendor	60%
5. Dedicated resources	59%
<u>Stage: Adaptation</u>	
1. Interdepartmental communication	65%
2. Interdepartmental cooperation	63%
3. Project team competence	63%
4. Dedicated resources	60%
5. Use of vendors' tools	60%
<u>Stage: Acceptance</u>	
1. Interdepartmental communication	64%
2. Interdepartmental cooperation	63%
3. Top management support	56%
4. Project team competence	55%
5. Education on new business processes	53%
<u>Stage: Routinization</u>	
1. Interdepartmental communication	51%
2. Top management support	42%
3. Interdepartmental cooperation	41%
4. Vendor support	36%
5. User training on software	36%
<u>Stage: Infusion</u>	
1. Interdepartmental communication	39%
2. Interdepartmental cooperation	35%
3. Top management support	32%
4. Vendor support	28%
5. Partnership with vendor	28%

Figure 6: Importance of CSFs in different stages (Somers & Nelson, 2001)

Loh and Koh (2004) focused on identifying critical elements behind successful ERP implementation. They divided the critical elements into three categories: critical success factors, critical people and critical uncertainties. Their research proposes that successful ERP implementation requires identifying and managing all the three different critical elements. They identified vendors, consultants, IT specialists and support personnel, operation manager and end users to be critical people throughout the ERP project. The identified CSFs can be seen from the appendices.

Maditinos et al. (2012) studied how the human inputs such as top management, users and external consultants impact on communication effectiveness, conflict resolution and knowledge transfer in ERP projects. They identified the consultant support and effective knowledge transfer to be the most important factors for the success of ERP system. They stated that especially the knowledge transfer from consultants to users is in a central position as it increases the level of user knowledge and finally enables the users to modify and maintain the system without the help of consultants. Dezdar and Sulaiman (2011) focused on studying how organizational factors such as top management support, training and education,

and enterprise-wide communication impact on the success of ERP implementation. As a result they found a positive correlation between all these factors and successful ERP implementation.

Even though ERP implementations have been a lot studied and factors enabling successful implementation have been identified it still does not seem to have had a big impact on the success of ERP implementations (Pekkola et al., 2013). Therefore to find an alternative viewpoint for example Momoh et al. (2010) studied the factors causing the main challenges in ERP implementation projects by identifying the critical failure factors. They were able to identify 9 factors that are likely to lead to cost overruns in the projects and even in worst case to project cancellations. The identified factors were *excessive customization, dilemma of internal integration, poor understanding of business implications and requirements, lack of change management, poor data quality, misalignment of IT with business, hidden costs, limited training and lack of top management support*. The identified factors can be seen from the figure 7.

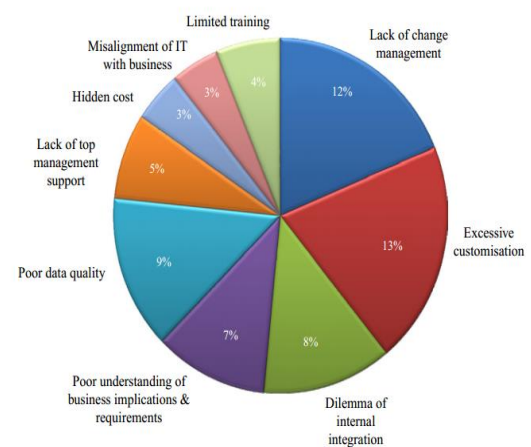


Figure 7: Critical failure factors (Momoh et al., 2010)

2.4.2 Most commonly cited Critical Success Factors

Because the critical success factors can be seen to describe the central issues in the implementation projects and because the projects are often analyzed through these, the author considers important to present more closely CSFs most commonly cited in the academic literature. The chosen factors can be seen from the table in the appendices. In addition, as the empirical part focuses on examining the impacts of a long-term consultant-client relationship on new ERP projects, it is very likely that the past history with the client will impact on the CSFs of the new projects. Therefore, it will be important to include these factors in the empirical study later to analyze how the history with a client will impact on the critical success factors that are mainly studied related to projects without previous history.

Based on a broad literature review 8 factors were identified that occurred most often in the studies. These are *top management commitment and support, business plan and*

vision/clear goals and objectives, education and training, effective communication, excellent project management, business process re-engineering and minimal customization, project team competence and composition, and change management and organizational culture. Below each of these factors is described in detail to provide understanding of their role in the implementation project and better highlight the central issues in ERP projects.

Top management commitment and support

Top management commitment and support is critical for every IT project to succeed (Johnson, 1995). This applies also to ERP projects and in both, Somers and Nelson (2001) and Nah et al. (2003) researches it was rated as the most important success factor. It is important that the top management identifies the project to have a top priority and they are committed to allocate all the needed resources to the implementation project (Nah et al., 2001; Holland et al., 1999).

The support and commitment of the top management can be seen as the base which enables succeeding with the other factors and the interrelation model developed by Akkermans and Helden (2002) also supports this claim. If the top management does not have clear goals and business vision or they are not able to communicate those properly, the project has little chance of succeeding.

Besides the commitment and support, also the right skills and knowledge of the top executives is needed to successfully implement an ERP system. The managers should be able to understand the business implications of the ERP system and not give the responsibility of the implementation to the technological departments (Davenport, 1998). ERP implementation is more than just a technological challenge. Managers who are able to see the technology investment as a business enabler and have a clear business purpose for it are likely to achieve the wanted goals (Roque, 2010).

Business plan and vision/clear goals and objectives

Identifying the goals and possible ways to accomplish those should be the first step in each project and this applies also to ERP projects (Slevin and Pinto, 1987). The vision has to be defined at the beginning of the project, and it should specify how the ERP system and organization will relate to each other and what are the expectations concerning the whole project. It is the key that links the ERP project to the organizational strategy and determines the goals to be reached. (Francoise et al., 2009; Roque, 2010).

The identified goals have to be specific and operational and it is also important to constantly evaluate achieving these goals. Usually the goals that have to be met are related to scope, time and costs (Somers and Nelson, 2001). Achieving the stated goals can be very challenging as majority of the ERP projects usually exceeds the expected time and costs. It is important that the management identifies the ERP project as the most important project to guarantee all the needed resources and capital to best reach the stated goals.

When making the business plan the management has to be aware of how the new technology can be integrated to the business itself. Alignment of the IT strategy to the business strategy is crucial and this can be best reached by including both the IT and business executives to the business strategy formulation process. Implementing an ERP system without first developing a clear vision and understanding of the business implications is likely to lead to a disaster. (Al mashari et al., 2003) It is important that the vision is communicated to all levels of the organization so that all the employees will see the reasoning behind the implementation decision. This is likely to increase the trust and co-operation and thus lead to a better outcome (Amoako-Gyampah, 2004).

Education and training

Without proper training of the employees it is very difficult to achieve the wanted benefits. Because the ERP system will have an impact on the way people do their job, the company must be willing to invest in user training. The training should not focus only on using the new software but also on the new business processes (Sumner, 2005). Roque (2010) stresses the importance of teaching the ways of using the technology to achieve the strategic goals.

Francoise et al. (2009) highlight the importance of end-user involvement in the early stages of the project. They stress the fact that the training should be started so that the employees will be ready when the project goes alive. The training can be conducted by the internal IT staff or external consultants depending on the situation. In the case that external consultants take care of the training the company must establish a knowledge transfer mechanism which guarantees that the knowledge and expertise of the consultants is transferred adequately to the end-users.

Excellent project management

As the ERP projects tend to run notably over the budget and take longer than expected, the role of the project manager is very challenging. Thus, having an excellent project management is vital to improve the possibilities that the time and budget requirements are

met in the project (Nah et al., 2003). The responsibility to lead the project should be given to an individual or a group of people (Rosario, 2000). The management has to clearly define the objectives, develop a work and resource plan and carefully track the progress (Woo, 2007).

Successful project management requires handling technical issues like system development and process re-engineering and same time taking care of human and organizational issues like change management and end-user involvement (Francoise et al., 2009). Slevin and Pinto (1987) argue that a project manager has to have both tactical and strategic skills to successfully manage to project.

Deztar and Ainin (2011) say that strong project management includes controlling the scope and time of the project. The scope refers to the modules to be implemented, involvement of business units and amount of business process re-engineering needed (Nah et al., 2001). The time includes defining the critical path, deadlines and milestones of the project. If a project scope is too broad or ambitious it can cause severe problems (Somers and Nelson, 2001)

Project team competence and composition

“Ideally the project team should consist of staff members that the organization cannot afford to assign to the project” (Roque, 2010). The guideline is that the company should address its best people to the ERP project (Bingi et al., 1999). Because the ERP project involves all the departments in the enterprise, also the team should be cross functional, so that the best people from different departments are involved (Nah et al., 2001). In addition to internal staff, also external consultants should be involved to the team so that the internal staff is able to develop their technical skills during the project (Holland and Light, 1999; Nah et al., 2003).

It is not enough that the team members have only technical skills. They need to also have a wide understanding of the company’s business operations (Woo, 2007). To guarantee the best outcome, the members of the team must be assigned full time to the implementation project so that they are able to give their full attention (Nah et al., 2001). Team members must also have the trust of the top management so that they are empowered to make quick decisions when needed (Parr and Shanks, 2000) Using incentives to push the group towards a common goal has also been seen important. (Nah et al., 2003)

Business process reengineering and minimal customization

One of the main challenges related to implementing a commercial off-the-shelf ERP system is its incompatibility to organization's current business processes. The ERP systems are based on the vendor's vision of the best practices on the specific industry. However, these practices rarely fit to the company's current processes and thus the reengineering of the business processes is needed. To be able to take full advantage of the best practices and achieve the full benefits of the ERP system the reengineering of the existing business processes is crucial (Bingi et al., 1999; Yusuf et al., 2004; Nah et al., 2003).

The opposite of reengineering the processes is customizing the selected ERP system so that it will fit to the company's existing systems. However, it is seen that companies should rather be willing to change their processes than customize the ERP system (Bingi et al., 1999). Customizing the system is likely to lead to increased costs, longer implementation time and problems related to vendor's maintenance and upgrades (Somers and Nelson, 2001; Sumner, 2005). Ehie and Madsen (2005) indicates that "Rather than integrating ERP-software into the existing business processes, successful companies draw their process requirement needs and select the system that best fits these needs to the greatest extent possible. Once these are done, the company would either customize the software or adapt their processes to particular software"

However, in some cases the company's competitive advantage is based on its unique way to do business and in those kinds of situations the customizing should be considered. The basic rule is to do as minimal customization as possible.

Organizational culture and change management

"ERP systems introduce a large-scale change that can cause resistance, confusion, redundancies, and errors." (Somers and Nelson, 2001). This is why a clear change management program is needed including people, organization and culture change (Rosario, 2000). The change management should be started as early as possible by first achieving the support of mid-level managers and opinion leaders (Francoise et al., 2009) One of the most important aspects is to recognize the need for change and communicate it to all levels, as the stronger the need for change is, the more likely people will support the ERP implementation. (Falkowski et al., 1998, according to Nah et al., 2003)

As a part of the change management, users should be involved in the design and implementation processes, and education and training should be arranged to support that. The training is important as it helps the employees to understand how the new system will change

the business processes and affect to their job (Loh and Koh, 2004; Nah et al., 2003). Muscatello and Chen highlight the importance of communicating the employees how they fit to the new ERP-oriented environment and actively taking care of their concerns related to the new system. Changing the whole organizational culture to support the new system is crucial as culture with shared values and common goals will improve the chances to succeed (Nah et al., 2001; Muscatello & Chen, 2008).

Effective communication

Like the top management support, also communication has a crucial impact on the other critical factors. Because ERP system is an enterprise wide solution, a lot of interdepartmental communication is needed to ensure interdepartmental collaboration (Somers and Nelson, 2001). Implementing an ERP system must be very visible project with a lot of communication. Managers should clearly communicate the goals and expectations as they help to recognize the milestones in the ERP implementation (Nah et al., 2003)

Slevin and Pinto (1986) regarded communication to be crucial within the project team and between the team and rest of the organization (Somers and Nelson, 2001). The communication should work both ways so that the managers will share the information with the employees but also the employees will have a possibility to give feedback related to the new system. This way the share of knowledge will be maximized.

It is important that the company has a clear communication plan. It should cover areas such as rationalizing the ERP implementation, details of the business process change, demonstration of the new software modules and information about change management strategies and tactics (Bancroft et al., 1998). Esteves and Pastor (2000) claim that there should be two kind of communication: Inwards communication inside the project team and outwards communication to the whole organization concerning the results and goals in each stage of the implementation.

2.5 Challenges in ERP implementation

As already mentioned studying ERP implementations has been popular subject for a long time. The main focus has been on studying the CSFs that minimize the risk in implementation and would guarantee positive outcome. However, even though the researchers have paid a lot of attention on identifying these factors the challenges still occur in real life and it seems that companies have not been able to benefit from the extensive

research conducted (Pekkola et al., 2013). Closely related to identifying CSFs has been studying the main difficulties and challenges in the implementation projects. The main difference in this research has been that now the focus has been on identifying which are the factors that actually cause the negative outcome. For example Momoh et al. (2010) aimed in identifying the critical failure factors in ERP implementation.

In order to evaluate if the implementation was successful or not one has to understand how to measure the success of the implementation project. Hong & Kim (2002) stated that the success should be measured by the degree of deviation from the goals of the project such as schedule or cost overruns, performance of the system or the achieved benefits. In other words if the implementation of the system leads to higher service levels, reduced costs, benefits to company's external and internal environment and same time stays within the set budget and maintains adequate performance the implementation can be seen to have been successful (Schniederjans & Yadav, 2013). When evaluating the projects today from this perspective it seems that a large number of implementation projects are unsuccessful.

Momoh et al. (2010), state that the challenges are not due to poorly designed ERP systems but due to companies' lack of understanding how the system should be implemented. Because of this it is not uncommon that the time and budget are exceeded in many projects. The main problems are still the same as over ten years ago. For example Chang (2004) indicated that 90% of implementations exceed the planned time and budget and Zhang et al. (2005) stated that projects are 178% over the budget and exceed the planned time by 2,5. In addition, before mentioned studies showed that only about every third project is able reach the set goals or is perceived otherwise successful.

Perhaps the most current statistics concerning the ERP implementations can be found from Panorama Consulting's yearly ERP report. It reveals that notable percent of the implementation projects take longer than intended, cost more than originally budgeted and that companies are not receiving the benefits they were expecting. Even though these are only results of one company's study they can be seen to describe the situation in the field pretty well and also be in line with the past research concerning the ERP implementation challenges and success.

2.6 Key stakeholders in ERP projects

In traditional implementation of ERP system it is common that there are three parties involved in the implementation project. The implementing company (client), the provider of the ERP system (vendor), and consulting enterprise, that helps the company in the implementation (ERP supplier/consultant). In some cases it also possible that the implementation is conducted by the internal IT department of the implementing company or with the help of vendor's own consultants. ERP vendors have their own partner network consisting of IT or management consultant companies or smaller independent consultancy firms which focus only on implementation and service support. These are the ERP supplier companies that sell the services of assisting in the implementation of the vendor's system (Lech, 2013). In their study Sammon and Adam (2002) identified the main actors and their relationships and referred that as ERP community (figure 8).

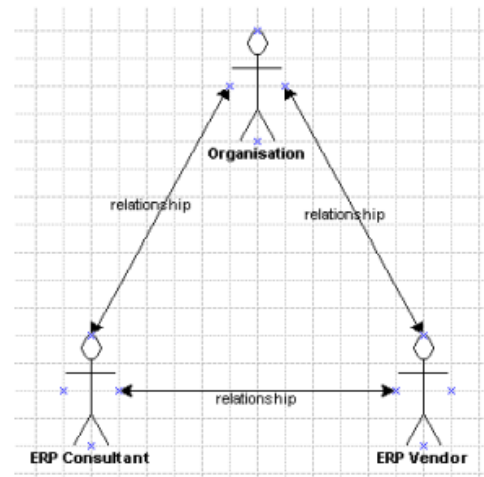


Figure 8: Actors in ERP community (Sammon & Adam, 2002)

2.6.1 Collaboration in ERP projects

Even though it is very common that ERP implementations are conducted with the help of external consultants this area has not gained that much attention among the researchers compared to other ERP related research. The role of consultants has been seen as critical success factor in many studies (e.g. Somers and Nelson, 2001, Ehie and Madsen, 2005, Chen and Muscatello, 2008) and it has been stated that effective collaboration and communication between the software vendor, consultants and client is crucial (Wu and Cao, 2009). Hung et al. (2012) examined the impact of knowledge transfer climate and relationship bonding in ERP implementation projects and came to conclusion that these two play a vital role in enabling effective knowledge transfer between the two parties. In other words if good relationship can be formed between the consultant and implementing company side, this is likely to lead to positive knowledge transfer climate which in turn enforces effective knowledge transfer and at the end leads to positive outcome of the project. Ko et al. (2005) stated that realizing knowledge transfer will be difficult if the client and consultant feel that they are drifting apart and have different work values, norms, and attitudes.

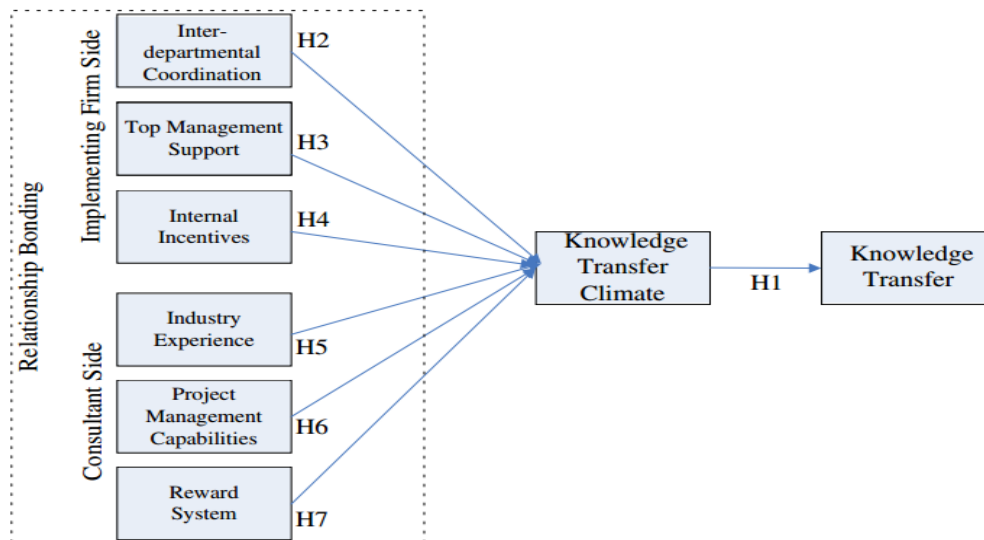


Figure 9: ERP knowledge transfer model (Hung et al., 2012)

In many cases the consultant company forms a long-term relationship with the customer so that after the actual implementation they take part in the development of the system and may also implement other modules of the system later or update the current system. In these kinds of cases it is likely that the relationship does not stay stable all the time. In their research Pekkola et al. (2015) focused on this issue and examined the collaboration roles in a long term ERP system development project. As a result they identified four kinds of collaboration modes that existed during the timeframe. They noticed that in a long relationship the collaboration modes changed as a response to project related incidents and did not stay stable throughout the relationship.

The identified collaboration modes were Contract mode where the collaboration is defined by legal contracts between the parties, cooperative mode where collaboration is based on mutual interest and voluntary cooperation, Personified mode where collaboration happens mainly between individuals and Process mode where collaboration is a process that can be planned and designed. Summary of the collaboration modes can be seen from the figure below.

Table 1: Summary of the collaboration modes (Pekkola et al., 2015)

	Is reaction to	Regularity	Emphasizes	Requires
Contract mode	Division of costs and responsibilities	Management-induced systems development	Plans and commitments	Clear contracts
Cooperative mode	Unclearity in the context	Cooperative development of new solutions	Cooperative action, the spirit of "we"	Common goals
Personified mode	Imminent problem-solving needs	Improvised problem-solving actions	Individual achievements	Influential persons
Process mode	Constant planning needs	Planned development actions	Change and quality management practices	Defined and implemented processes

2.6.2 Role of consultants

Especially in the mid 90's the ERP consulting business was booming when all companies wanted to take ERP system in use but still today it is very common to use consulting company to assist in the implementation and according to Panorama's report (2014) 83% of the companies used the services of consulting company.

Due to complex nature of ERP implementations and high risks and costs included it is common that companies use external consultants to assist in the system implementation (Metrejean and Stocks, 2011). In many cases the implementation projects tend to be once in a lifetime projects for companies so it is unlikely that they would have all the required knowledge in-house. Therefore consultants are used to provide the needed technical and business expertise and that way decrease the level of knowledge needed inside the implementing company (Chang et al., 2013). As the customer possesses the business knowledge they need to educate the consultants concerning the business needs of the system and in turn the role of the consultants is to educate the client on the technology side. Among many others Chang et al. (2013) stated that it is vital that the consulting company's goals are in line with the client's goals. Usually the misfits between the system and the expected goals arise from the requirements that are not supported by the ERP package (Soh et al., 2000) and therefore it is crucial that the consultants understand the customer's business so that they are able to customize the system to support the specific business needs.

Companies use consultants in ERP projects for different purposes ranging from managing the whole project to providing support in some specific areas. It is most common that consultants provide support in the actual implementation phase of the system but they have also important role in the training of the users and assisting in change management processes (Panorama, 2014). The main reasons for companies to use ERP consultants can be seen from the picture below.

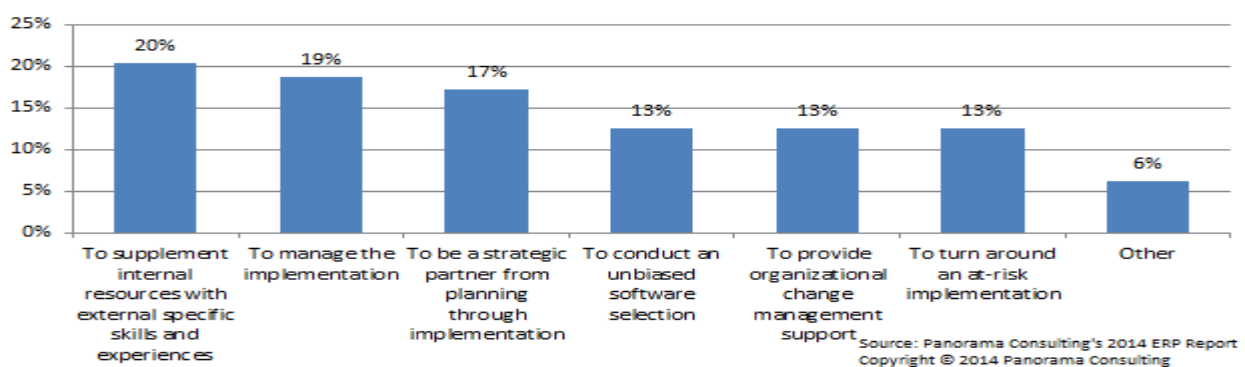


Figure 10: Reasons to use ERP consultant (Panorama Consulting, 2014)

Because the two parties possess a different knowledge there is a potential for knowledge gap between them. In order to minimize this gap it is essential that there is effective communication in place and that the process of knowledge transfer is well-managed (Maditinos et al., 2011). However, using the aid of consultants does not guarantee a successful implementation and there are many stories about failed implementation where there has been external consultants taking care of the implementation. Another important notice is that even though the usage of consultants has increased from the last year it does not seem to have had positive impact on the project results which is pretty alarming (Panorama, 2014)

In their study (2011) Metrejean and Stocks studied the importance of consultants in different phases of ERP implementation. They found out that consultants are seen to have most important role in the configuration and integration phase of the ERP system. As a part of their study they conducted a literature review to define the main characteristics of ERP consultants. The identified eight characteristics can be seen below. Their study revealed that technical skills and knowledge has the biggest impact on the effectiveness of the consultants followed by past experience and consulting skills.

- Technical skills and knowledge
- Experience with ERP implementations
- Consulting skills and knowledge
- Commitment to quality
- Objectivity
- Human interaction and communication skills
- Business context skills
- Ability to manage ERP implementations

2.7 Framework to guide the empirical research

The figure below presents the framework which the author has developed based on the literature review on the ERP field and author's interests related to subject. This framework will be used to guide the empirical research and also work as a base for the interviews. It describes the ERP projects as collaborative projects between the implementing company and

the consultant company and highlights the fact that in the long-term relationships projects are followed by other projects. It suggests that the impacts of past projects and the history with the client should be studied through the fields described by the critical success factors identified from the previous literature. These factors can be seen to form the central parts in the ERP projects and therefore are a valid tool for examining the impact of long-term history to new projects. The framework also takes into account the potential development of the collaboration, benefits and challenges caused by this long history and aims in identifying how the past history is actually exploited.

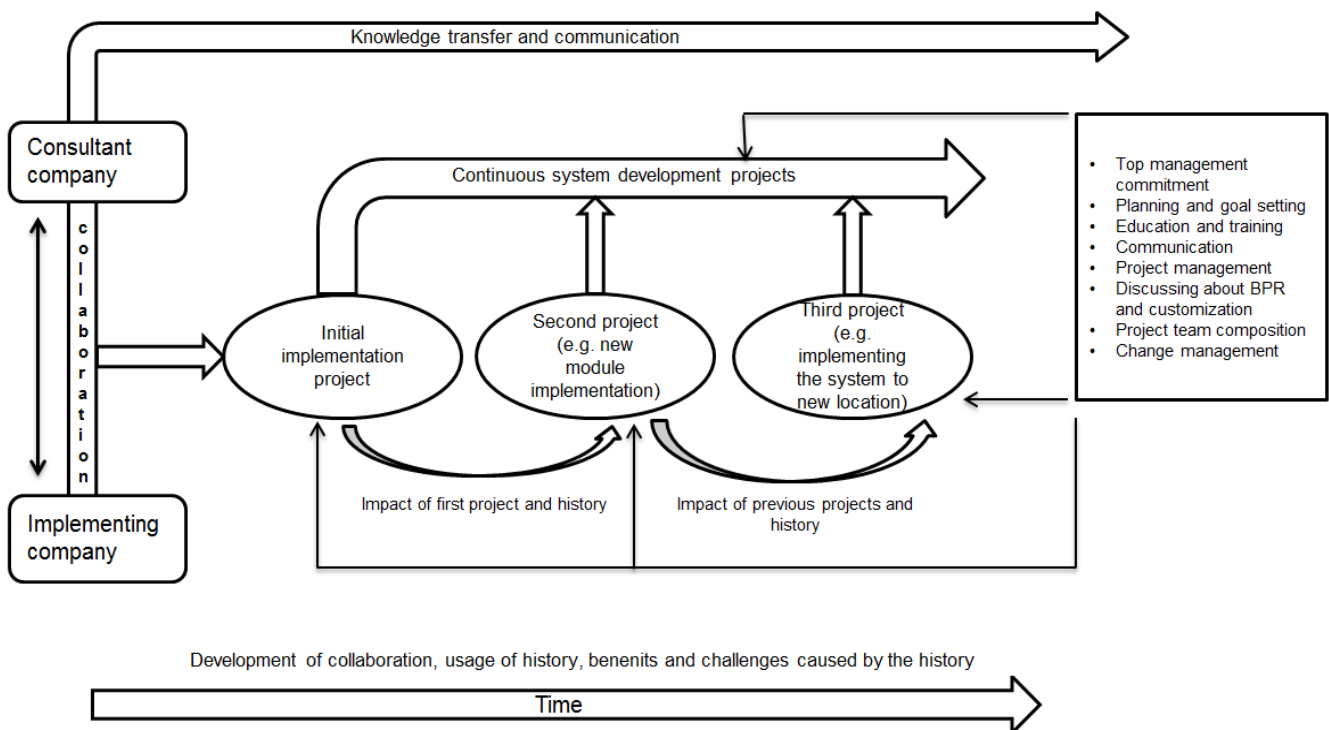


Figure 11: Research model

3 Research methodology

This chapter will introduce the methodology of this research. First, the different research paradigms will be discussed and the selected paradigm presented. Second, the design of the research will be presented and case study designs and data collection methods discussed. Followed by this the data analyzing method will be presented and quality and ethics of the research discussed.

3.1 Research paradigm

A main issue in research is to acknowledge the research paradigm which can be regarded as “the basic belief system or worldview that guides the investigator”. Many researchers are mostly concerned about choosing between the qualitative and quantitative methodology but forget that it is only one of the three elements of paradigm that they have to work with while the others are ontology and epistemology. Ontology can be described as the “reality”, epistemology as the relationship between the reality and researcher and methodology as the techniques used by the researcher to discover that reality. (Sobh & Perry, 2006)

The four research paradigms are positivism, constructivism, critical theory and realism. These are concerned with the knowledge creation. In other words, how the research findings can be generalized to other situations. In positivism reality is real and apprehensible and knowledge is possible to be generalized to a population by using statistical methods. In constructivism and critical theory reality is seen as a perception so generalizations of one research’s finding to theory of another person cannot be done. The findings of these two paradigms are related to individual views of the world and can create a world of multiple constructed realities. In realism the reality is real but only imperfectly and probabilistically apprehensible and the goal is to generalize to theoretical propositions and not to populations. (Sobh & Perry, 2006)

This research will follow the realism paradigm. In realism there is an external reality which exists independently of the researcher’s mind and the goal of the research is to develop a family of answers. This means for example that different interviewees are asked the same questions to see if they answer with the same perceptions. In realism research one should start studying the literature before conducting the first interview and continue to read while proceed with the interviews and that way bind the literature around the findings when they

are revealed by the interviews. Also having prior knowledge helps in selecting the interviewees and allows the questions to be more effective (Sobh and Perry, 2006). Miles and Huberman (1994) support this by advising that one should develop initial framework about the underlying structures and mechanisms before starting the data collection.

3.2 Research design

“Research design is the logic that links the data to be collected to the initial questions of the study” (Yin 2003, 19). In other words it describes the strategy used to conduct a research and the structure of the research. For this research a qualitative study is chosen to be made due to its fit to research purposes. Case study methodology will be used in order to acquire multiple professionals’ opinion concerning the research question and that way create comprehensive analysis on the subject.

3.2.1 Case study design

Using a case study is a preferred strategy when the questions posed are in the form of “how” or “why” and when the researcher has only little control over the events or when the focus is on a contemporary issue within some real-life context (Yin, 2003, 1). The research question of this thesis being “How does a long-term consultant-client relationship impact on new ERP projects” a case study method can be seen to be suitable for the research purposes. Yin (2003, 40) proposes a 2x2 matrix for a possible case study design. The case study can be conducted as single (holistic), single (embedded), multiple (holistic) or multiple (embedded) case study. The types of case study designs can be seen below.

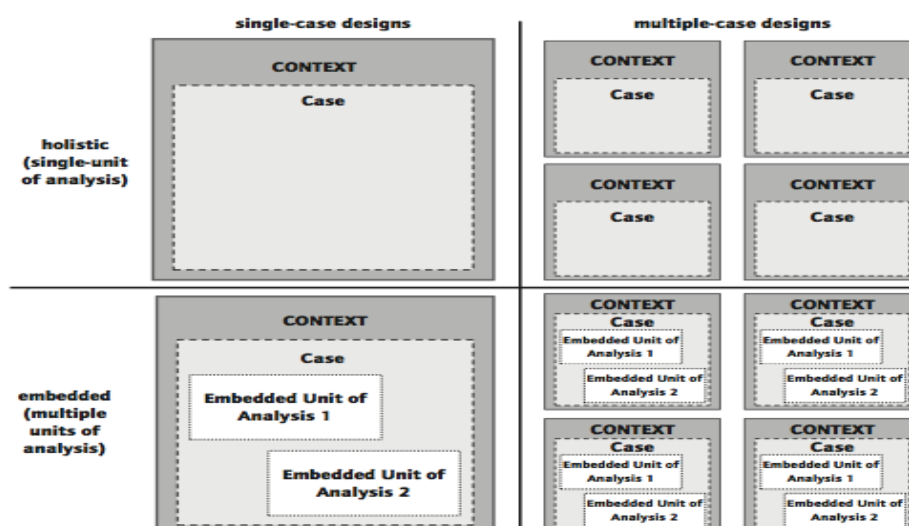


Figure 12: Case study design types (Yin, 2003)

Using a single case study may include some risks but there exists situations when this method can be advised to be used. These are when the case represents critical test of existing theory, rare or unique circumstance, representative or typical case or when the case serves revelatory or longitudinal purpose. Multiple-case study in turn means that a study contains more than a single case and the aim is to find answers by combining the results of these cases. If the study is conducted as holistic study it means that only one unit of analysis is used while in embedded study multiple units of analysis are used to draw the conclusion. In general, multiple-case study is seen to provide more comprehensive results and be less vulnerable than single case study and therefore is also chosen to be used in this research. In addition, as the study aims to find perceptions of people in different roles concerning the impact of long-term relationship an embedded case study methodology will be used. The case study method proposed by Yin (2003, 50) will be used to guide the design of the study and it is described in the figure below.

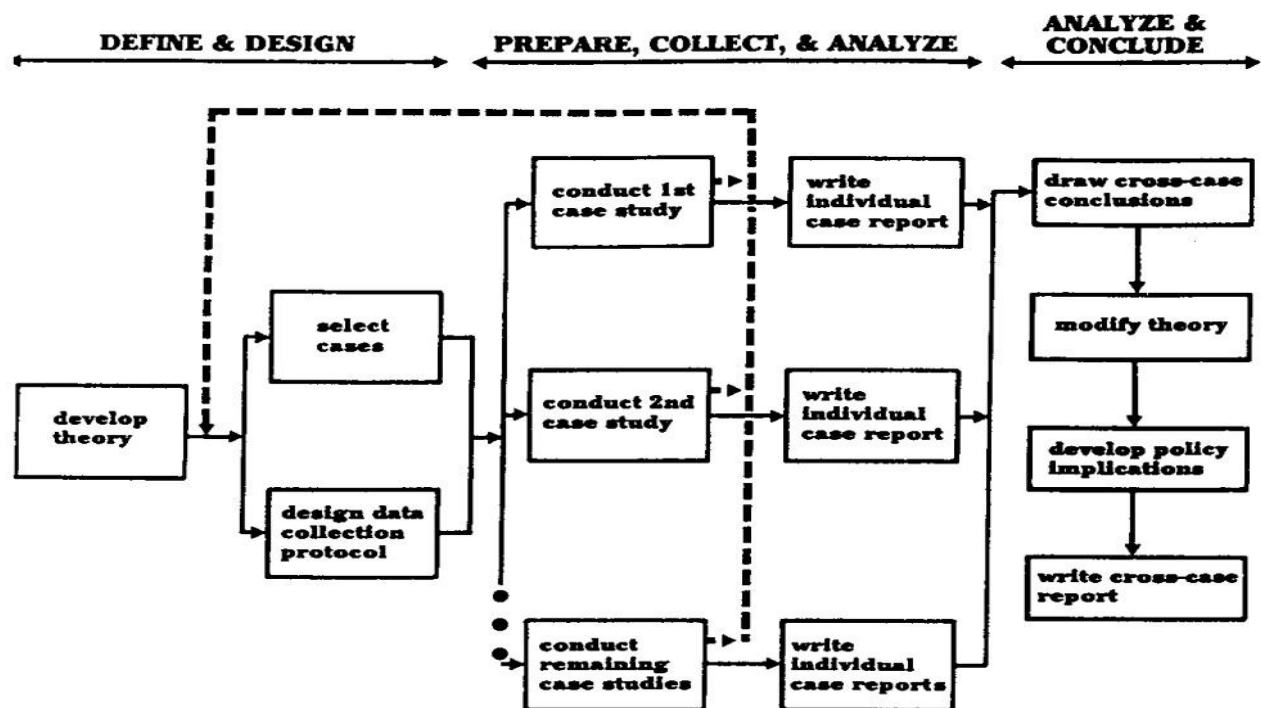


Figure 13: Case study method (Yin 2003)

First, the theory and understanding of the subject will be developed through a broad literature review. After having gained the sufficient knowledge on the field the research question will be modified based on the research gap identified and researcher's interests. Yin

(2003) states that sampling logic should not be used so typical questions regarding sampling size are not relevant. Therefore the author plans to conduct interviews until the maturity can be seen to have reached and the interviews do not reveal any new information.

3.2.2 Data collection

Yin (2003) states that evidence for case studies can come from six different sources. These are documents, archival records, interviews, direct observation, participant observation, and physical artifacts. Interviews are one of the most important sources for case study information and were also used in this research.

Interviews

The goal of this research was to find out the perceptions of ERP professionals concerning the impact of long-term relationship with a client and therefore conducting interviews was chosen for the data collection method. Data was gathered through semi-structured interviews with open ended nature and the interviewed people were professionals in the ERP field. To get more comprehensive insights, people from different positions were interviewed. The roles of the interviewed people varied between consultant, solution design architect, project manager and program manager. As the study focuses on long-term consultant-client relationships from consultant's point of view the requirement for the interviewed people was that they had experience from long-term collaboration with one client including different projects.

The interviews started with discussing about the interviewee's history in ERP consulting and experience about long-term collaboration with a client. After this the impacts of long-term relationship to new projects conducted with the client were discussed by using the areas of critical success factors identified from previous literature to guide the conversation. The third part of the interview consisted of more open questions concerning the importance, benefits and challenges of long relationship. Interviewees were also asked about the usage of this client history in their company and their perception whether it could be better exploited. The basic frame used in the interviews can be seen in the appendices. In total 6 people were interviewed and the interviews were conducted during March and April 2015. Summary of the interviews can be seen from the following table.

Table 2: Summary of the interviews

Date	Name of interviewee	Company and Position	Location and Duration
25.3.2015	Ari Kumpumäki	Fujitsu, Solution design architect	Helsinki, 55 min
30.3.2015	Jouni Aarniala	Fujitsu, Project manager	Helsinki, 90 min
15.4.2015	Jouko Kirppu	Fujitsu, Project manager	Helsinki, 50 min
21.4.2015	Mirja Lehti	Fujitsu, Consultant	Helsinki, 50 min
24.4.2015	Antti Mainio	Acando, Project manager	Vantaa, 70 min
24.4.2015	Reeta Pitkänen	Acando, Program manager	Vantaa, 45 min

3.3 Analysis of the empirical data

Analyzing the case study evidence may not be easy as there is no well-defined strategy or tactics for it. The analysis of data should consist of examining, categorizing, tabulating, testing and recombining evidence to address the initial propositions of the study. Yin (2003, 111-115) proposes three general strategies for analyzing the case study evidence. These are relying on theoretical propositions, setting up a framework based on rival explanations and developing case descriptions. For the purposes of this research the first one, relying on theoretical propositions was chosen to be the suitable strategy. This is the most common strategy and is based on the idea that the objectives of the case study are based on existing propositions which have reflected a set of research questions, reviews of literature and new propositions. Yin (2003, 133) also suggests different analytic techniques to be used from which cross-cases synthesis is used in this research. This technique applies specifically to the multiple case analyses and it treats each individual case study as a separate study and aggregates findings across multiple individual studies. In this study each of the interviews will be treated as individual study and the findings will be combined in latter phases.

The interviews were recorded with the consent of each interviewee and afterwards transcribed. The transcribed material from the interviews was then decomposed and analyzed separately. After this the data was organized under selected categories and finally combined with the results of other interviews. After combining the results of each interview the final conclusion were drawn and analysis made.

3.4 Quality of research

Case study quality can be assessed by using the four tests proposed by Yin (2003, 33-39). These are construct validity, internal validity, external validity and reliability. These aspects have also been taken into account in this thesis in order to improve the quality of the research. Construct validity refers to establishing correct operational measures for concepts being studied. It is especially problematic in case study research as subjective judgments are often used to collect the data. Using multiple sources of evidence is one way of improving construct validity but as this research aims to find perceptions of people regarding the topic only interviews are used as the source of data. However, multiple interviews are conducted which aims in improving the validity. The chain of evidence has been established by presenting the frame for interviews, main findings and analysis. This way the reader will be able to follow the derivation of evidence from initial research question to ultimate conclusions. External validity concerns establishing the domain to which a study's findings can be generalized. It has been a major issue for conducting case studies as it is typically stated that single cases provide poor basis for generalizing. However, generalizations of case studies should be done to "theory", not to other case studies. In this research the external validity is enhanced by using multiple-case study design and replication logic within in.

Reliability is related to the fact that if the operations of the study are repeated it will lead to same results as the original study had. The goal of reliability is to minimize the errors and biases in the study (Yin 2003, 34). Reliability of this research has been enhanced by documenting the procedures of the case study so that it will be repeatable in the future if needed. Yin (2003, 36) states that internal validity is only applicable to causal studies and therefore does not have an impact on the case study in question.

3.5 Research ethics

Research ethics covers the ways in which research is reported and conducted. In addition, it is related to for example ways of quoting other authors and researchers (Eriksson & Kovalainen, 2008). However, Eriksson and Kovalainen (2008) state that in the field of business research, ethics is rarely discussed area, even though ethical issues are likely to arise in the empirical research.

Eriksson and Kovalainen (2008) highlight the importance of researcher-participant relationships but also state that research ethics should concern the whole research process,

not solely the data collection part. In this research the ethics was taken into consideration by making sure that all interviewees voluntarily participated in to the project, material gathered was handled with confidentiality and participants were given possibility to remain anonymous if wanted. The research was only based on author’s own interest on the area and no external sponsor was included in the project. In addition, to enhance informed consent the interviewees were informed about the purpose of the study and explained why they had been selected as objectives of the interviews.

4 Findings

In this chapter the findings of the research will be presented. First, the long-term ERP supplier-client relationships will be discussed in general and the experiences of interviewed people presented. This will be followed by presenting the findings concerning the impacts of long-term relationships to areas specified by ERP implementation related critical success factors identified from previous literature. After this the benefits of long-term relationship will be presented as well as the challenges it might impose to both sides. Final part will focus on analyzing how this history is actually used and if it could be better exploited in the future.

4.1 Interviewees' experience from long-term collaboration

The experience of interviewed people from long-term collaboration with a client varied between four to twenty years. Also the experiences of projects within the client relationship varied a lot. In many cases the relationship had started with an initial ERP system implementation which was then followed by continuous service, development projects to the existing system, implementing the system to other facilities or countries or implementing new modules or functionalities to the existing ERP system. Some of the interviewed people had experience from multiple long-term relationships while some had worked long time only with one client. Also there were differences in the roles that interviewed people had had in the client projects and relationships. These roles varied between consultant, solution design architect, project manager and program manager

4.2 Popularity of long-term relationships

When asked about the popularity of long-term ERP supplier-client relationships there was no clear vision about the overall situation on the field among the interviewed people. This was mostly due to the fact their knowledge was only based on their own projects or company's projects. However, all the interviewed people thought that long-term relationships are pretty common. In many cases it is typical to create a contract with a client which includes the main ERP project and then continuous service and support for that. Also new development projects that occur during the contract are handled by the same ERP supplier. The typical time for a contract was estimated to be between 3 to 5 years after which the client usually tenders the

supplier. If the client chooses the same supplier again the relationship evolves easily to last at least 10 years.

It was stated that usually it is also beneficial for a client to stick with one supplier for a while and not tender the suppliers for all the projects. Also from the supplier company's point of view these long-term relationships are very beneficial as it is well known that taking care of the old relationship is much cheaper than trying to create a new relationship. In many cases this also leads to a situation where the supplier is willing to be more flexible on price when they are negotiating with a long-term client. It was noted that even if a long-term relationship occurs it does not mean that the client would not tender new projects. Especially large companies are willing to create long relationships with consulting companies but they still might use tendering when some special projects occur. However, if the offers are close to each other it is pretty likely the client sticks with the same supplier if they are content with them.

“In long relationships larger projects are often tendered and if the long-term partner is a bit more expensive than the others the price is often decreased as nobody wants to lose long relationships.”

Usually there is one main player that takes care of the ERP system but it is possible that the hardware is managed by one company and the actual application consultancy is bought from another company. However, it was said that this kind of strategy may cause some issues as it might be difficult to draw the lines concerning who is responsible for which and therefore the more recommended solution would have the hardware and service delivered by the same consulting company.

One point that stood up was the change in the nature of ERP projects during the last ten years.

“SAP coverage in Finland is very high and it means that there are much less new implementation projects and the conducted projects are more compact. Therefore the new projects are narrower by scope and tighter by schedule. As the projects are smaller nowadays it makes it easier to use also new supplier to deliver it”

This reveals that the time span of the ERP projects has changed a lot during the last decade and it forces one to re-think what actually can be considered as a short and what as a long client relationship. Related to this one interviewee also said that it is likely that the long-term relationships will not stay same in the future as they were for example ten years ago.

One interviewed person identified two different strategies concerning client's IT governance and management which impacts on the nature of the ERP supplier-client relationship. The client may use a key ERP supplier which it trusts and that way keep its own IT management narrow and does not need deep knowledge on the area. The other alternative is to have more and more capable people in the IT management and keep the coordination responsibility in-house. In this case the client is able to acquire the supplier which best fits to their purpose and use head hunting to find the best consultants. However, this strategy requires having very high knowledge as the system and project specifications have to be very clearly defined so that a third party supplier is able to execute it. The choice between these two strategies varies between industries and companies but it was stated that nowadays it is more common to keep own IT department narrow and use a reliable long-term supplier. Still, it has to be kept in mind that if a company has outsourced majority of its IT knowledge it includes always a risk.

4.3 Analyzing the impacts through critical success factors

This chapter will present the findings concerning the impact of long term relationship to ERP project related critical success factors identified from the previous literature. As ERP projects are often studied through CSFs they were considered to be suitable to analyze also the impacts of long-term relationship. However, in most of the studies the CSFs are studied from the implementing company's point of view but as this research is done from the viewpoint of the consulting company also the approach to CSFs has to be a bit different and therefore the factors are modified a bit to be suitable for the purposes of this study.

4.3.1 Top management support and commitment

Top management support plays a vital role in all ERP projects and it is important that they understand the importance of the project and are committed to allocate all the needed resources to the implementation project (Nah et al., 2001; Holland et al., 1999). When inquiring about the impact of long term consultant-client relationship no clear correlation between the duration of the relationship and support and commitment of the client's top management was noted. Issues that were considered to have bigger impact on this were for example the type of the project and its impact on client's business. It was stated that top management has to be committed from the very first project and already from the beginning of the relationship and this should not change during the relationship. The first project was

seen as a base for the future projects so it is vital that the support is well established already at this point.

However, long relationship was seen to have an impact on top management level by facilitating the discussion with client's top management. When the relationship lasts longer and supplier starts to better understand customer's business environment and processes they are also able to propose different development ideas and offer more services to top management. It is also common that people from top management are part of the steering committee in large ERP projects. If the person from the supplier company communicating with the steering committee has earned the trust of client's top management already in earlier projects he can lean on that on new projects also.

4.3.2 Planning of project and setting the goals

All the interviewed people agreed that the long-term relationship has a high impact on the planning of the project and that the correlation is highly positive. The planning of the project was seen to become much easier when the client is well known and there is history behind. In the long-term relationship the supplier has been able to establish a good understanding of client's business environment and processes which helps a lot also in the project planning phase.

When both parties are familiar with each other they are able to start the dialogue already in the early phases and agree on the plans and budgets. Through early collaboration the needs and suggestions can be discussed well in advance and that way enough resources can be reserved for the project. Usually the measured goals of the project are related to scope, time and costs and it is well known that achieving the stated goals can be very challenging and majority of the ERP projects usually exceeds the expected time and costs (Somers and Nelson, 2001). The interviews revealed that even though a long relationship exists between the consultant and client, staying within the time and budget might still be difficult. However, it was stated that in long relationship there is better base for determining the budget based on previous experiences and therefore the budget and schedule are easier to manage and control. When both parties share the common understanding of the project's goals and schedule it is likely that less changes will occur and there are better changes to achieve the set goals. Also if changes occur and more work needs to be done, discussing about this is easier when the client is well-known.

As each client is different and acts differently, having the prior knowledge of them is a huge advantage. This way the supplier is able to know what kind of people will be taking part into the project, what kind of resources will be available and what will be the level of commitment to the project. Also the consultants will know the client's way of working and the environment they have work with in. It was also noted that in well established relationships the budget of the client can be more visible for the consultant company which makes the planning easier and more open.

One of the key issues already in the planning phase is the division of work. In the first project there is risk that client sets the schedules and delegates all the work and responsibilities to the supplier. This kind of situation should never be acceptable or let happen as the effort of both sides is needed to succeed in ERP project. In long relationships there is potential to collaborate more and do things together from the very beginning and this should also be exploited and avoid situation where one of the sides starts doing planning by themselves without discussing with the other side. When there is a long history behind there is also a risk that client trusts the supplier too much and assumes that they will take care of the whole project and no efforts are needed from the client side.

Related to planning of the project the author inquired also the interviewees about the selling of the project to the client and how does having a long history impact on that. It was a common opinion that also the selling of the project becomes easier as the supplier understands better client's business environment and their needs. Client also trusts the supplier and believes that the price is based on realistic estimates. When the relationship is well established the client can even order smaller projects from the supplier without further considerations. When the size of the project increases and we are talking for example about implementation of the new system then the project is usually tendered even if there exists long-term relationship. Selling a new project is also easier for the supplier as they have already gained client's trust and they can have evidence from successful past projects. This of course applies only if the previous projects have been successful and went as planned. It was stated that in long relationships the focus of the planning should be also expanded to the future and discuss about and plan the coming years' projects.

4.3.3 Education and training

According to interviews the impact of long-term relationship between consultant and client was seen to have a moderate impact on the education and training. Education and training of the client's users plays a vital role especially in the first ERP projects and if external consultants take care of the education effective knowledge transfer mechanisms has to be developed that guarantee that the knowledge is effectively distributed to client's key users and finally to end users (Francoise et al., 2009). In the long-term relationship the need for education and training decreases which also decreases the amount of knowledge transfer needed. This is due to the fact that for example new SAP functionalities or modules are never stand-alone features but are built on top of the existing system. Also the trainings are designed this way so that in the later projects the training has to be focused only on the new functionalities and features. For example if new module is taken on the use there should be no need to go through the basic functionalities of the ERP system as the client should be already aware of these. However, it has to be stated that it is not necessary that the specific ERP supplier company and client have a long relationship in order to need for education to decrease. The client might have for example implemented the ERP system with the assistance of other consulting company and still they would have the basic knowledge when conducting a new project with other consulting company. The basic requirement for this is that the client has gained the ERP system experience from some source. If the relationship includes many roll-out type implementations to different locations the responsibility of education can be left to client as they should be able to repeat the training in the later implementation projects.

Other way the long relationship was identified to impact on the education and training was better client knowledge.

“The base for successful training is to understand who you need to educate and what is their starting point, level of expertise and need for education. If you know the client beforehand this is much easier and the education is more likely to be successful”

This quote shows that the long history will make the education easier and more effective. If the client is new it is much harder to know their level of knowledge and therefore the amount of education they will need. Also planning the training sessions is easier when you are familiar with the other side's key users and the communication is more open. The client can for example say directly which users have already sufficient knowledge and which would need more education and training.

It was also a common view that in a long relationship the education becomes more informal compared to first projects with the client. There was no clear agreement whether this is a good change or not. It was seen to include some level of risk if for example the consultant relies too much on the past trainings and leaves out some features of the training even though there would be need for those from the client side. However, it was stated that this kind issue would occur due to lack of expertise of the consultant, and the long history should not impact on this. Also if people have changed on the client side or new people have joined it is important to arrange extra trainings to guarantee their sufficient knowledge.

4.3.4 Communication and collaboration with the client

Successful ERP projects require a lot of communication and collaboration and it is often stated that effective collaboration and communication between the software vendor, consultants and client is crucial (Wu and Cao, 2009). All the interviewed people agreed that long history between ERP supplier and client has a notable impact on these aspects and that the correlation is mostly seen very positive even though some risks or challenges were also identified.

The most stated fact was that long-term relationship facilitates communication and collaboration between the consultant and the client. When people know each other and are aware of the areas everyone is working with and who is responsible for what it is much easier to find the right person to discuss with and set the tone of the conversation to right level. When the other party is familiar one can have a direct conversation without having to educate the other person or tell the backgrounds behind the issue. The past client knowledge helps also in using the suitable communication methods for different target groups. It was also noted that communication in problem situations will evolve during a long relationship as the methods are more established.

The long relationship enables also the evolvment of good personal relations between the parties. In the optimal situation the consultant and key users can almost read each other's mind and understand from half of the word what the other person means. If the communication is at this level also misunderstanding are less likely to occur. However, this kind of situation may also exist in short relationship but in well-established relationship it is much likely to happen and usually the relationships evolve over time. The previous

collaboration enables also creation of tacit knowledge from client's environment which facilitates understanding their language, needs and terms they use.

Related to improved communication is also the increase of trust between the parties. In longer relationship the nature of collaboration will shift more into "we-spirit" and it will become more informal. The barriers for communication will decrease inside the project organization and between different levels and the usage of direct contacts will increase. In long relationship everything does not have to go through the project manager and it is for example much easier for a consultant to contact directly the key user and discuss about the issues in question. All in all this can be seen to make the collaboration more effective. However, if the collaboration and communication becomes too informal it includes a risk that for example all the required things are not documented. This can lead to bigger problems at latter stages when these issues arise in some other context. Therefore it was said to be important to keep the project in control, make sure that communication and collaboration does not become too informal, and create a communication plan at the beginning of each project which should be followed even though the client would be familiar.

One interview revealed also the fact when the relationship is well-established it also enables the people in the client's project team to try to think issues further and notice the potential problem areas and solutions for these. This makes the communication with consultants more effective when they can discuss together and try to identify the actual cause of the problem. In long relationship the consultants are also able to challenge the client and their request as the need for pleasing them is not as high as in the first projects as the following quote illustrates.

"When the client is familiar one can challenge their ideas, talk directly with them and discuss what the actual problem areas are. If you don't know the client well the barrier for questioning their wishes is much higher"

When the relationship is at this level where consultant can openly disagree with the client and discuss openly it will lead to finding more efficient solutions and avoid doing unnecessary work.

4.3.5 Project management

The interviewed project managers agreed that having a history with a client impacts on their work in new projects conducted with the client. Especially with large clients it was seen

important that the project manager is familiar with the practices and policies of the client. If client's ways of operating are well known already before or at the beginning of the project, it makes the tasks of project manager a lot easier. The personal relations developed during the earlier projects can also be exploited at the project management level and more direct contacts can be used. If the trust of the steering committee has been gained already in earlier projects it can be utilized in the new project too. In long relationship the agendas and practices between the two parties are usually well-established so no extra time has to be spent on planning and discussing about these issues.

Strong project management includes controlling the scope and time of the project (Deztaar and Ainin, 2011). It was mentioned that if project manager is familiar with the client and problems arise during the project the project manager has better tools to fix the issues and find answers as he knows immediately who to contact and verify if the project is going to the right direction. The challenge that the long history might impose to project management is getting too used to old practices and relying on those. Therefore it is important to stay up to date with for example new project methods and evaluate each project and suitable methods and solutions for it separately. It was admitted that the history and past projects impact a lot and project managers tend easily to rely on previous projects' templates and documents. However, in most cases this is not a bad thing as it saves a lot time and makes the project management more effective. In long relationships project manager has to take care that some kind of standard working procedures are created. If consultants have very different ways of working the client might have difficulties to accept a new consultant if his working methods differ a lot from the methods of the previous one.

4.3.6 Discussion about business process re-engineering and customization

One of the main challenges related to implementing a commercial off-the-shelf ERP system is its incompatibility to organization's current business processes and in many cases to be able to gain the full advantages of the system some level of re-engineering of business processes is needed. (Bingi et al., 1999; Yusuf et al., 2004; Nah et al., 2003). The other alternative is to customize the system to support the existing business processes but in most cases this is not advisable as it is likely to lead to increased costs, longer implementation time and problems related to vendor's maintenance and upgrades (Somers and Nelson, 2001; Sumner, 2005). In many cases it might be difficult to make the client understand the importance of business process re-engineering and reasons to avoid customization. When

inquiring whether long-term relationship has impact on this there was no clear consensus among the interviewed people.

Some of the interviewed people stated that they have not noticed any impact on this area even though the relationship has lasted a long time. Others stated that some kind of improvement has been noticed with some clients. There was one example where the client had originally insisted a much customized system and was not willing to change its business processes. However, later on when they started to notice how expensive it was to maintain the customized system and that the new standard features of SAP could not be taken into use they understood that the level of customization has to be decreased and business processes adapted more to support the system. One stated reason for the long history not having an impact on the understanding of BPR was that even though the client's IT management would understand the need and benefits resulting from it, the resistance will still come from the business side which is much harder to convince.

Other point supporting the benefits of long-term relationship in this area was the statement that BPR and customization should be left to further development projects as doing everything in the first project is a huge effort and change for the organization. The long collaboration with the client enables the consultants to have better understanding of the business processes and knowledge how to modify those to be better compatible with the system. Also at this stage the client should better understand how the system works and what kind of changes would be needed to gain all the desired benefits. During the relationship a long list of needs will be created and then the supplier and client need to evaluate together which actions are worth taken and at what price.

The trust between consultant and client is also very helpful when discussing about BPR and customization. If the client feels that the consultants are capable, know their job and understand client's business processes it makes the discussions a lot easier. Also decreasing the change resistance is easier when the client feels that it can trust the supplier and a vital part of this is selling the ideas to client's operative business side as in most cases the resistance arises from there. However, in the long relationship there is a risk that the supplier will become blind to client's business processes and does not challenge the requirements as much as they should. Therefore having new people in the project team is important so that the flow of new ideas will be enabled and criticality towards client's processes maintained.

4.3.7 Project team composition and competence

The main point that the interviews revealed was that it is vital to have both, the people from previous projects as well as new people in the project team. It is obvious that when conducting a new project with a client not all people should be changed from the previous project. However, it would be important to get also new people in the project team so that the expertise of the team can be expanded and guaranteed that too much does not depend only on few people.

“The ideal situation in the project team would be having both, people with experience from the client and new people included. If there are only people from old project team nothing will change. New people will bring also new ideas with them”

It was often stated that a single person will not have endless amount of new ideas and even though it would be effective in monetary terms to use a same person as much as possible it will not necessarily be reasonable in the long run. At some point during the long relationship there might become a point where changing the people might actually benefit both sides in terms of improving the business. It was admitted that in this kind of cases the efficiency of course decreases at the beginning but should be quickly achieved again. Many researchers state that ideally the project team should consist of staff members that the organization cannot afford to assign to the project and that companies should address its best people to the ERP project (Roque, 2010, Bingi et al., 1999). The interviews supported this claim and revealed that the people taking part into projects from client’s side stay pretty constant and there is not great variance between the people involving in different projects. However, this situation is likely to lead to a situation where a creation of new ideas might suffer when new people are not involved

“As money has the central role in the projects and the goal is to set the costs as low as possible it leads to a situation where same people do same things with same client all the time. This way the billing rates can be kept high and highest short term efficiency can be achieved but in the long run this cannot be seen beneficial or reasonable.”

This quote from one interview explains well why people are not easily changed between the projects. Especially in consulting business the role of the money and cost pressures is so high that it is difficult to take new consultants into the project without experience from the client or similar tasks. This applies also other way around and in most cases the client has to assign same people to each project. If the project teams stay constant

from project to project there is a risk that the partners start relying too much on each other. If the two sides trust each other too much they can easily agree on everything without challenging the ideas of the other and count on that the other side has taken everything into consideration. This kind of narrowing of thinking can lead to neglecting important issues for example related to testing which in worst case can come up only when the system is already in use.

Benefit and challenge related to long consultant-client relationship is the personification of the relationships. Good side of that is that the collaboration will be very effective when the consultant and client know each other well. As already discussed related to the communication and collaboration this kind of relationships has many advantages. However, most of the interviewed people saw this issue to cause also challenges as when relationship becomes personal people get easily too used to working with only specific people. When a new consultant starts collaboration with a long-term client it is very important for him to gain the trust of the client and usually there is an evaluation period where the client tests the consultant and tries to find out whether he is capable or not. Even though the consultant would be capable in his job there is a risk that the client will not start using him and contacts still the old consultant in case of problems.

It was stated that as people have different ways of working the project management should try to create standard ways of working so that even if the people are changed the collaboration would still work without problems at the beginning. It is also important to make sure that the client understands who the people are included in the new project in the case that client still tries to use the people they are used to work with in previous projects. However, it was stated that the development of close relationships includes so many benefits that they overrule the negative sides and the project management just has to keep these issues in mind and try to control the situation. One interesting remark was that it was highly agreed that when for example new consultant joins the relationship there should be a transition period where the old and new consultant are both involved for a while to smoothen the transition. However, one interview revealed that in most cases this is not possible due to budget limitations and because of this the new consultant might face a lot challenges at the beginning.

One issue that impacts a lot on the project team composition is the type of the project. If the first project is the traditional implementation of the ERP system and in the second project a new module is taken into use, new people are needed in the project as it concerns

different business area and different skills and experience are needed. If in turn the following projects are conducted roll-out type where the same system is implemented into different locations then there is a lot benefit if the same people are included in each project because the goal will be duplicating the same project as much as possible. Therefore it can be said that the project team composition depends more on the project type than the length of the relationship.

4.3.8 Change management and understanding organizational culture

It is common that ERP systems cause resistance, confusion, redundancies and errors as they introduce a large-scale change to the organization (Somers and Nelson, 2001). One would think that in the long relationship this aspect might become easier as the client is more familiar with the system and consultant is more familiar with client's culture and processes. However, no high correlation was noted between the long consultant-client relationship and its impact on change management and understanding organizational culture. The main reason for this was that taking care of the change management was seen mainly as a responsibility of the client. It was also noted that even though the consultant would offer help in this area the client often refuses it even though it was seen that the level of change management is often insufficient in the first projects. However, no matter how long the relationship is, change resistance is likely to occur when something new is taken into use or something is changed.

In the longer relationship the supplier is able to better assist in the change management as they are more familiar with client's processes and problem areas. However, also in this case the need for the change and ideas should come from the client but the consultants can better tell how these could be conducted. The rush also decreases at some point during a long relationship enabling both sides to put more efforts on this area. In every organization there are people who are against the change and when these are known in advance also the consultant is able to plan beforehand how these should be handled. If the client is totally new, handling these issues is more difficult as no planning in advance can be done. Therefore in these cases this area is left more on the client's responsibility as they know their people much better.

One issue pointed out was that if for example a consultant has been working a long time with a client and due to system changes some organizational changes occur leading to a loss of jobs in the client organization this might be a hard place for a consultant if familiar

people are getting terminated. In these kinds of cases it might be reasonable to use consultants who do not have such a strong personal relation with the client.

4.4 Benefits of long-term relationship

Having a long-term relationship between the ERP supplier and client has many advantages for both sides as already partly discussed in the previous chapter. Below the main benefits of long term relationship revealed by the interviews will be presented.

Knowing the business processes and personnel

For ERP supplier it is vital to know the client's business and also the people they are working with. If the ERP supplier and the client company have been collaborating for a long time the consultants have been able to develop a comprehensive understanding of the client's business processes and closer relationship between consultants and client's project personnel is likely to have developed. In the first projects the consultants are very much dependent on what client has told them about their business. During a long collaboration the understanding of the client's business expands and consultants are better able to understand the linkage between different processes and business needs resulting from this.

It was mentioned that the success of the project is very much dependent on two things: the practices of the supplier and client and their fit and the people included in the project team and their fit. When the people collaborating in the project are already familiar with each other the communication and collaboration are more effective and less communication errors are likely to occur. It was stated that majority of the problems arise as a result of communication gaps so when the communication is well established less problems are likely to occur.

In big organizations it may take months to get into organization and network with the people and understand the business of the client comprehensively so if this phase has already been passed in earlier projects it saves a lot time and makes starting a new project more efficient. The long relationship enables the creation of client specific knowledge and transferring this to new projects. This kind of knowledge is usually in a tacit form and includes information such as how different people act, what kind of power they actually have in the organization and how they should be communicated with. The basic solutions are always documented but these kinds of issues cannot be found from the documents but are maintained by people who have been working a long time with the client.

Knowing the client and understanding their business allows also better future planning as the consultant is aware of different ongoing and possible future projects. When they have a clear picture of client's business they are able to propose different ideas that could be executed in the future. Long relationship enables also broader development of ideas than the client had originally planned and supplier can expand its operations to new areas depending on the client's needs.

Improved communication

The importance of communication and impact of long-term relationship for it was already discussed in the previous section when analyzing the impacts through critical success factors. When inquiring about the main benefits of long-term relationship it was mentioned in all of the interviews. The role of communication was seen crucial in all projects and it was stated that even though the methods and practices would be perfect, without successful communication the project is likely to face notable challenges.

The long relationship enables both sides to start using direct communication from the beginning of the project without having to test the other side and their knowledge at the beginning. This way the collaboration can start from the very beginning and also the division of work and other planning can be done together to avoid the situation where client delegates all the duties to consultants. The shift of communication to more personal and informal level decreases the boundaries to contact the other side no matter what the question is. This again makes the collaboration more efficient and decreases the possibility for information gaps as nobody should have to guess what the other person meant.

Increase of trust

When there are two parties involved in the project the trust between them is very important. As in all consulting business the consultant company has to earn the trust of the client for a relationship to last long and be beneficial. If the relationship has already lasted long the supplier does not have to prove its expertise in latter projects but it can focus better on the project itself. Also in a long relationship the boundaries between the consultant and client disperse which can make the work more effective as it will be possible to focus more on delivering value-added than in the bureaucracy.

When the client trusts the consultant the justification of proposals becomes much easier. It was stated that in the first projects a lot of justification is needed to explain why for example some solution would not work but in latter projects when the client trusts the

consultant no extra reasoning is often needed. When the relationship is well established, in ideal situation the consultant can openly disagree with the client and tell directly his opinions. This kind of situation was seen very desirable and it was noted the also client appreciates this kind of behavior. When the consultant and client have long-term relationship the client can also trust that the consultant does not say things only because it wants to sell more services to the client. However, if the relationship is very new the need to please the client is so high that openly challenging their decisions can be very difficult because of the fear of losing the client. All in all it can be stated that if a consultant has not been able to gain the client's trust in earlier projects a long relationship is not likely to occur. It was stated that with some clients the effective collaboration may start from the very beginning and with some clients it can take a long time to earn the trust. Therefore the long relationship is not a necessity for a trust to occur but it provides better chances for a trust to be created.

The benefits that companies can receive from long term collaboration between ERP supplier and client are dependent on many things and the duration of the relationship is not the only thing having impact on this. For example the organizational cultures of the two parties have a big impact and if they don't fit well together the benefits are unlikely to be received. Other thing having an impact is the type of the project as it defines how much the past knowledge and resources can be exploited in the new project. If for example a totally new module is taken into use it means that totally different knowledge and people might be needed than in the previous project and therefore the history cannot be fully exploited.

4.5 Challenges of long-term relationship

Even though long-term consultant-client relationship is often seen to be beneficial for both sides it can still impose some challenges that has to be taken into consideration when this kind of relationship exists. The main challenges and risks revealed by the interviews are presented and discussed below.

Relationship getting too informal

One of the most often stated risks was that when the consultant and client have been collaborating for a long time the consultant-client boundaries start to disappear and the relationship becomes too informal. As already mentioned earlier this has many advantages but it can also impose some risks that the both sides have to be aware of. Being too familiar with the other side can lead to neglecting standard procedures and thinking for example that

verbal discussions are sufficient to make decisions and no proper documentation is needed. However, if the decisions are not documented properly and for example a person in the project changes it can lead to wider troubles. By documenting everything properly it can be guaranteed that the information spreads to all people included in the project and no surprises will occur in latter stages.

Getting too used, Personification of relationships and Personal issues

It was stated that during a long collaboration the relationships between consultant and client personifies quickly and people get used to working only with specific people. The problem arises when for example the consultant changes and a new person has different ways of working than the previous one. As the client has formed a solid relationship with the first consultant he might have issues to accept the new consultant. It is not uncommon that in case of problems the client still contacts the old consultant and complains the supplier about the change of the person. If too much depends only on one consultant it is also risky for the client as he might not be available all the time and therefore it would be better if more than one person is familiar with client's processes and is able to collaborate with them. To avoid these kinds of situations to happen the project manager should try to create standard ways of working with the client so that the change of the person would not cause notable challenges.

Narrowing of thinking was also seen as a risk of a long-term collaboration as finding new perspectives may be difficult at some point if the two sides trust each other too much and understand each other already too well. This can lead to lack of new ideas and reduce the challenging of decisions of the other side. There was seen a risk of going in the mode where everything is done the same way it has been done before and that way the renewal weakens. This kind of reactively handling issues and not proactively developing new ideas and solutions impacts directly on client satisfaction as it was stated that they value if the consultant is able to develop new ideas and renew constantly. To avoid this to happen it would be wise to change the project personnel at some point as some kind of change is needed for renewal to happen. This will reduce the effectiveness for a while but in a long run be beneficial. The client can also become blind for the service they are getting from the supplier and not value the service level even though it would in fact be better and more cost efficient than they could actually get from the markets. It was stated that if collaborating very long time with one client the motivation of the supplier can also decrease and lead to situation where they will do only the necessary to keep the relationship running but not see any extra effort.

When different people are working together it is also likely that some confrontations will occur. This was not seen as a common problem in long-term relationships but some cases were mentioned where people had to be changed from the project due to incompatibility of chemistries. When it is known in advance that some people cannot work with each other it can be taken into account already when planning the resources. As the word spreads easily on the client organization, making one mistake may lead to a situation where a client refuses to use a consultant with a bad reputation. This is not such a big issue for big companies as they can easily change the people in the projects but for smaller companies which do not have that many resources this may even threaten the relationship with the client as they cannot offer other people in the project. However, it was noted that having a long relationship may also facilitate solving and discussing about personal issues and discontent with some person. If both sides know each other well they are able to openly discuss why for example the client is not content with the consultant and how the situation could be improved. In long relationship the supplier can also tell the client if they think that some person from the client side does not have the sufficient knowledge and should be changed from the project. In new relationship having this kind of open conversation would be very difficult.

Keeping the knowledge up to date and maintaining profit margins

One interesting point that was noted in one interview was the impact of long-term collaboration with one client to knowledge level of consultants. It was stated that if a consultant works for a long time with only one client there is a risk that his knowhow does not stay up to date. This is because consultant's knowledge needs are very much dependent on the client's needs and if the consultant keeps doing only certain tasks within that client relationship he will not have need to develop further skills and knowledge. However, the ERP industry develops very fast and without continuous training one might fall easily behind the development. This imposes challenges also for the supplier as when the consultant starts working with a new client he might be lacking the new needed technical knowledge.

Even though long relationship provides stable revenues for the supplier, it was seen possible that it has also some negative monetary impacts. As said many times, during a long relationship the service usually improves and becomes more effective. However, charging more money from the old client from improved service can be very difficult and therefore keeping the profit margins high can actually be challenging as pricing cannot be changed.

When starting a project with a new client it is much easier to set the price to match with the current market situation.

4.6 Usage of the history

When inquiring about the actual usage of the client specific history there was no clear consensus among the interviewed people as some stated that the information is well exploited while others said that it is not really used at all and there would be a lot to improve in this area. The most often mentioned thing when discussing about the ways of using the history were the lessons learned reports which are done after every project. However, whether these reports are actually used in the future projects was a bit unclear and the dominant opinion was that those are not really used.

After finishing a project a lessons learned report is filled to analyze the past project. Also the client might be included in the discussions to get their opinion concerning what went well and what could have been done otherwise.

”As a part of closing the project we try to go through experiences of people and analyze what could have been done otherwise and what could be developed further. The formality of using this information in new project depends on whether the same people continue in the new project or if the project team changes. The more there are new people the more the formal memos have to be used”

This quote states that the past project’s events are documented and also used in the future projects. However, it was stated that people are very tired at the end of the project and might lack the motivation to put efforts on analyzing the past and therefore these reports do not necessarily include all the important information. In addition, it was stated that these reports might benefit the people who took part in the project as they get feedback from their performance but for other people the benefit is almost non-existent. One example was mentioned where a company had a system where the final reports were stored and could be easily found from but when starting a new project nobody actually read these reports even though it was seen that going those through before starting a new project would have been beneficial. Especially if the old and new project were not directly linked with each other it was regarded very unlikely that the old reports would have been used even though they might have included useful information regarding the collaboration with the client.

“In any company I have worked in, not much effort has been put on a situation where new consultant enters a client relationship and starts working with them. By informing him for

example what kind of issues are expected and which level of communication should be used would make starting the collaboration much easier“

This quote reveals that even though the client would be well familiar the information gathered from them is not well used and shared forward so that the collaboration would be more effective from the very beginning. Starting to work with a new client can be very stressful for a new consultant and therefore preparing them better by using this kind of information could improve the situation and improve the chances for successful collaboration. One offered explanation for not doing proper orientation for a new person was that he might have only minor role in the beginning and the role increases step by step which leads to situation where no proper introduction to the relationship is ever done. However, in one interview it was stated that the knowledge transfer to new people and the briefing of the past events has to be done by the supplier even though the resources would be tight and it was seen unacceptable if this is not done. One interview revealed also the usage of “service handbook” with long term clients where all the knowledge and basic ground rules concerning the client have been gathered to improve the collaboration. It was noted that in order to benefit more from the past experiences, the bigger projects could follow more the procedure in place with small-scale development projects where the new project is always started by going through the final reports of the old projects and trying to learn from them.

It was mainly agreed that no formal documentation is done from the personnel or relationship level issues and this kind of information is usually in a tacit form and is transferred to new projects with the people who continue working with the same client. This kind of information may include for example the resistance arising from the client and other staff level problem areas. Therefore to forward this kind of information open communication among the consultants would be important. It was also stated that new people entering the client relationship should be active in seeking the information from people with longer experience from the client as they are the ones carrying the tacit knowledge.

One way the past projects were seen to be exploited was when doing the work load estimates for future projects. However, it was noted that it does not necessarily have to be a project conducted with the same client but also a similar project conducted with other client was seen to be as useful. Taking advantage and learning from the past projects might be also difficult due to monetary reasons as the following quote shows.

“The previous implementation project might have showed that more time should have reserved for testing and preparing for the go-live. However, when the new project starts the

same people from the client say that the resources are tight and costs needs to be cut which leads to a situation where same problems arise again even though they would be easy to avoid this time”

This demonstrates well the impact of monetary issues and seeking of cost savings which has a big impact on the way ERP projects are conducted.

At the end of the interview the interviewees were asked if the long-term collaboration and history with the client could be better exploited in the future. It was commonly agreed that more could be done to benefit from this kind of relationship but the opinions concerning how the long history could be used varied a lot.

One suggestion was shifting the focus more towards long-term planning. It was stated that the daily and weekly collaboration is usually well handled within the projects but there would be possibility to set the target a bit further away and look at the road map and try to think what will happen for example in the next three years. Possibility to discuss with the client how their business is expected to develop and how their processes could be improved in the future to support this should be used if a long-term relationship exists.

Other thing that was pointed out was using more job rotation in long-term client relationships. If the people with the client specific knowledge switch tasks within different kinds of ERP projects their knowledge can be wider exploited and bring more value to the relationship. The importance of continuous evaluation and analyzing of past projects was also pointed out and should be done more to consider what kind of models and actions should be expanded to new projects too. It was also noted that with long-term clients there would be possibility to try for example new project methods for small-scale projects if these can be openly discussed with the client. The need to get new people to join long-term relationship was also highlighted and the importance of putting efforts on giving them proper client specific orientation was seen as an area which could be improved in the future.

5 Discussion and conclusions

In this section the main findings of this thesis will be summarized and the research discussed in general. In addition, theoretical and managerial implications will be presented and finally the limitations of the research and future possibilities in the area will be discussed.

5.1 Summary of the findings

The goal of this thesis was to set the focus on the long-term consultant-client relationships existing in the ERP field. The thesis aimed in finding answers to following two questions; how does a long-term ERP consultant-client relationship impact on new projects and how this client specific knowledge and history is actually exploited in new projects. The impacts were analyzed through ERP project related critical success factors identified from the previous literature and with more open questions to find out the benefits, challenges and usage of the history.

The study revealed that long-term collaboration between ERP consultant and client has a notable impact on the new projects conducted. The CSFs through which the impacts were analyzed were top management support and commitment, planning of project and setting the goals, education and training, communication and collaboration with the client, project management, discussion about business process re-engineering and customization, project team composition and competence, and change management and understanding organizational culture. The study revealed that the long history with a client had some kind of impact to all of these factors. However, the level of how much the long history impacted on these varied between the factors. The highest impact was clearly to the project planning and goals setting, project management, communication and collaboration with the client and to project team composition.

In general, past knowledge and experience of the client was seen to facilitate new projects a lot. The identified reasons for this were the improved communication, better understanding of client's business processes and people, and increased trust between the parties. The long relationships were seen to cause also some challenges that should be taken into consideration if this kind of relationship exists. The long-term relationship was seen likely to cause collaboration and communication between the parties to become too informal leading for example to neglecting standard procedures such as documentation of all decisions. Other challenge was related to people getting too used to certain habits and inability to renew and come up with new ideas. In addition, excessive personification of personnel level relationships was seen to cause some level of challenges as it may lead to difficulties in working with new people. Collaborating a long time with one client can also cause some risks to consultant's knowledge level as it might not stay up to date. Keeping the profit margins high with a long-term client was also seen as a possible challenge.

The study revealed that the past knowledge and history with a client is used at some level but that in most cases it could be better exploited. The past projects' events are properly documented after each project but these are rarely used when a new project with the client is started. In addition, much of the client level knowledge seems to be in a tacit form maintained by people who have been working a long time with a client but is not formally transferred to for example new people joining the client relationship.

5.2 Discussion

Today there exists many relationships where the ERP supplier company and client have been collaborating for a long time and conducting multiple different ERP projects together. As the nature of the projects might differ a lot from the initial implementation project to following new implementations, system development or system updates it might not be possible to straight forward compare these projects between each other. However, when the collaboration between the consultant and client has lasted for a long time it will inevitably have an impact on new projects no matter what kind of those are by nature. Long-term relationship enables creation of trust between the two companies, development of personal level relationship between the people working together and it enables consulting company to gain comprehensive understanding of the client's business processes and environment. The before mentioned factors can have both positive and negative impacts on the new projects. During the long relationship the communication and collaboration tend to become more informal which can make the operations more effective but contains also some risks that the companies, project managers, consultants and other people working in this kinds of relationships have to be aware of. By being aware of the impacts they can observe their actions and analyze what kind of impacts the long-term relationship has on their performance and consider if the past history and knowledge could be better exploited. In this kinds of relationships people get easily used to working with only certain people and therefore it would be important that companies and especially project management are able to create standard working procedures which can minimize the difficulties resulting from a situation where a long-term member of a project team is changed to a new one.

ERP projects where there is ERP supplier company taking part are in the first place collaborative projects where the communication is in the central role in enabling the success of the project. The role of the communication and collaboration can be even seen more important than the technical capabilities in many case. There is no doubt that the consulting

companies would not have the needed technical capabilities but if the communication and collaboration between them and the client does not work the project has weak chances of succeeding. The results of this study showed that the long-term relationship has a big impact especially on these aspects and that way it facilitates the new projects a lot.

In consulting business the short term efficiency and cost pressures dictate a lot how the business is done. In the field of ERP consulting this leads to a situation where for example in the long-term relationships same people are used from project to project. This allows conducting the projects as efficiently as possible, keeping the billing rates high and keeping the client happy. From the upper management level and in monetary terms this is of course the preferred way but for example in the consultant level it might burden certain people a lot and on the other hand in the long run prevent new ideas occurring as new people are not taken in to project teams. In the long relationships there is also a risk of becoming blind to other side's actions and processes and getting too used to certain habits. Therefore it would be important to include new people to the project teams but as the focus is in the short term efficiency this might be difficult to justify for the upper management.

Most of the client specific knowledge seems to be in a tacit form maintained by people who have been working a long time with the client. When these people leave the relationship this information is easily lost and therefore it would be important to share this information also to other people but according to interviews this is rarely done. Especially for new people joining the relationship it would be very beneficial to have this kind of information as it would make starting the collaboration easier. In addition, by using the client specific knowledge and history and learning from the past experiences both the consultant company and client could gain benefits. As it is in the interest of both parties to further develop their relationship and make the collaboration more effective a bit more effort could be seen to improve this.

Last, it has to be said that even though there exists a long-term collaboration between the ERP supplier and client, the benefits that companies can receive from this may vary between the projects as they are dependent on many things. For example the organizational cultures of the two parties have a big impact and if they don't fit well together the benefits are unlikely to be received. Other thing having an impact is the type of the project as it defines how much the past knowledge and resources can be exploited in the new project. If for example a totally new module is taken into use it means that totally different knowledge

and people might be needed than in the previous project and therefore the history cannot be fully exploited.

5.3 Theoretical implications

This study contributes to theory by providing insights into subject that has not gained much attention in the previous studies. The collaboration between consultant and client has gained some attention in the previous research and for example Hung et al. (2012) stated that creation of knowledge-transfer climate between these two parties is in a central role in enabling successful implementation. The results of this study also support that claim and reveal that during long relationship the knowledge transfer is also likely to improve due to development of relationships. In addition, many researchers have studied the role of consultants in ERP projects (e.g. Metrejean and Stocks, 2011 & Chang et al., 2013) but have not included the long-term aspect of the collaboration in their studies. This study adds a new perspective to the field of ERP project research by setting the focus on long-term relationships between the ERP consultant and client. As most ERP project research focuses on a single implementation project this kind of long-term aspect including several projects and identifying continuum between them is a welcomed change especially when combined with the impacts of long-term collaboration between the consultant and client company

This study uses the previous ERP implementation studies as a base by identifying the most commonly cited critical success factors and then using the fields defined by these factors to analyze the impacts of long-term collaboration between the consultant and client. Therefore this study can be seen to be built on the previous critical success factor studies while the focus itself is not identifying new factors or analyzing the importance of these factors in any specific project as so many studies before have done. As this research is one of the first studying this specific topic the results cannot be compared to ones of the previous studies. To be able to analyze the differences between the studies and that way get more comprehensive picture of the area more studies of this subject should be conducted in the future.

5.4 Managerial implications

This study contributes to practice by identifying the impacts that the long-term relationship between the consulting company and client can have on new ERP projects. Even though in

this study the impacts were mainly seen positive, the long relationship causes also some challenges and risks that the parties involved in these kinds of relationships should be aware of. Companies being in this kind of relationship can use the results of this study to analyze their situation and aim to identify for example potential challenges arising from the long collaboration. The results of this study also suggest that companies should better exploit the client specific knowledge and history in new projects as in many cases the information was identified to exist but at the end was rarely used.

5.5 Limitations and suggestions for future research

When interpreting the results of this study it has to be kept in mind that there are also some limitations related to the study. First of all, as only the ERP supplier side was interviewed the results may not give as comprehensive picture as they would if also the client side would have been included in the analysis. This is due to the fact that the supplier side represents only one side of the players taking part in the project and the opinions might be very different in the client side.

In addition, as the interviewed people represented their own organization it is possible that they wanted to avoid giving too negative image about the impacts of the long-term relationship with the client. The usage of the client specific history can be also very company dependent and as only people from two different consulting companies were interviewed it might not be possible to generalize findings related to this issue to cover the whole ERP consulting field.

For the purposes of future research it would be interesting to include also the client side on the analysis and compare their opinions to the ones of the consultant side. It would be especially interesting to find out if they see eye to eye on the benefits and challenges of the long-term collaboration as the impacts revealed by this study were mainly positive. In addition, future research could focus on analyzing unsuccessful projects where there has been long history behind and aim in identifying what has caused failure in these kinds of cases.

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Interviews

Kumpumäki Ari, Solution design architect, Fujitsu, Helsinki 25.3.2015

Aarniala Jouni, Project manager, Fujitsu, Helsinki 30.3.2015

Kirppu Jouko, Project manager, Fujitsu, Helsinki 15.4.2015

Lehti Mirja, Consultant, Fujitsu, Helsinki 21.4.2015

Mainio Antti, Project manager, Acando, Vantaa 24.4.2015

Pitkänen Reeta, Program manager, Acando, Vantaa 24.4.2015

Appendix A: Frame for interviews

Background information:

- Person's history in ERP consulting and current job description
- Experience from long-term collaboration with one client
- Opinion concerning how general are long relationships compared to constant supplier tendering
- How important do you see having a long history with a client compared to situation where no history exists?

Theme questions:

- How does a long-term ERP supplier-client relationship impact on new projects conducted with the client (Will be examined through following areas defined by the critical success factors if applicable)
 - Top management commitment and support to projects
 - Planning of the project: Setting clear goals and understanding the business needs (including also planning the budget and schedule and selling the project)
 - Education and training
 - Communication and collaboration with the client
 - Project management (Exploiting the client history and its impact on the role of project manager)
 - Discussion about BPR and customization
 - Project team composition
 - Change management and understanding organizational culture and challenges arising from it

Open questions: (May overlap with the issues handled already but the goal will making sure that all things will be covered and to get more background information)

- Are the events of past projects noticed and how these are brought to new projects?
- How important do you see that same people are kept in the client relationship and what benefits do you see resulting from that consultant or project manager has worked with the same client already before or that people from the client side have been included already in the earlier projects
- Have you noticed communication or collaboration changed during the relationship or between different projects?
- What things does past history make easier?
- What challenges does common history create?
- During long relationship do people get easily used to certain habits and what issues does this cause?
- Do you think that past history with client could be better exploited or that current practices concerning this could be improved?

Appendix B: Critical success factors identified from previous literature

		Small and medium sized											
		Somers & Nelson	Umble & al	inah et al	Rogue	Ehie & Madsen	Francoise et al	Al-Mashari et al	Chen & Muscatello	Woo	Salimifard et al	Snider et al	Loh et Koh
1	Top mgmt commitment and support	X	X	X	X	X	X	X	X	X	X	X	X
2	Project champion	X		X								X	X
3	education and training (IT and business process)	X	X		X	X	X	X	X	X	X	X	
5	vendor/cust. Partnership	X											
6	use of vendors development tools	X											
7	selecting appropriate package	X					X	X	X				
8	excellent project management	X	X	X	X	X	X	X	X	X	X	X	X
9	steering committee	X											
10	use of consultants	X				X		X	X		X	X	X
12	data analysis and conversion	X											
13	business process reengineering and minimal customization	X		X	X	X	X	X	X	X	X	X	X
14	defining the architecture	X											
16	project team competence and composition	X	X	X	X	X	X	X	X	X	X	X	X
17	organizational culture and change management	X	X	X	X	X	X	X	X	X	X	X	X
18	business plan and vision/clear goals and objectives	X	X	X	X	X	X	X	X	X	X	X	X
20	effective communication	X								X	X	X	X
23	Data accuracy		X										X
24	evaluation of ERP project (performance measures)		X		X	X	X						
25	multi-site issues		X										
26	IT infrastructure/business and legacy systems			X			X	X	X		X		X
27	Software development, testing and trouble shooting			X			X	X					
29	Operational process discipline												
30	cost/budget					X							
31	organizational structure											X	
32	knowledge management						X						