



**LUND UNIVERSITY**  
School of Economics and Management

Master Thesis  
BUSN 68  
15 ECTS  
Spring 2013  
Management  
Accounting & Control

## **Strategies in implementation of ERP systems**

The impact of vendor-consultant relationships on the role of the  
consultant in ERP implementation

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## **Abstract**

**Title:** Strategies in implementation of ERP systems - *The impact of vendor-consultant relationships on the role of the consultant in ERP implementation*

**Seminar date:** 2013-05-29

**Course:** BUSN65 Degree Project - Accounting and Management Control and BUSN69

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**Keywords:** ERP, Implementation, Role of the consultant, Vendor-consultant, IT-project

**Purpose:** The purpose of this thesis is to describe different types of relations between ERP vendors and consultants and analyze how these relationships affect the role of the consultant in ERP implementation.

**Methodology:** Primarily, a qualitative method has been undertaken in the collection of empirical data. This was performed through multiple case studies with six case companies, which provides a detailed description and a deep understanding. Semi-structured interviews were conducted with one key-person at each case company. The respondents were chosen by the examined companies, based on a description of the purpose of this thesis.

**Empiric study:** The empirical study is mainly based on data from the conducted interviews. Three ERP-vendors along with three consultancy-firms providing services for ERP-systems were examined. The interviews have been complemented with additional information from the Internet and documents received from the case companies.

**Result:** The study indicates that the different relations between ERP-vendors and consultants have an impact on the role of the consultant. This possible impact is expressed through differences in lines of communication, various degrees of commitment, differences in education and a shifting risk of internal competition.

## **Preface**

The authors would like to start by thanking the supervisors Per Magnus Andersson and Johan Dergård at Lund University School of Economics and Management for their guidance throughout the process of creating this thesis. We would further like to thank the respondent: Dan Girdea, Hans Montelius, Mats Silvhed, Katarina Pärsson, Oscar Pettersson and the anonymous Market Director for granting us access and providing us with valuable insights.

Lund, May 23<sup>rd</sup> 2013

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## 1.0 Introduction

*In this chapter a general background concerning ERP systems will be presented followed by a brief presentation of previous research, which leads into a problematization. Thereafter, the purpose and the target audience of this thesis will be presented.*

In the contemporary highly competitive environment, a well-formulated business strategy is essential to succeed and to optimize the potential of success. A vital part of a successful business strategy is an effective use of compatible information systems within the organization. An integrated enterprise-wide information system aiming towards facilitating and optimizing business strategy has become essential for many companies, independently of size or industry. Enterprise Resource Planning (ERP) systems do to a large extent fulfill the definition above and has therefore been established as a natural part of the everyday life of professionals across industries from different organizational levels and with different areas of responsibility. However, having standardized IT processes is not enough, the users, i.e. the employees, must also possess the ability to apply these processes in order to achieve the desired purpose of the concerned system. Further, the rapid technology development has also resulted in a shift of focus considering managers and controllers. Their tasks have mainly focused on control and management e.g. budgets and accounting reporting analysis but do to a large extent today focus on the management and control of technology (Dechow, Granlund & Mouritsen, 2007).

### 1.1 Background

Although there is extensive research on ERP systems, the diversity of potential errors contributes to making the implementation of ERP a complex and highly subjective concept. It is therefore relatively hard to evaluate such a comprehensive project (Pabedinskaitė, 2010). Curko, Stepanic and Varga (2012) argue that most research considers successful implementation and therefore lacks of valid descriptions regarding how to decrease the considerable high failure rate. Further, they are emphasizing the need and the importance of broader studies in order to understand the complex interdisciplinary phenomenon of ERP implementation. The literature within this field discusses implementation of new information systems in general and ERP implementation issues in particular. Successfully managed ERP projects bring competitive advantages and other benefits to an organization. However, failures in terms of exceeding time limits, budget, and

inadequate functionality, might be devastating. Many researchers emphasize that there is a significant high failure rate for these projects (Barker & Frolick, 2006; Curko et al, 2012). This statement is supported by Decov and colleagues (2007) who assert that implementation of information system rarely work as predicted. Monk and Wagner (2009) are of a similar opinion as they claims that reports indicates that only a small percentage of organizations experience a smooth ERP rollout and that most companies didn't receive the benefits they expected in the short run. A global study performed by Panorama Consulting Solutions found out that 50 percent of ERP projects reach less than 50 percent of the estimated benefits (IDG, 2012). One example is Nestle who had to cancel their implementation in 2000 as a result of resistance among the employees due to a rapid increase in technical errors that they unable to successfully cope with. The costs of this failure amounted to \$280m (O'Mahoney, 2010). The largest chocolate manufacturer in North America, Hershey Foods (now The Hershey Company), is another organization gone through a major implementation failure. Their quarterly profits declined 19 % and the stock price declined 8 % as a result of a poorly executed implementation. Hershey's problems were based in a failed attempt to coordinate the new ERP system with their present Customer Relationship Management (CRM) system (backbonemag.com, 2011).

## **1.2 Common features in previous research**

Previous research does not focus on a particular software or system vendor. The general opinion is that most ERP systems are relatively similar (Davenport, 2005; Holland & Light, 1999; O'Mahoney, 2010). Focus, do however, often lie on organizational and strategic issues rather than solely technological which contributes in making the differences between systems secondary (Curko et al, 2012; Monk & Wagner, 2009). Another recurrent theme is that most previous studies mainly focus on the implementation phase. There are reasons to believe that the implementation process is of such importance that it can be equated to ERP strategies in general. The similarity is supported by Hollande and Light (1999) who states that the implementation determines the future use of the ERP system. Further, the main disadvantages with ERP systems are solely indirectly connected to the system itself. Instead, most disadvantages are derived from organizational factors in the implementation process (Barker & Frolick, 2003; Curko et al, 2012). In addition, implementation process is a considerable part of the system life cycle thus it ranges from 14 to 23 months (Mertrejean & Stocks, 2011). The implementation is often referred to and

treated as a project since it regards tasks beyond ongoing operations and proceeds within a certain time limit (Curko et al, 2012; Magnusson & Olsson, 2008; Wong & Tein, 2004). This approach gives the opportunity to utilize existing competence and experience (Magnusson & Olsson, 2008). Monk and Wagner (2009) emphasizes that these projects is more about managing people than managing technology due to that the implementation of ERP likely results in a major organizational change. There are many variables to consider when realizing a large-scale implementation process, before, during and after go-live (commissioning). These variables are within previous research (Curko et al, 2012; Dezdar & Ainin, 2011; Holland & Light, 1999; Maditinos, Chatzoudes & Tsairidis, 2012; Magnusson & Olsson, 2008; Pabedinskaitė, 2010) referred to as critical success factors (CSF) and are most often formulated from the user organizations perspective.

The role of the consultant within ERP implementation is examined to some extent (Chang, Wang, Jiang & Klein, 2013; Mertrejan & Stocks, 2011) and the use of consultants is often highlighted as one of the CSF (Curko et al, 2012; Hollande & Light, 1999; Maditions et al, 2012; Magnusson & Olsson, 2008) although the role of the ERP-vendor is not extensively examined. Sarker, Sarker, Sayhaym and Andersen (2012) are investigating business-to-business (B2B) value cocreation by a case study involving an ERP-vendor and its partners. Some implications of these relationships including advantages and disadvantages with the case company strategy are examined.

### **1.3 Problematization**

Many organizations lack the understanding of an entire ERP system due to the scope of the software and the required competence within the field of IT (Mertrejean & Stocks, 2011; Monk & Wagner, 2009). External consultants are most likely needed to provide the required expertise to optimize the project performance. Previous research is also proving that most organizations hire consultants to assist the ERP implementations and those usually assist their clients during all phases of the project (Chang, Wang, Jiang & Klein, 2013; Mertrejean & Stocks, 2011). The collaboration between internal and external key-players brings an additional level of potential issues within these projects. Consultants are in some cases hired from the same company that provides and develops the system but some system-vendors do not provide consultancy services

in-house; they may for instance cooperate with other partner e.g. a management- or IT consultancy-firms. In addition to this, there are independent consultancy-firms who provide implementation services and system support. These consultancy-firms may provide services for several systems or be specialized on one particular system. To our knowledge there are none or little previous research that profoundly elaborate these relationships of external stakeholder's impact on the ERP implementation. Several questions arise when this relationship are examined. Why do some ERP-vendors provide own consultants while other doesn't? How do the vendors select their partners? Do they require some type of licensing and do they offer continuous education? Are the CSFs different depending on relations between the involved parties? Previous studies have been made regarding the role of the consultants (Change et al, 2013; Mertrejan & Stocks, 2011; Wang & Chen, 2005). One possible method could be to replicate previous studies and add the variable of whether the consultants perform services on their own system or on partner firms. A disadvantage with this method would be that the system-vendors view on the topic would be excluded. In order to include both parties role it could also be interesting to investigate how ERP-vendors and its partners operate in order to create shared value and also how and to which extent the ERP-vendors control their partners. There might be reasons to believe that ERP-vendors who perform consultancy services in-house are less standardized and more flexible than the ones that utilize external partners. This is particularly important for new ERP users who often are faced with the choice whether to adapt their internal process after the ERP system or adapt the ERP system after their existing organizational practice. Sarker and colleagues (2012) are of a similar approach as they investigating B2B value cocreation through a case study involving an ERP-vendor and its partners. This study does not compare the certain ERP-vendors approach to others and it does not consider the issue from the perspective of the consultants. In addition, it is performed through a paradigm of informatics. Most previous studies are mainly performed within the field of Informatics and not within Business Administration. This is questionable due to that many emphasize (Curko et al, 2012; Hollande & Light, 1999; Monk & Wagner, 2009) that implementations most often fail due to organizational and strategically factors, not technical.

The results may be more credible if ERP implementation is studied from external stakeholders', i.e. vendors and consultants, perspective since consultants and vendors has extensive experience

from several implementation projects while most ERP users only experienced this particular project once. Despite of this potential vendor-consultancy approach, the results might also be interesting for companies who are planning to implement ERP in the future. Insight in this relationship could likely be valuable when making the highly important decision regarding which type of vendor to contract.

#### **1.4 Purpose**

The purpose of this thesis is to describe different types of relations between ERP-vendors and consultants and analyze how these relationships affect the role of the consultant in ERP implementation.

#### **1.5 Target audience**

The essay's primary audience is researchers and university students at graduate level who are studying within the field of Business Administration. The author's ambition is also that practitioners with different roles within the ERP industry may be inspired and attain valuable insights.

## **2.0 Research methodology**

*In this chapter, the choices of research methods that have been applied in order to fulfill the purpose of thesis are presented and discussed. The selection of primary and secondary data will be explained followed by a presentation of the measures the authors have undertaken in order to evaluate the gathered information.*

### **2.1. Research approach**

In order to fulfill the purpose of this thesis, the authors are applying a strategy that aims to provide a deep understanding of the different relationships between involved parties in ERP implementation and what impact these have on the role of the consultant. To achieve this, in-depth interviews with the opportunity to ask follow-up questions are required and why a qualitative study is undertaken. There are different examples of how the vendor-consultant relationship can be structured which is why several companies need to be examined in order to attain a comprehensive view of the issue and be able to generate a valid analysis. This thesis is therefore based on multiple case studies including both ERP-vendors and consultancy-firms. In total, six companies who all have different roles within the industry will be examined. Moreover, insights will be given on other companies since the case companies will be encouraged to communicate knowledge about their relation to and collaboration with their partner firms within the same industry.

The choice of method is based on Yin's (2009) description of a case study. A case study is an empirical study of a contemporary phenomenon in its real context, where the boundaries between the phenomenon and context are not self-evident. Case studies are commonly used and favored in qualitative data collection methods in which the selected units are studied at a deeper level contrary to quantitative studies. Further, case studies may have either single or multiple case study approaches depending on the nature of the study. The main argument in favor of multiple case studies is that it improves theory building (Bryman & Bell, 2011). By comparing four or more companies the researcher is in a better position to establish the circumstances in which a theory may be tested and analyzed.

## 2.2 Selection of empirical data

The selection of empirical data was conducted in three steps. Firstly, the market of ERP-vendors was charted. Secondly, appropriate case companies were chosen and contacted. Thereafter, the contacted companies that agreed to participate were asked to choose respondents themselves.

### 2.2.1 Case companies

This thesis undertakes a broad approach, using a multiple case study where six companies are examined. The companies represent different variations of the relationship between consultants and vendors of ERP systems. They are ERP-vendors that provide own implementation consultants, consultancy-firms focused on one ERP system and consultancy-firms focused more than one ERP systems. In addition to this one ERP-vendor which solely provides consultants via partner firms and one ERP-vendor that both use partners and own consultants are examined. This enables the authors to attain good insight in the different relationships between vendors and consultants and what impact they have on the strategy in implementation. The selection of companies was based upon a report by KPMG (2012) that examines ERP-vendors in Sweden. The study examines the current market situation regarding ERP-systems in Sweden and was performed on 375 of the largest companies in the country. This report has been complemented with information gathered at each company's websites. The vendors were divided into those who provide own consultants and those using consultancy-firms. The results of this "mini market study" have been summarized and are presented in section 4.1. Consultancy-firms were found by looking at which firms the ERP-vendors had partnerships with. In total three different versions of vendor-consultant relationship in ERP implementation were derived and these are illustrated below.



Figure 1. ERP-vendor with partner consultants/Consultancy-firms providing services for one ERP system

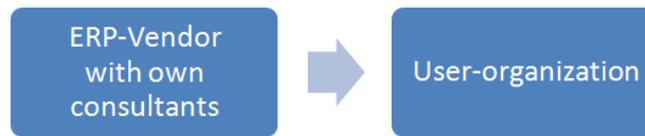


Figure 2. ERP-vendors with own implementation consultants



Figure 3. Consultancy-firm providing services for more than one system

User-organizations were excluded due to that they are solely indirectly connected to the purpose of this thesis since this regards the vendor-consultant relation. In addition, ERP-users are less experienced within this field since they probably only performed one implementation while consultants and ERP-vendors are facing these projects on a daily basis. ERP-vendors and consultancy-firms with different roles and approaches were contacted via email. Companies with employees within the authors’ network and those situated close to Lund were, if suitable for the study, prioritized due to convince reasons.

### 2.2.2 Respondents

In the selection of respondents, the companies were asked to choose appropriate representatives with sufficient knowledge regarding the examined subject. This method was elected due to the authors’ limited insight in the different roles within the case companies operations and this resulted in the respondents below:

Name	Position	Company	Category of company	Interview	Date	Length
<b>Dan Girdea</b>	Implementati- on Consultant (IC)	Unit4Agresso	ERP-vendor with own implementation consultants	Personal	2013-05-09	90 min
<b>Anonymous</b>	Market Director (MD)	Unikum	ERP-vendor with partner consultants	Personal	2013-05-02	60 min
<b>Hans Montelius</b>	CEO	Repona	Consultancy-firm providing services for one ERP system	Personal	2013-04-23	90 min

<b>Mats Silvhed</b>	Region Manager (RM)	iStone	Consultancy-firm providing services for more than one system	Phone	2013-05-07	40 min
<b>Katarina Pärsson</b>	Region Manager (RM)	Infocube	Consultancy-firm providing services for more than one system	Personal	2013-05-15	60 min
<b>Oscar Pettersson</b>	Partner Sales Manager (PSM)	Visma	ERP-vendor providing own consultants and collaborating with partners	Personal	2013-05-14	60 min

Table 1. Respondents

## 2.3 Data selection

This thesis is based upon both primary- and secondary data. Primary data is data collected by the researchers themselves, and secondary data is material already collected by others (Lundahl & Skärvad, 1999).

### 2.3.1 Primary data - interviews

The primary data are mainly gathered through semi-structured interviews. Since this study requires in-depth answers, explanations, and follow-up questions that cannot be achieved through for example a survey, the choice of data collection method fell on semi-structured interviews. The questionnaires were sent in advance alongside with a short description of the topic and purpose of the thesis, in order to enable the companies to find the most suitable representative. This also enabled the interviewee to be well prepared and informed in the researched topic. Additional questions have been answered through continuous email contact with the respondents. One of the interviews was conducted by telephone due to lack of time. All interviews were, with permission from the respondents, recorded, which enables the interviewer to fully focus on the answers in accordance with Bryman and Burgess (2011) recommendations. The questionnaires were based on four areas that somewhat differed depending on the overall strategy and offer of the particular company. Sub questions were created in order to secure that enough information were gathered and to secure a flow throughout the interview. The questionnaires are attached in the appendix. The empirical data has been presented with a structure similar to the interview questions. This method was chosen to provide structure for the convenience of the reader.

Interviews are a common way to conduct a qualitative study. Interviews may be explained by the flexibility it enables and they can be conducted as unstructured, semi-structured or structured (Bryman & Bell, 2011). Semi-structured interviews are when the interviewer starts from a list of topics and issues surrounding these to be included in the interview. The order of questions is of minor importance and the interview is seen more as a dialogue between the interviewer and the respondent. This means that it provides more room for follow-up questions, explanations and clarifications, which may be necessary and therefore avoids loss of information (Darmer & Freytag, 1995).

### **2.3.2 Secondary data**

The secondary data used in the study comes primarily from research papers found via the University's access to electronic databases, LUBsearch. To complement the University database, research has also been conducted from Google Scholar. Key words used in finding information were: ERP, implementation, the role of the consultant, ERP projects, ERP-vendor, vendor-consultant. Other secondary data used are relevant literature within the field of ERP systems, the role of the consultant and about business-to-business (B2B) relationships. This combination aims to provide the reader with a broad and deep theoretical understanding of the topic. The objective has been to gather information regarding ERP in general, ERP implementation and also data that enhance the understanding of the role of the consultant and its relationship to partner firms. The authors have tried to combine these areas in the literature study in order to increase the understanding of the topic and to create an appropriate base for the analysis of the empirical data. The literature study is structured as below:

- Section 3.1 concerns basic knowledge about ERP-systems including a historical review and a brief technological background
- Section 3.2 focuses on previous studies regarding ERP implementation. Theoretical implementation models are described followed by a presentation of CSF that aims to increase the understanding of what mechanisms that is important for an implementation process.
- Section 3.3 presents the role of the consultant in ERP implementation and other IT projects.

- Section 3.4 concerns interorganizational relationships and aims to provide a theoretical understanding of underlying mechanisms of the relations between ERP-vendors and its partner firms and what implications these might have on the role of individual consultants.

In addition to the previous literature, secondary data about the case companies have been used. This has been gathered partly from the Internet but also from various documents provided by the respondents such as product- and service brochures and company presentations. This information has been used, as a complementary to the primary data conducted from the interviews, when presenting the empirical data. This approach, where empiric data is gathered from several sources, is referred to as triangulation and aims to increase the reliability of this thesis (Bryman & Bell, 2011). The authors are aware of that this type of information might be biased and therefore, these data have been reviewed critically.

## **2.4 Information evaluation**

The respondents are all experienced within their certain field and several of them has senior positions. The authors are aware that the picture given by the companies can be nuanced and sanitized. In such a situation, it is fundamental to be critical of the information they provide. Validity and reliability have to be considered in order to create and maintain quality and to reduce the risk of obtaining incorrect answers. It is an important factor to consider avoiding distorting images, which may be incomplete or biased. During the data collection for this study the sources has been widely collected and examined to obtain a neutral view as possible.

### **2.4.1 Validity in case studies**

Validity is the extent to which measurements are in line with what it is intended to measure. There are three main aspects that have to be taken into account considering validity in case studies. Internal integration questions how information is connected while explanatory power compares gathered information with already existing frameworks. Thirdly, relevance needs to be considered in order to determine whether the created information is valuable and can enhance the understanding of the particular area. Furthermore, validity can be divided into two parts, internal and external validity. Internal validity concerns how the results of the study are consistent with the reality. Since this study is based on qualitative interviews and the respondents are considered

both knowledgeable and credible, the internal validity is seen as high. The respondents were also encouraged to revise the text before publication in order to ensure that perfectly correct information is presented. External validity concerns how the results of a study can be applied to other situations. To what extent the results of one study may be generalized and used in other context (Yin, 2009). The study will mainly focus on Swedish companies, which lead to that a certain cultural aspect might underlie the results. However, the authors are still convinced of the validity of the elected sample due to that most studied companies are subsidiaries to a global company or are in one or another way part of a global network. Besides, the investigated industry must be considered as global and quite standardized which contributes to that the differences between countries should be of minor importance.

#### **2.4.2 Reliability in case studies**

Reliability is concerned with the question of whether the results of a study are repeatable and refers to the consistency of a measure in a concept. In case studies, reliability refers to that the empirical findings are coincidental, stable, consistent and credible. More exactly, the study can be regarded as a fit between what researchers' record as data and what actually occurs in the natural setting that is being researched. The objective is to ensure that an exact replication of the study should make the same findings (Yin, 2009). Since the collection of primary data mainly comes from interviews, the risk of objective interpretations cannot be fully excluded. The respondents were, as mentioned, asked to review the thesis before publication in order to minimize this risk. Furthermore, triangulation has as previously mentioned been applied by combining the interviews with looking at documentations received from the case companies and collected from the Internet. This use of multiple sources aims to increase the reliability of the study.

### **3.0 Literature study**

*This chapter provides the readers with relevant information and theories within the research area. The aim of this chapter is to create a deeper understanding for readers with less insight within ERP systems and to provide a framework for the upcoming analysis of the empirical data.*

#### **3.1 ERP System**

The term ERP comes originally from the IT consultancy-firm Gartner group (Magnusson & Olsson, 2008) and they define ERP as *“the ability to deliver an integrated suite of business applications. ERP tools share a common process and data model, covering broad and deep operational end-to-end processes, such as those found in finance, HR, distribution, manufacturing, service and the supply chain.”* They further emphasize that it supports both administrative and operational assignments on different organizational levels across different industries. Four main benefits are presented, including: (1) IT cost savings, (2) business process efficiency, (3) Facilitates process standardization and (4) serves as catalysts for business innovation (Gartner Group, 2012). In addition to these benefits, Monk & Wagner (2009) emphasize that ERP systems facilitates global integration and that it enables manager to focus more on managing operations and less on monitoring the employees. There are also several disadvantages, but most of the shortcomings are according to Barker and Frolick (2003) either linked to the implementation phase or to the particular organization itself.

##### **3.1.1 The evolution of ERP**

The evolution of ERP systems consists of different support systems with chronologically increased integration and can be detected to the 70’s (Magnusson & Olsson, 2008). Material requirements planning (MRPI) was originally developed to facilitated material planning within the automotive in the 70s and was the first successful example of enterprise-wide system support (Monk & Wagner, 2009). Similar solutions are still used, often integrated as one module into ERP systems. These systems developed over time and in the 80’s Manufacturing Resource Planning (MRPII) was established. MRPII provides both a more comprehensive view of the material planning and, in addition to this, basic solutions for purchase including invoicing and paying. This facilitated the opportunity to create rather complete forecasts within the same

system. The increasing technological development resulted in an accelerating use of enterprise-wide information systems in the 90s. Practically all activities within a company were, at the time, managed by using some kind of information system. Increasing costs and technological errors did however create a rising demand of integration of the different systems (Al-Mashari, Al-Mudimigh & Zairi, 2003; Magnusson & Olsson, 2008). Software vendors responded towards this by developing ERP systems and SAP R/3, which is considered as the first ERP system, was released in 1992 (Monk & Wagner, 2009)

### **3.1.2 Technical architecture of ERP**

There are, according to Magnusson and Olsson (2008), three main cornerstones that differentiate ERP systems from its predecessors and other corporate information systems. Firstly, it is fundamental for ERP systems that all data- and software storage are centralized. This, often referred to as single entry, enables a global data structure where users can access and change data in real time. Secondly, the ERP system is based on modules where each activity is packaged into a specific module that aims to fulfill certain needs attached to the particular business. This approach enables the benefit that changes and maintenance can be performed within one module without any impact on the others. This gives the organization the opportunity to extend their operations without having to change their information system since they can add a new module in order to fulfill the new needs. The third cornerstone is the client/server (C/S) architecture which is an approach to computer network programming based on that computers can have two different roles within one network, including the role as a client as well as the role as a server. A server might be likened to a central computer since it holds and shares its resources (information), while a client is a computer or software that initiates the contact with the server. The benefit with this model is that several computers can use the same server simultaneously and therefore access and manage the same data (Magnusson & Olsson, 2008). When this technique was introduced in the 70s a network could consist of two clients and one server, but the development has enabled more clients to connect with the particular server. The server has over time become cheaper, more powerful and provides increased scalability. These improved technical conditions has created an opportunity to integrate information systems that previously was managed independent from each other and therefore contributed to the emergence of ERP systems (Monk & Wagner, 2009).

By definition, the aim of ERP is to enable organizations to manage an efficient and effective use of different resources. Resources can, in this case, for instance include finance, customers, material, suppliers and human capital. In other words, an ERP system provides tools for financial management and accounting (F/A), sales and marketing (S/M), supply chain management (SCM) and human resource management (HRM) (Magnusson & Olsson, 2008). Each of these modules needs certain information from the others and does also provide output towards the others. For instance, F/A needs sales order data from M/S, production plans from SCM and payroll data from HR in order to produce forecasts, analysis and accounting reports that the other areas needs in order to proceed their operations (Monk & Wagner, 2009).

### **3.2 Implementation of ERP system**

As previously stated, the implementation phase is the most crucial part of the ERP life cycle and usually ranges from 14 to 23 months (Mertrejean & Stocks, 2011). The adoption of ERP systems results in a major organizational change and it is therefore important that both technical and structural variables are managed smoothly by the particular organization (Monk & Wagner, 2009)

#### **3.2.1 ERP implementation models**

Parr and Shank (2000) studies successful and unsuccessful ERP implementations by adopting the project phase model (PPM). They argue that PPM is relevant to use as a lens in case studies regarding ERP projects in order to detect CSF and facilitate the process. The model is basically divided into three phases wherein the planning phase considers the selection of ERP system, formation of a project committee and establishment of overall strategy and objectives for the implementation. The project phase identifies which ERP modules that are needed and manages the installation and implementation, including the go-live. This phase is divided into five subphases including: set-up, re-engineering, design, testing and installation. Finally, the enhancement phase considers system repair, extensions, stabilizations and general continuous improvements. This final phase is seen as an ongoing process and may last for several years. The

PPM provides guidance for involved practitioners as well as a framework for qualitative empirical research in this certain area. (Parr & Shanks, 2000)

Zhang and Li (2006) present a comprehensive model for ERP implementation, based on data collected from ERP users in China that aims to take all major aspects into consideration. The main phases are presented in the left column and belonging subphases in the right.

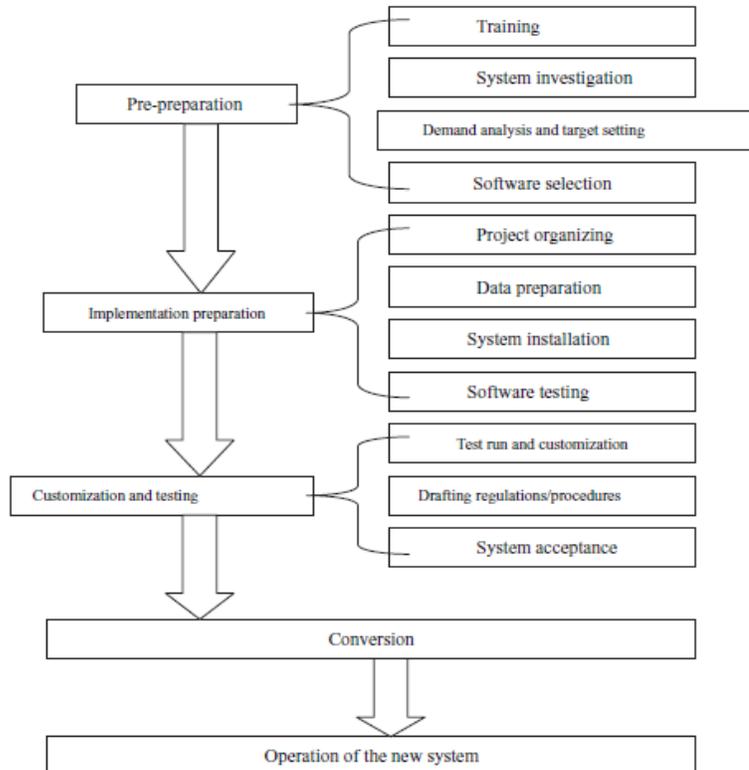


Figure 4. ERP implementation model (Zhang & Li ,2006. page 228)

### 3.2.2 Approaches to ERP implementation

Curko et al (2012) presents two main approaches to ERP implementation including the big bang approach and the phased approach. The phased approach is either when modules are gradually implemented or when system implemented is implemented at various time points based on geographical areas. This approach gives the project team a possibility to adopt a more narrow focus since unconcerned parts can continue with their normal activities. The phased approach enables internal knowledge- and experience transfer and is considered as less risky. This approach is far more time-consuming than the more radical big bang approach, which is more aggressive since the entire implementation is performed at once. Big bang is often favored when

the organizations has an urgent need of changing information system (Curko et al, 2012; Magnusson & Olsson, 2008; Markus, Tanis & Fenema, 2000). Curko et al (2012) argue that the size of the particular organization certainly has an impact on the election of strategy where smaller companies are more likely to adopt the big bang approach. Markus et al (2000) emphasize that the degree of local autonomy also has an impact on the selection of strategy. Companies with high local autonomy does more often prefer the phased process while a high degree of standardization increases the possibility for adopting the big bang approach. These both approaches are often combined, referred to as rollout implementation strategy, which enables ongoing adjustments of the scope of the project (Curko et al, 2012; Holland & Light, 1999).

### **3.2.3 Critical Success factors when implementing ERP**

There is extensive research made during the last 15 years on which factors that is considered as critical in a successful ERP implementation. Many MNE's selected to implement ERP systems in the end of the 90's due to the assumed "year 2000 problem" and there were an increased number of publications within the area (Al-Mashari et al, 2003; Monk & Wagner 2009). Holland and Light (1999) presented a framework for CSF in implementation based upon a review of previous literature, which focused on case studies from the perspective of the organization that introduced ERP. Pabedinskaitė (2010) investigated which factors experts, i.e. experienced employees at ERP-vendor firms or specialized consultants, respectively users considers as most important in implementation. Pabedinskaitė concluded that there is significant correlation between what the ERP users and ERP expert considers as important. Maditinos et al (2012) performed a quantitative study on causal relationships between CSF based upon the previously presented framework by examining Greek companies with previous ERP implementation. Their starting point was three main factors including top management support, user support and consultant support. These factors influence on the communication, conflict resolution and knowledge transfer was thereafter investigated in order to understand the most CSF for implementation. Dezdar and Ainin (2011) also applied a quantitative approach when looking at the influence on organizational factors impact on successful ERP implementation. In other words, they focused upon subjective and non-financial factors of evaluating an ERP project. The influence of top management support, user training and education and internal communication

were investigated through a questionnaire. The respondents consisted of Iranian ERP users. Curko et al. (2012) emphasize that a comprehensive understanding of ERP implementation is essential when formulating valuable CSF. They provide a similar discussion as Holland and light (1999) where several success factors are divided into strategic and tactical factors. Magnusson and Olsson (2008) are also presenting CSF for implementation of ERP systems and other enterprise information systems based upon previous research. Their success factors are derived from four main areas, including the ability to managing projects, knowledge about the particular system, an appropriate structured organization and the role of the management team. The findings in the examined literature regarding CSF in ERP implementation is presented in table two below:

Literature	Focus area	Critical Success Factors & other related findings	
<b>Holland &amp; Light (1999)</b>	CSF model for ERP implementation	<b>Strategic CSF</b>	<b>Tactical CSF</b>
		Legacy system	Consulting
		Business vision	Personnel
		ERP-strategy	Business process change & software
		Top management support	Client acceptance
		Project plans	Monitoring & feedback
		Communication	
		Trouble-shooting	
<b>Pabedinskaitė (2010)</b>	Factors of successful ERP implementation	<b>Most important CSF according to:</b>	
		<b>Experts</b>	<b>Users</b>
		1. Clear and measurable goals	1. Control of project budget, time & tasks
		2. Analysis of needs	2. Project team
		3. Project management	3. Analysis of needs
		4. Control of project budget, time & tasks	4. Balance between business & technology
		5. Project team	5. Clear and measurable goals
		6. Project planning	6. Training of users
		7. Project management	
<b>Dezdar &amp; Ainin (2011)</b>	Influence of organizational factors on ERP implementation	<b>CSF</b>	<b>Results in:</b>
		1. Top Management Support	Effective ERP implementation
		2. User Training & Education	User satisfaction
		3. Internal Communication	Effective ERP implementation

<b>Maditinos et al (2012)</b>	Factors affecting ERP implementation effectiveness. Investigating relationship between CSF	<b>Critical Success Factors</b>		<b>Results in:</b>		
		1. Communication		Conflict resolution		
		2. Knowledge transfer		Effective ERP implementation		
		3. Consultant support		Effective ERP implementation, conflict resolution		
		4. Top management support		Conflict resolution		
		5. User support		Communication & knowledge transfer		
<b>Curko et al (2012)</b>	Strategic and tactical success factors in ERP Implementation.	<b>Strategic</b>		<b>Tactical</b>		
		Change management		Project team		
		Business planning		Project controlling & evaluation		
		Implementation strategy		Business process modeling		
		Top management support		Software & trouble shooting		
		Project management		Legacy system		
<b>Magnusson &amp; Olsson (2008)</b>	A model of CSF when implementing ERP and other business information systems	This model consists of four vertical dimensions: <b>(1)</b> Management, <b>(2)</b> Project, <b>(3)</b> Organization, <b>(4)</b> System.				
		<b>1</b>	Strategy	Leadership	Support	Competence
		<b>2</b>	Team	Management	Planning	Consultants
		<b>3</b>	Culture	Change	Process	Communication
		<b>4</b>	Technology	Training	Users	Empowerment

Table 2. Literature study of Critical Success Factors

### 3.3 The role of the consultant in ERP implementation

Consultants are in general seen as having a complex relationship towards technology in the sense that they usually aren't involved in the creation but often are highly important to its distribution, implementation and application. Consultancy-firms had during the 90's considerable margins on IT-projects but are today less profitable due to a high degree of standardization and commodity. Many projects are today of large proportions and therefore still profitable from the consultancy-firm's perspective O'Mahony (2010). Organizations often use consulting firms when implementing ERP due to the scope of the project and the lack of required IT personnel, expertise and time (Chang et al, 2013; Mertrejean & Stocks, 2011; Monk & Wagner, 2009) and the use of consultants is often highlighted as one of the main CSF (Curko et al, 2012; Hollande & Light, 1999; Maditions et al, 2012; Magnusson & Olsson, 2008).

Consultants offer technical and operational knowledge and provide training for users (Chang et al, 2013). Experienced consultants can handle tasks that internal personnel are unwilling or unable to perform and they can also contribute with additional expertise and a new perspective that might facilitate the internal processes. It is of high importance to create a culture that facilitates knowledge transfer between consultants and internal staff in order to prepare the client for upcoming challenges. Based on a literature study, performed by Metrejean and Stocks (2011), eight main characteristics of ERP consultants have been derived including:

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

These characteristics were used in an extensive survey, aimed towards Chief Information Officers and other IT directors on companies with an ERP system, in order to determine their importance. The result indicated that technical skills were considered as the most important followed by experience, consulting skills and commitment. In addition, the article examined if consultants were perceived as more effective and necessary during a certain phase of the implementation projects. The survey concluded that consultants were considered as both the most effective and necessary factor during the configuration and integration phase while they were perceived as least effective during the operation phase (Metrejean & Stocks, 2011).

Mische (2000) have identified a set of important characteristics for information system consultants to possess, whereof several important skills are considered as soft. In addition to experience, communication, understanding of the client organization needs, commitment and personality are emphasized. A successful consultant possesses both sufficient technical skills and experience and has a high communicative ability towards the clients. These characteristics optimize the knowledge transfer between the consultants and the clients that is highly important

due to the scale and complexity of an ERP system. The differences in knowledge between the both parties are often referred to as the knowledge gap. Well-managed knowledge transfers will minimize this gap and most likely result in a successful implementation (Maditionos et al, 2012; Wang & Chen, 2005). Wang and Chen (2005) emphasize that there is a clear connection between consultant quality and both communication effectiveness and conflict resolution. Maditionos and colleagues (2012) performed a similar study on ERP users in Greece and found a positive correlation between consultancy support and conflict resolution while the hypothesis regarding consultant's impact on communication was rejected. Both studies did however highlight that consultant quality can directly and positively influence the performance of ERP projects. Maditionos et al (2012) asserts that consultant support and knowledge transfer is the two most important factors in the ERP implementation. The result also proves an interconnection between consultant support and knowledge transfer where input from consultants facilitates this and minimizes the knowledge gap. Another fundamental is that there is congruence between the clients and the consultancy-firm's goals. Chang and colleagues (2013) discusses how to achieve this by adopting different control mechanisms including output-, behavioral- and clan control. The clients are, according to their study, controlling the external experts by using output control while the consultancy-firms apply a mix of different control mechanisms.

### **3.4 Interorganizational relationships**

This section focuses on literature that provides a broad understanding of interorganizational relationships within a knowledge intensive context.

#### **3.4.1 Consultants in interorganizational relationships**

O'Mahony (2010) examines the role of management consultants and elaborates on the implications the professional partnerships has on the role of the consultant. The professional status is emphasized and affects the use of control mechanisms in these interorganizational relationships. The author suggests a somewhat looser approach than previous literature, e.g. Kraus and Lind (2007), on the control within the context interorganizational relations. Three main characteristics of professional partnerships, according to O'Mahoney (2010), are presented below:

- Decentralized control structures provide local partners with a high degree of flexibility.

- Professional partnerships emphasize “tolerant accountability” which facilitates a long-term approach to planning and increases the focus on non-financial measures.
- These partnerships are characterized by a high degree of mutual trust resulting in less detailed forecasts, control and increased flexibility.

### 3.4.2 Intermediation in business relationships

The business of information technology is a typical example of an industry where the business relationships are characterized by networks consisting of several intermediates. These indirect relationships are important due to increased complexity and diversity within the industry. Specialization has led to a need of networks where each member fulfills a certain function. The relationships between involved parties are often complex and affect end-users perception of the product or service. How the relationships are perceived is according to Ford determined by two main factors. The first are related to the complexity of the particular offer e.g. how standardized or flexible it is considered. The second factor relates to the degree of commitment towards the relationship. Companies might elect to develop high-involvement relationships in order to achieve certain synergies e.g. from knowledge sharing while others prefer to avoid involvement in order to maintain freedom and flexibility. These two dimensions are illustrated in the model below which can be used when analyzing and classifying business relationships. Business relations in the upper right field are characterized by a complex offering, high degree of adoption and continuous interorganizational communication while low degree of involvement requires a larger degree of standardization in the the control of the relation. (Ford, Gadde, Håkansson & Snehota, 2011)

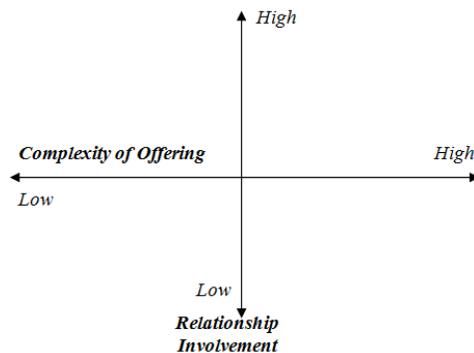


Figure 5. Intermediation in business relationships  
(Ford et al, 2011. P. 140)

### **3.4.3 Value cocreation in vendor-consultancy relationships**

Sarker et al (2012) examines value cocreation within a B2B context. The study was performed through a case study where the relationships between a multinational ERP-vendor and some of its partners-firms are observed. The main purpose of the study was to find important factors that contribute to value cocreation within interorganizational relations, mainly seen from a vendor perspective. The findings were derived through interviews with key-persons at the ERP-vendor and its partner companies. The results show that the relationships affect the knowledge transfer that facilitates continues innovations and other synergies. It is also shown that it has a positive impact on the relation towards the client organization. The relationships will also enable the vendor to easier reach new markets and create global networks. A consultant contributes with knowledge insight regarding clients' processes and operations while the system vendor has a higher degree of technological competence. Knowledge sharing is vital in order to gain synergies and requires mutual sharing, learning and trust. The examined organization also claims that the approach enhances a better support towards the end users. The authors do, however, highlight a considerable risk of conflict of interest. In conclusion, these partnerships contribute to considerable technological and operational benefits while the disadvantages mainly relates to political and structural factors. The partnership approach results in a more diverse customer base for ERP-vendors, both considering industry and geographical location. (Sarker et al, 2012)

## 4. Empirical study

*In this chapter the empiric material gathered through interviews, case company documents and the Internet will be presented. Firstly, a brief market research is presented in order to introduce the reader into the market. Secondly, a selection of interesting findings from the performed interviews is presented within four different categories divided after the case company's strategy.*

### 4.1 Current market situation - ERP-vendor´s consultancy approach

The 16 most used ERP systems in Sweden, according to a study performed by KPMG in 2012, are presented in the left column below. In the right column the vendors' solutions regarding consultancy support are presented.

ERP-Vendor	ERP system	Consultancy support
<b>SAP</b>	<b>SAP</b>	Different categories of partnerships <ul style="list-style-type: none"> <li>- Channel partner (can be involved implementation)</li> <li>- Service partner (can be involved implementation)</li> <li>- Software solution and technology partner</li> <li>- Support partner</li> <li>- Hosting partner</li> </ul>
<b>Unit4Agresso</b>	<b>Agresso business world</b>	Provide all consultancy support in Sweden in-house
<b>Infor</b>	<b>M3</b>	Collaborating with partner-firms
<b>Microsoft</b>	<b>Microsoft Dynamics NAV, Microsoft Dynamics AX</b>	Collaborating with partner-firms
<b>Visma</b>	<b>Visma</b>	Have several systems within their supply. Collaborates with partner-firm in implementation of Visma Business while they provide consultancy support in-house for the others.
<b>IFS</b>	<b>IFS Applications</b>	Provide own consultants; Solution architects, Business consultants and Application consultants are all involved in implementation projects.
<b>Jeeves</b>	<b>Jeeves</b>	Collaborating with partner-firms
<b>n.a.</b>	<b>Raindance</b>	Collaborating with partner-firms
<b>IBS</b>	<b>IBS enterprise</b>	Providing consultancy support for implementation and other services in-house.
<b>Unikum</b>	<b>Pyramid</b>	Partners are providing retailing and implementation while support and development are performed in-house.
<b>Oracle</b>	<b>Oracle e-business suite, Oracle enterprise one</b>	Collaborating with partner-firms
<b>Monitor</b>	<b>Monitor</b>	Internal consultants and two partner companies
<b>Deltek</b>	<b>Maconomy</b>	Provides implementation-, technique- and business consultants in-house

Table 3. Current market situation – ERP-Vendors and their consultancy support

## 4.2 ERP-vendor with own implementation consultants

*Interview with Dan Girdea, Implementation Consultant (IC) at Unit4Agresso.*

### 4.2.1 Unit4Agresso

Unit4 NV is a global group that develops and provides services to the ERP-system Agresso Business World. The headquarter is situated in Holland while the system development takes place in Norway. The Swedish subsidiary, Unit4Agresso AB, has around 500 employees with 1100 customers in Sweden whereof 50 % in the public sector. Most industries are represented and the customers are in general medium sized to big organizations. Some examples of their customers are Stockholm Municipality, Polisen, Securitas and Academic Work. Their strong focus towards the public sector enables long-term relations since these organizations not change information systems very often and it also reduces the sensitivity to cyclical changes. Besides the main system, Unit4Agresso provides information systems for construction companies and property owners, an HRM-portal as well as business- and salary consultancy services.

All activities are provided in-house and they have no partner-firms in Sweden that provides retailing and implementation. Unit4 has chosen this approach in most European countries while they, for instance, are collaborating with partner-firms in Australia. The strategy is chosen depending on the market condition in each country. In addition, the IC admits that the nearby located development department also might have an impact on this strategy. The IC thinks that the consultant likely is more committed when they are representing the particular system-vendor and they cannot blame technical deficiencies on a third party. Further, the consultants at Unit4Agresso have a tight relation towards the system developers. This enables an effective communication and contributes to making them responsive and flexible towards the client requirements. The IC claims that their main competitive advantage is the flexibility of the system. The IC further explains that all system vendors are able to provide pre-implementation flexibility while Agresso, in addition to this, also provides post-implementation flexibility.

## **Strategies in implementation**

Implementation consultants, project managers, technicians, and programmers are all represented in the implementation process and they are active to a varying degree within the different steps. Unit4Agresso are highly flexible towards the client demands throughout the entire implementation process. They have workshops in the beginning of a project and are thereafter having continuous meetings with the clients in order to be able to adjust the system to the particular requirements. The implementation process is divided into four main steps.

1. The *analysis and design* step is divided into two parts. One part considers the system installation, which the technicians are accountable for. The other part consists of workshops where the implementation consultants and the client organization discusses how the system should be set up in order to match the client requirements i.e. which modules they need and how these should be designed. In some cases, business consultants are also involved in order to improve internal processes prior to the implementation. The workshops are summarized in a document that constitutes the base for the rest of the project.
2. In the *customization and integration* phase, the implementation consultants are accountable for setting up the system in order to match the certain demands that the client was communicating in the previous workshop. In addition, integrations are made if the client uses other information systems besides Agresso. The technicians are in this phase contacted if errors occur.
3. The client is provided a fictional system environment for the *test and quality assurance* phase. The users are in this phase able to be educated in an environment similar to the actual system. There are in this step possibilities to make continues customizations in order to match the users requirements. It is the client organizations responsibility to use the test environment as much as they need in order to be prepared to go-live.
4. Lastly, the *go-live and continuous improvements* phase includes the commissioning of the system and the managing of early occurring issues that the client needs consultancy support to cope with.

Support activities are continuously provided post-implementation. Some support cases are regarded as a part of the main project while others are considered as the result of internal deficiencies, the user organizations are charged for the latter.

### **The role of the consultant**

The implementation consultants at Unit4Agresso can adapt different roles depending on their individual competence. Some consultants are foremost involved in educations and workshops while others are assisting the technicians in making system adjustments. The IC emphasize that the implementation consultants are involved in all steps in the above describe process and they have a continuous dialogue with the client in order to understand and fulfill its demands. This is considered as particularly important and the consultants are encouraged to identify solutions that lie beyond the borders of the ERP-system. They are in other words sometimes required to adopt the role of a management consult and use operational knowledge that they for instance acquired from working with other clients. The consultant should be responsive and possess both organizational and technical knowledge. It is also important to encourage the client organization to be committed towards the project. The management team behind the system procurement decision has seldom communication with the actual project team and this contributes to gaps in communication. The consultant should share their previous experience in order to assist the organization to avoid these most common failures. The role of the consultant also involves communication to other internal functions, such as technicians accountable for installation and system set up. They may also need to contact employees working within system development in order to find appropriate solutions that match the customers' demands. There are no standardized routines for how these communications shall proceed.

## **4.3 ERP-vendor with partner consultants**

*Interview with the Market Director (MD) at Unikum.*

### **4.3.1 Unikum**

Unikum is situated in Lund and develops and provides support to its own ERP-system named Pyramid Business Studio. Pyramid had according to Advinces survey in 2011 the highest rank in usefulness among ERP-systems produced in Scandinavia (Mjorbring, 2011). Unikum was founded 30 years ago and the three founders are still owners and partly responsible for the

management of the company. They have 70 employees whereof more than one third works with system development and about the same amount in customer support. The rest works within the system department, in management or in administration. They have an annual turnover (2010) of around 80 million SEK and Unikum has almost 6000 customers across several industries (Unikum, 2010). A majority of Unikums customers are smaller companies with between 10 till 100 employees. The system is developed in Sweden and a large majority of the customers are Swedish companies. However, the system is also able to run in English and the users can translate each module themselves if needed. This enables Unikum to maintain customers expanding their businesses beyond the Swedish borders. The MD states that Pyramid is a highly general system, meaning that there often are several solutions to one problem. This enables flexibility, which is one of the main differences and advantages towards other ERP-systems. This does not necessarily mean that the system is easier to manage from the user perspective since they might prefer to have one particular solution in order to keep routines simple. When the user organization has implemented Pyramid, the MD argue that their administrative operations often run smoother and they can process a higher volume of information without utilizing more resources.

In order to stay successful as an ERP-vendor, it is important to follow the market trends. One example is when new ERP-systems in the early 90s, started to require Windows-based systems. Another example of a radical change in the industry is when the C/S model had its breakthrough. These breakpoints have resulted in many competitors exit from the market. The MD is convinced that the future lies in cloud-based system where the users can enter the system from a web-browser. Unikum are trying to work proactively to be prepared for these kinds of new demands and general technical progress.

### **The role of the consultant**

The MD emphasize that the consultants are likely the most important success factor in implementation of ERP-systems. Many customers are, as mentioned, smaller companies and do therefore lack the required internal expertise. This is one reason to why Unikum consider it important to have partners located close to their customers. In order to be a successful consultant you need a good insight in which functions the client organization considers important in their

daily operations. Production oriented companies requires a different approach and other modules than companies mainly controlled by the financial manager. The amount of vertical divisions within a company does also have an effect on the demands on the ERP-system. The consultant should be aware of these factors when trying to find an approach to the ERP implementation. Besides the role of the consultant, the MD mentions management support and internal commitment as other critical success factors in implementation within the user organization perspective.

### **Vendor-consultant relationship**

Unikum has around 60 partners that provide consultancy service to users in most regions in Sweden. These partners provide implementation and services, which reduces the distance to each client organization and enables Unikum to solely focus on their core activities. The partners are accountable for retailing and implementation of Pyramid while the support after the implementation phase is provided in-house. Unikum aims to establish long-term relationships with its partner and the majority has been working together for more than 15 years. The MD emphasizes that long-term relations are critical for success and that the mutual trust is highly important. Most partners are smaller firms with limited supplies of services. Some of the partners provide services to other ERP systems besides Unikum, but this is not considered a problem. The MD realizes that this may be necessary for them in order to diversify the risk. The market is seen as self-regulating and the most important factor is to have satisfied customers. Working with more than one system has according to the MD a negative impact on quality of the provided services. They have no established routine for recruiting a new partner-firm. They want long-term partnerships and emphasizes that new partners need an already established company since it is likely hard to generate incomes during the first years.

Regarding the control of partner-firms, Unikum gains from their business model where they provide the post-implementation support in-house while partners are accountable for retailing and implementing the system. Unikum are not involved in the implementation and they do not provide instructions on how their partners should conduct their work. They are however keeping record of every support case, which enables insight in the consultants' performance during the implementation. This approach allows Unikum to become aware of if the user-organizations

have received appropriate support and training throughout the implementation project. In addition, they have a continuous dialogue with their partners in order to detect possibilities to develop the system. This approach, in combination with the mutual trust built from the long-term relations, makes the relations less dependent on control. The MD also states that rules would make the operations less flexible and reduce the benefits it provides. Unikum do, however, provide education within three different certification programs, which are referred to as quality assurance for a successful installation. One certification considers a programming license that enables the partners to make adjustments in the system in order match user requirements. The other two certifications concern modules for e-commerce. The invoicing processes between Unikum and its partners are relatively standardized. The partners bill their clients per hour while Unikum bill them per module. Pyramid contains of around 60 modules and the customers acquires the ones that are needed and are able to add a new module from the supply at a later stage. This is important due to that the customers are able to expand without necessarily have to change to another ERP-system.

#### **4.4 Consultancy-firm providing services for one ERP system**

*Interview with Hans Montelius, CEO Repona.*

##### **4.4.1 Repona**

Repona is a consultancy-firm located in central Lund with 27 employees including one CEO, one consultant manager, one administrator and 24 consultants. They have an annual turnover of 38,8 MSEK (2011) and their targeted market is the Öresund region. Their customers include major corporations in the region such as Tetra Pak, E.ON and Gambro (Repona, 2013). Repona have been an actor in the ERP-business since 1998 and have the last seven years worked exclusively with SAP, with whom they have a strong relationship. Reponas CEO sees their employees as their major competitive advantage since they have an average SAP-experience of 15 years and are considered experts within their field. Reponas experience and history in the region have resulted in long-term relations with their customers' characterized by an open and flexible relation. Reponas offers three primary services and they are resource consulting, SAP-implementation and SAP-support.

### **Strategies in implementation**

Reponas main strategy, when implementing, is to have a flexible approach with high adaptation to their customer's requests. The CEO describes that the critical success factors can be divided into company-related and consultant-related factors. The company-related factors are the most critical and what normally separates less successful from successful implementations. The company-related factors are divided into four groups wherein *the required data knowledge* is the first factor that Repona ensures before implementing SAP. They believe that customers with previous experience and knowledge from similar systems have a higher understanding of the relevance with a new ERP-system. The following factor, *commitment* is explained by that the project needs a high priority. To implement a new ERP-solution is both costly and time-consuming and requires a great effort, it therefore need to be recognized and prioritized. The management also needs to *make resources available* in order to indicate that the project is prioritized. A common mistake is that project team members keep all regular day-to-day tasks. When the previously mentioned factors have been fulfilled, the whole organizations must have a continuous *change management* to make the organization adaptable to the new system.

### **The role of the consultant**

CSF related to the consultants is emphasized and refers to the required *knowledge and training* to perform an implementation and includes technical and managerial skills. Reponas CEO means that SAP is a large and complex system, but that it with the help of skilled and experienced consultants is capable to create user-friendly processes, change management is therefore of greater importance in the implementation of SAP. The consultant must be able to “speak up” when problems within the organizations are detected. If consultants, for instance, notice that the client organization isn't committed enough or is not making enough resources available it is the consultants' responsibility to make the client aware of the problems. Repona has frequently internal discussions regarding these issues in order to exchange knowledge and assist colleagues in difficult situations.

### **Vendor-Consultant Relationship**

Repona is solely working with SAP and have had this approach since ten years ago. They have tried to provide service to one of Oracle's systems but did after a shorter period go back to

exclusively work with SAP. The CEO asserts that Repona achieves increased credibility among its clients due to that they only provide services to one system. Repona is service partner towards SAP, which means that they are certified to provide the implementation, consultation, and support services towards clients. They should assist client's requirements and aim to maximize ROI from their SAP solutions (SAP, 2013). Repona can also decide to become system retailer but are, according to the CEO, not interested in this due to strict demands regarding the amount of sales per year. They have instead a partnership with, Colada, a certified SAP retailer. Repona need to have a certain number of licensed SAP consultants in order to maintain their position as service partner. These licenses require continuous education, which SAP is arranging and every service partner is controlled annually to ensure that they follow the requirements. The CEO claims that the provided education usually is beneficial. As a service partner you pay for the licensing and education

Repona is overall satisfied with their partnership with the system-vendor. The CEO emphasize that SAP's business model, which is based on partnerships, results in that they have now limits and have enabled them to grow rapidly during the last 20 years. SAP is also encouraging their partners to develop own solutions within the system and Repona have for instance developed a "virtual customs warehouse" to a customer (Repona, n.a.). They have secured the rights to sell this logistic solution to other customers and they could also register this solution through SAP. Repona has no plans on develop own solutions and the CEO claims that it would be challenging to both develop an own ERP system and sell it.

## **4.5 Consultancy-firms providing services for more than one ERP-system**

*Interview with Mats Silvhed, Regional Manager (RM) at iStone and with Katarina Pärsson, Regional Manager (RM) at Infocube.*

### **4.5.1 iStone**

iStone refers to themselves as Europe's leading business systems trading house. They have over 500 employees and offices in twelve different countries on four continents. They provide services to many of the major business systems on the market. iStone provides a wide range of support for ERP systems and their focuses on services for M3, SAP, Microsoft Dynamics AX

and to a small extent IBS (iStone, 2013a). iStone has its origin in Intenia, a former Swedish ERP-vendor whose main product was Movex (today M3). Intenia was in 2005 acquired by the American Software company Lawson. The new owner caused some dissatisfaction and a group of former employees established iStone together with the consultancy-firm Rego. Today Infor, another US software company, owns M3. The history explains iStones extensive experience and competence within M3, which is their most sold system. Most customers are midsized to large companies and iStone provides M3 to a wide customer base of IKEA, Getinge, Trelleborg and Lantmännen. iStone strive to establish long-term relationships with their clients and provides services to all phases throughout the ERP life cycle including retailing, implementation, installation and various support activates both during as well as beyond the implementation phase. The clients are most often in need of the full service, which is why long-term contracts are commonly used. iStone provide services, beyond ERP, within information management, decision-making support, product development, systems integration and other technical solutions (iStone, 2013b).

### **Strategies in implementation**

iStone has a standard model for implementation projects regardless of which system the client has chosen. The consultants are aiming towards following the standard model but the RM claims that they are flexible depending on what the particular client needs. The RM emphasizes that customer satisfaction is the most important factor to consider and this requires flexibility. There are different kinds of implementation projects and they differ between new installations, upgrades and geographically phased rollouts. Regardless of the characteristics, a project team always consists of project management and business consultants. Solution consultants, programmers and technicians are also often involved depending on the nature and scope of the project. The RM emphasize that iStone has some requirements regarding which roles the client organizations project team should consists of.

### **The role of the consultant**

Consultants at iStone are specialized in one system within their supply. Considering the support activities beyond the implementation phase, their employees are divided into specialist groups and are working with all systems. It is important for the consultants to be able to detect and

communicate deficiencies. It might, according to the RM, be considered as offensive to have opinions considering the client organization, but the consultants will be seen as responsible for an unsuccessful project, regardless of the source of failure. They have continuous project meetings in every phase, with attendants from both iStone and the client organization, where such issues are discussed. Several success factors related to the client organization are mentioned and management support, competence, change management, willingness to change, an ability to work with deadlines and commitment considering effort and time are all emphasized. The role of the consultant is to encourage the mentioned factors in the client organization. The ability to cooperate is therefore fundamental for the consultant. The RM refers to an implementation project as a “team play” where consultants and client must interact in order to succeed.

### **Vendor-Consultant relationship**

The relationship to M3 is strong and to select this system was natural due to the previously described historical reasons. SAP was selected due to their position as market leader while Microsoft Dynamics AX was selected due to their fast growing system. All three systems require certifications obtained through education. iStone has the highest rank of partnership for these systems i.e. they are allowed to provide services to the clients along the entire ERP lifecycle from retailing to support activities in the post-implementation phase. The RM do not consider the control from the ERP-vendors as tight and do not think that the vendors are controlling whether the consultants has the required educations or not. The certifications and educations are however seen as beneficial and it is in iStones own interest to follow the requirements regardless of the system-vendors control. iStone are allowed to make adjustments in all three systems and the system vendors encourage these actions since they also benefits from new ideas and solutions within a particular system. They are also involved in the development of the new version of M3, which is about to be released in 2013. Regarding the invoicing, Infor is billing iStone both based on a percentage of income from consulting hours and per sold system license. SAP and Dynamics AX charge iStone for 50 % of the income from sold software licenses. None of the system-vendors have any strict guidelines for how iStone should perform implementation projects and similar activities. The RM claims that all large ERP systems are relatively similar since they follow each other’s developments through continuous system upgrades. SAP is leading considering finance while M3’s strength lies in production related modules. Dynamics

AX are on the other hand often considered as the user-friendliest system much thanks to their interface. The RM does not see any particular disadvantages in providing services for more than one system. iStone has chosen this approach in order to have as many clients as possible while at the same time minimize the risk of being dependent on a single vendor.

#### **4.5.2 Infocube**

Infocube is a Swedish IT-consultancy-firm with a main focus on ERP and was founded in 1999. They had a turnover amounted to 118 MSEK in 2011 and 110 employees in five offices in Sweden and one smaller office abroad in Chicago. Their customers are mostly medium sized companies with a turnover in between 50 to 500 MSEK and with an average of 60 ERP users. Infocube are mainly providing services for companies using Jeeves but do also provide services for Microsoft Dynamics AX users within the construction industry. They provide retailing, implementation and post-implementation support to both systems. In addition to this, they provide CRM solutions in Microsoft Dynamics AX and Business Intelligence tools within Qlickview (Infocube, 2013). The founders were working as consultants within Jeeves at their former employer and the choice to continue providing consultancy support to this system was therefore obvious. Jeeves is a Swedish ERP system that only provides development in-house, all other activities are performed by 20 partner-firms whereof Infocube today is the largest. The RM claims that Jeeves main competitive advantage is its easily developed system where user-organization is able to expand without replacing the ERP systems. Many new customers choose to implement Jeeves as a result of that upgrades of their previous system is considered as complex and expensive. Other underlying reasons for a system change are changes in external demands and lack of support within previous systems.

Each employee at Infocube is specialized to one system and is normally not providing services for both systems within their supply. The RM does not believe that the customers perceive that Infocube provides services for more than one system as anything negative but are aware of that it might create internal competition considering retailing. This has not been an issue since Jeeves are regarded as their main system and Dynamics AX solely is sold to clients within a certain sector. The system-vendors do not perceive this structure as positive, but the strategy of the partner-firms is in this sense is beyond the vendors' control.

### **Strategies in implementation**

Infocube manages all steps of the implementation process jointly with the client organization and these projects usually range from six to eight months. Some of the implementations are performed at an entire group at once while other considers geographical rollouts. The RM does not see any major differences on the consultants' role depending on which system they are implementing. Infocube has a standard methodology for implementation that they are applying for all customers regardless of which system they are implementing. The consultants are responsive and flexible and the programmers in almost all projects make system adjustments to various degrees. The users are also able to perform simpler adjustments themselves if needed, but they try to guide the client to follow the four-phased methodology below.

1. *Pilot study and analysis* phase includes a basic analysis of current processes and organization. Needs of integrations, data migration and education are examined leading to a definition of project goals and vision.
2. The aim of the *project implementation* phase is create a ready to go system and compose an education plan for the end users. The installation is performed within this phase and the roles within the project team are defined.
3. The *start up* phase consists of end-user training, creation of routines for system administration and an analysis of future support needs. Tests and simulations are performed and when these are performed successfully it is time for go-live.
4. In the *Administration and client development* phase, the system is now running. Continuous adjustments and improvements are made and evaluation is conducted in order to attain feedback.

The project group usually consists of one project manager, a technician, a programmer and one consultant for each area included in the project e.g. finance, logistics, manufacturing etc. Infocube requires the client to have a mirrored project organization and the PM emphasize that it is important to have some demands on the client organization for instance regarding having a key-user accountable for each function. The internal and external project groups have joint meetings throughout the project. Infocube considers it as important to inform the client if there are deficiencies that may cause a project failure. The RM claims that it is vital for the client

organization to make enough resources available and to understand the scope and importance of an ERP implementation. In addition, a culture characterized by an openness to change is important for an organization taking on an implementation project in order to avoid internal frictions.

### **The role of the consultant**

Infocubes consultants are involved in all phases in an implementation project. The RM has previously worked as a consultant at one of their competitors and emphasize that the role of the consultants has developed from being passive and solely following the demand of the client towards being more proactive and guiding towards the client. Consultants need to have insight in other organizations operations, which most often requires experience from working in a user organization. The role of the ERP consultant has embraced certain elements from the management consultants but they are still required to possess technical knowledge. The RM believes that this development will proceed and they are continuously encouraging their consultants to adopt a proactive approach. The RM hopes that the consultants in the future will be trusted to participate earlier in the processes i.e. to be more involved in process improvements prior to the ERP implementation. Responsiveness and communicational skills are two critical success factors the consultants need to possess. The consultant must also have the ambition to learn and understand the client organization and have the ability to challenge the client by suggesting new solutions. The RM asserts that the role of the consultant is unique in the sense that they need to sell a service but in the meantime be able to come up with controversial suggestions when needed. Experience is fundamental for the consultants in order to be able to cope with these situations. It is always important to have in mind that the main keys to success, for both the consultant and the client organization, are to be proactive and realize how many resources, i.e. time and staff that are required.

### **Vendor-Consultant relationship**

Both Jeeves and Microsoft are arranging educations and issues certifications for consultants attending these. A certification is not required for Jeeves, but Infocube prefers to have as many certified consultants as possible in order to be credible towards their customers. There is one general certification for Jeeves and more specialized licenses within each application. Infocube

has a close relation with Jeeves due to them being their largest partner-firm and has collaborated over a long time. They have ongoing contact with the system developers and their consultants usually communicate through Infocubes own support, who then contacts Jeeves if the problem regards something beyond their knowledge. Microsoft Dynamics AX has a different control towards their partner where certifications are included into a ranking system. The correspondence process between Infocube and Microsoft is similar to the one with Jeeves although that they relation not is equally close. It is not considered as an issue that Microsoft is an US system-vendor since they have partner managers in Sweden. The invoicing between the both system-vendors and Infocube are based on the number of sold system licenses and fee is also charged when employees attend an education arranged by one of the system-vendors.

#### **4.6 ERP-vendor providing own consultants and collaborating with partners**

Interview with Oscar Petterson, Partner Sales Manager (PSM) at Visma Software AB.

##### **4.6.1 Visma**

Visma AS is a Norwegian company with 5 400 employees whereof one third is located in Sweden. The turnover for the entire group amounted to 5 749 MNRK in 2011 and they have an extensive grown during the last years with acquisitions of small companies within their segment (Visma, 2013a). Vismas vision is to become the leading supplier of efficiency improving products and services. The company is divided into five main areas providing different products and services including software, retail, BPO (accounting and payroll), projects & consulting and commerce solutions (Visma, 2013b). Visma are in general particularly strong within modules for accounting and finance. This is due to historical reasons since they previously provided systems mainly supporting these functions. The system development mainly takes place in Norway and the PSM claims that the Nordic origin is one thing that differentiates Vismas products from its competitors. Visma Software AB has 120 employees and around 1 700 customers whereof most belongs to the SME-segment. The software area includes ERP-, CRM- and accounting information systems wherein Visma has several systems depending on the size and requirements of the particular user organization. Visma Business is a modern and flexible ERP system that is especially strong in logistics and the customers using this system are mostly medium sized companies like Liseberg, Fontana, Siba, Espresso House and inkClub. Partner-firms perform the retailing and implementation of this product while these activities otherwise are performed in-

house. The reason behind this approach is that Visma business was acquired by a company that used external partners to provide these activities and Visma decided to keep their already established partner network. They see both benefits and shortcomings with this approach. The main advantage is that the partner-firms are able to work closer to the customers and therefore gains an understanding in their operations and needs. Beyond this, the collaboration enables Visma to grow rapidly without hiring new employees. The disadvantages relate to Vismas needs to control the partners and that the approach contributes to reduced contact with the end users.

### **Strategies in implementation**

Visma is mostly involved in all steps in an implementation and a consultant group is assigned to each project. A group consists of a project manager, technicians, programmers and business developers. Visma is a highly flexible system, and the PSM states that the flexibility is important due to customers' demands. Customers expect that Visma will provide a "best practice" to their business with a high degree of customization towards their needs. The PSM says that one important critical factors for success is to challenge the customer to make them understand their needs. Some clients rarely realize the scope of an implementation, which may result in that the client feels deceived. It is therefore of great importance to have a clear communication to increase the understanding. The PSM also says that the clients need to understand that the consultants have been assigned because of their competence within the field. Another critical factor that affects the implementation is the use of sub targets to control that the implementation goes as planned. The PSM explains that one common reason for why longer projects often fail is due to that the clients required specifications might change during the process. Sub targets with continued evaluation facilitate the implementation and contribute to the reduction of failure. Another way to handle this problem is, according to the PSM, through a phased rollout. The PSM explains that the consultant's role has developed a lot, and sees a continued development towards having a more managerial aspect. The systems are today well developed and the installation has become more automated which means that the consultants must focus more on optimizing the operations.

### **Vendor-Consultant relationship**

20 partners from different regions of Sweden provide retailing, implementation and other consultancy services for Visma Business. Each partner-firm must be licensed meaning that they need to attend a certain education and the license must be renewed yearly. Visma has a ranking system for their partners wherein each partner can attain platinum, gold or certified level depending on their performance. The invoicing between the parties is solely based upon sold licenses and Visma do not collect shares of clients' income from consultancy hours. Considering strategy in implementation, Visma has no particular guidelines for how this shall be examined. The partner-firms are supposed to possess the required skills to manage this by themselves. The PSM admits that they are not completely satisfied that some of their partner-firms are retailing and providing services for other ERP system besides Visma. The ideal situation would be if the partners were totally committed to Visma, but this lies beyond their control. Visma are, on the other hand, striving towards establish partnerships with larger consultancy-firms in order to reach a wider set of customers.

Several mechanisms are applied in order to secure that the partners deliver a sufficient performance. Visma always contact the user-organizations and asks them to evaluate the consultancy support. This evaluation is also performed on organizations using systems where Visma provided the implementation themselves. This enables a greater insight of both the external and internal consultants' performance. Visma are able to reallocate customers from one partner-firm to another if they consider this as needed. The PSM also claims that they are more able to provide assistance and support to partner-firms that match their requirements. Visma are monitoring their partners by using key-ratios that mainly is connected to sales. Another control tool is the use of best practices in order to encourage the partner-firms to develop their business models. This is performed through that Visma identifies a practice of a successful partner and then tries to communicate this to the other firms.

## 5. Analysis

*In this chapter, the empirical material gathered through the six interviews and complementing sources will be analyzed and compared. This data will ongoing also be compared to the literature study that was presented in the literature study. Primarily, a brief summary of the empirical data will constitute an introduction to the analysis.*

Case company	Core business	Consultancy-vendor relationship	Implementation strategy
<b>Unit4Agresso</b>	ERP-vendor	Agresso provides all services in-house in Sweden.	Flexible process in four main phases: <ol style="list-style-type: none"> <li>1. <i>Analysis &amp; design</i></li> <li>2. <i>Customization &amp; integration</i></li> <li>3. <i>Test &amp; quality assurance</i></li> <li>4. <i>Go-live</i></li> </ol>
<b>Infocube</b>	Consultancy-firm	Provides consultancy support in all phases for Jeeves and Microsoft Dynamics AX. The latter solely for organizations within the construction industry.	Uses a standard methodology consisting of four phases for both systems. <ol style="list-style-type: none"> <li>1. Pilot study and analysis</li> <li>2. Project implementation</li> <li>3. Start up phase</li> <li>4. Administration and client development</li> </ol>
<b>iStone</b>	ERP consultancy-firm providing retailing, installation, implementation and support to M3, SAP, Microsoft Dynamics AX and IBS Enterprise.	Highest rank of partnership to all three vendors. They have also a group of employees who participates in the development of M3.	Aiming to follow a standardized model regardless of which system but in the meantime flexible towards the customers' needs.
<b>Repona</b>	ERP consultancy-firm providing implementation and support solely within SAP.	Service partner to SAP, allowed creating customized solutions in the system.	Has a flexible approach in implementation with high adaptation to their customer's requests.
<b>Unikum</b>	ERP-vendor. Develops and provides support to Pyramid.	60 partner-firms all over Sweden provides retailing, implementation and in some cases system adjustments. Aiming towards creating long-term relations and emphasize mutual trust.	No strict guidelines or control towards their partners. Detecting deficiencies among their partners due to that the support is provided in-house.
<b>Visma</b>	ERP-vendor	Visma has several ERP systems whereof the implementation is managed by partners for one system and in-house for the others.	Emphasize the importance of involvement in all phases and flexibility towards client's requirements. Uses best practice.

Table 4. Summary of the empirical data

## 5.1 Vendor-consultant relationship

The empirical data presents several different approaches considering the relationship between an ERP-vendor and the consultants participating in ERP implementation. Consultants who are providing services to their firms own system are investigated as well as consultants who are working with a system that is owned by a partner company. In addition, ERP-vendors that are collaborating with partners are examined. The different case companies have had various explanations to why they have adopted a certain approach but some main features are derived.

All the examined companies have the possibility to do adjustments in the system to some degree regardless of whether their employer owns the particular system or not. In this sense, all respondents claim that they are flexible in their services towards their customers. The system vendors usually issue programming licenses to employees at the partner-firms and the licenses require an education that enables the vendors to control the employees at the partner-firms. The programming licenses also enables co-creation of value since the consultancy-firms are able to provide needed solutions to their clients which increases customer satisfaction and billable hours. The vendors do also benefit from this strategy since the partner-firms assist them in developing their products. Both parties seem to gain from this approach, which is in accordance with Sarker and colleagues (2012) hypothesis regarding technical advantages in partnerships between ERP-vendors and consultancy-firms. SAP has created a marketplace where the partner-firms have the ability to promote and sell their solutions to other user organizations. The consultancy-firms are able to reach new customers and SAP receives a commission and benefits from the users who become more reliant on their own system. This last implication is discussed by Magnusson and Olsson (2008) and referred to as “lock-in effects”.

The business models among the consultancy-firms that are partners to an ERP-vendor usually differ from each other. All examined companies in this thesis have service to ERP systems as their core business, but, their competitors also consist of management and IT consultancy-firms who have a wide set of services. The respondents from iStone and Repona consider their narrow scope as a competitive advantage. Another variable regarding consultancy-firms business model is the amount of systems they are providing services for, where iStone provides services for four ERP systems, Infocube for two and Repona solely for one. All respondents admits that size do

matter in the sense that it is easier for iStone, with 500 employees compared to Repona with only 27 employees, to provide services within more than one ERP system. The CEO of Repona argues that they would likely lose credibility towards their clients if they would provide services for several ERP systems. The RM at iStone argues, on the other hand, that the approach where they provide services to three partners systems enables a wider reach of clients. Providing services to several systems is not considered as an issue since most employees are specialized on one system.

Infocube was previously only providing services for Jeeves but after examined the current market conditions they extended their supply by starting to provide services within Microsoft Dynamics AX. In accordance with iStone, they saw opportunities to expand their business. iStone is also providing services within SAP due to the simple reason that they wanted to include the market leading system in their supply. iStone and Infocube have in common that their main focus lies on one of the systems within their supply due to historical factors. Both companies have also a relatively tight relation towards this vendor regarding support and system development. Infocube are Jeeves largest partner-firm and they are both Swedish companies, which have a positive effect on their relation. iStone has a close relationship towards Infor despite their foreign ownership. In addition, iStone has a group of 10 employees who are participating in the development of the new version of M3 that will be released in 2013. This must be considered as a high degree of involvement in business relationships that according to Ford and colleagues (2011), creates knowledge transfer and other synergies. Most examined vendor-consultant relations should be positioned in the upper right field in the model presented by Ford et al (2011) meaning that they characterized by providing a complex offering and having a high degree of involvement in the relation. This requires continuous communication and adoption from both parties, which is fulfilled in most described cases. Reponas relationship with SAP is not as close although their system is the only one within Reponas supply. SAP is a global actor with many partner-firms around the world which according to the CEO of Repona has resulted in that SAP have been able to have a steady growth during the last 20 years. Repona is labeled service partner meaning that they can perform implementation and support but not retailing. iStone has a more extensive partnership with SAP and they are managing retailing as well as implementation and support. Repona has decided to cooperate with another SAP partner

that provides retailing of system licenses. They do not want to manage this activity in-house due to the demands that SAP has regarding sold licenses per year. The relation between SAP and Repona are categorized by a complex offering within a relation with low involvement meaning that they, according to the model by Ford et al (2011), are somewhat adapting to each other based on standardized rules.

Visma are also evaluating the partner-firms performance considering sold system-licenses and are basing their licenses on this indicator. Visma and SAP adopts an approach considering retailing that is in contrast to O'Mahoneys (2010) theory regarding decreased focus on financial measures within professional partnerships. They have, on the other hand, no explicit demands on the amount of billed consulting hours, which increases the flexibility in their partners operations. The only system-vendor that has been examined, directly or via a partner-firm, that takes a commission for consulting hours is Infor who are developing M3. The invoicing between system-vendor and their partner-firms is in all other examined cases solely based upon sold system-licenses and attended educations. Some web-seminars are provided for free but the required education for licenses usually costs to attend. Unikums MD emphasize that mutual trust is important within the relation with their partners and it is created through long-term relations. Unikum are managing the post-implementation support in-house and this enables an indirect control over their partner-firms performance. The MD states that their strong partner relations are one factor explaining their strong position. According to Ford and colleagues (2011) good relations between suppliers and their intermediaries have positive effects on the end-users perception of the product. Unikum has, in line with this, strong relations with their partner-firms and the end users are having a positive perceptions of Pyramid, that according to Advinces survey in 2011 was ranked as the number one Scandinavian ERP system considering usefulness (Mjorbring, 2011).

The system-vendors have different views and perceptions on whether their partners should provide services for more systems than theirs. Unikum do not mind that their partner-firms are providing services for other ERP systems while Visma dislike it, the PSM however admits that it lies beyond their control. The MD at Unikum states that the partners are recommending the most appropriate system depending on the particular customers need and that no actor would gain if a

partner would sell Pyramid to customers that are not suitable for this particular system. In this sense, the market is self-regulating. This self-regulating mechanism seems to contribute to interdependence between the vendor, the partner and the user of the ERP system. This facilitates the interorganizational control where ERP-vendors are generally applying a relatively loose approach considering the control towards their partners. O'Mahoney (2010) is also emphasizing a looser control on consultants within interorganizational relations which is supposed to enable local partners a higher degree of autonomy and flexibility. Unikum are, in line with this, applying a loose control towards their partners and believes that it enables flexibility and mutual trust. Infocube on the other hand argues, in accordance with Vismas opinion, that most system-vendors dislike the multiple system supply but they cannot do anything about this. From the consultancy-firms perspective, both Infocube and Repona emphasize the importance of timing when deciding to extend the service supply with one additional system. The challenge is to find a system that will gain market shares within the companies' geographical area in the future. In addition, it is vital to possess experience within this particular system. Infocube emphasize the risk for internal competition considering system retailing. The RM somewhat disagrees with the self-regulating mechanisms that the MD at Unikum highlights and argues that the consultancy-firms must be cautious in order to avoid internal tensions. The consultancy-firms may however have several intension regarding having multiple systems within their supply. The major intention is, as stated above, the possibility to reach a wide set of customers while another is to diversify their risk. Both the MD at Unikum and the RM at iStone have addressed that the risk decreases when having a wider supply of services.

## **5.2 The role of the consultant in ERP implementation**

Throughout this thesis, the role of the consultant in ERP implementation has been elaborated from different perspectives. Consultancy-firms themselves has given their view as well as the system vendors who does not provide these services at al or provide consultancy services but somewhat beyond their core operations. Some sources within the literature study highlights that it is crucial to use external assistance from consultants during an implementation project in order to reach a satisfying outcome. (Mertjean & Stocks, 2012; Chang et al, 2013). Although the role of the consultant is examined, most articles in the field of CSF are doing this from the user organization perspective. Most case companies are in accordance with this, emphasizing that the

user-organization must, regardless of how skilled the particular consultancy support are, fulfill certain requirements in order to perform a successful implementation. The most frequently mentioned CSF from the client perspective was commitment, change management, internal communication, management support and computer skills. These factors are all mentioned in the literature study (Curko et al, 2012; Dezdar & Ainin, 2011; Holland & Light, 1999; Maditinos, et al, 2012; Magnusson & Olsson, 2008; Pabedinskaitė, 2010). Respondents from all consultancy-firms' highlights that the key role of the consultant is to enhance the most important factors in the client organization i.e. the factors mentioned above. Pedagogical and communicative skills are therefor vital to possess. These skills are also included in previous descriptions of important features of ERP consultants (Chang et al, 2013; Metrejean & Stocks, 2012; Mische, 2000). The overall view from the empirical study regarding the important skills of the consultant is in line with the literature study. Experience, technical and the mentioned pedagogical skills are all mentioned and discussed in various degrees by the respondents. The empirical study does however provide a somewhat more nuanced view e.g. regarding the importance of communicating deficiencies. The ability to detect shortcomings within the client organization and thereafter communicate this is highly critical for the consultant. The CEO of Repona claims that this is particularly hard since many organizations dislike when external actors have opinions regarding their internal operations. Repona has frequently internal discussions regarding these issues in order to exchange knowledge and assist colleagues in challenging situations. The RM at iStone, has a straightforward view on this matter and states that the consultants must "speak up" since they will be blamed for unsuccessful projects, regardless the source of failure. Infocube is of a similar opinion and their RM emphasize, as well as the CEO of Repona, that consultants with experience from working as an ERP-user are required to handle such issues. The consultants at AgressoUnit4 are encouraged to use experiences from previous projects when facing deficiencies within a client-organization. If the consultants are unable to manage these issues individually, they delegate the problem to the project manager who discusses this with the client-organization at recurrent project meetings. The respondents have different views on the role of the consultants and argue that it is determined by situational factors within each project. The RM at iStone argues that there are differences between a new installation, an upgrading and a system rollout into a new geographical region. A large portion of the implementation projects managed by Infocube considers rollouts into a new geographical area. The RM does, however,

not see any major difference from other projects besides that the language must be adjusted along with certain financial functions in order to match legal requirements in the new country. The system rollout is within the literature study referred to as the phased approach and recommended to organizations with a low degree of standardization and high local autonomy (Curko et al, 2012; Holland & Light, 1999; Markus et al, 2000). How the type of implementation affects the role of the consultants is however not explicitly examined. The case companies activities do also differ, Repona are for instance not managing the retailing of SAP, which enables their consultant to fully focus on the implementation. Metrejean and Stocks (2012) do also investigate which phase within the implementation that the consultants were considered as most needed and effective and concluded that the configuration and integration phase is the most crucial part. This is the phase that Infocubes refers to as the project implementation phase and AgressUnit4 calls the customization and integration phase, meaning that the consultants are setting up the system in order to match the clients' demands. Integration with their present information systems is also being managed within this phase, if needed. This phase is, in accordance to the article, described as complex in the sense that client organizations usually lack the particular skills needed and therefore are dependent on the consultancy support.

Infocube, Unit4Agresso and iStone have a standard methodology for implementation. Unit4Agresso and Infocube methods consist of four phases that are thoroughly described in the empirical material. The consultants are, despite these methods, flexible towards their clients' preferences and the systems are more often adjusted to the client organizations than the other way around. In some cases, the clients want to redefine and streamline their routines as a part of the implementation project. AgressoUnit4 and Visma do sometimes integrate business consultants in the project in order to meet these kinds of requirements. The IC at AgressoUnit4 emphasize that they are encouraged to use knowledge acquired from previous clients in order identify possible process improvements beyond the borders of the ERP system. The ERP implementation models in the literature study (Parr & Shanks, 2000; Zhang & Li, 2006) are relatively similar to those presented by Infocube and AgressoUnit4. The main difference is that the models presented in the articles includes a support period that may last for several years while all the examined practitioners considers the support as something beyond the implementation. One example is Unikum who provides support in-house while the

implementation is managed by partner-firms. This approach indicates that the support is not regarded as an activity outside the actual implementation.

Neither the IC at AgressoUnit4 nor the RM at Infocube claims that the standardized models have a major impact on the consultants' role. The aim of these models is instead to communicate an action plan to inform the clients in order to increase their involvement and facilitate their planning. All respondents have, as well as the literature study (Magnusson & Olsson, 2008), highlighted the importance of commitment within the client organization in the sense that they need to make resources available. The PSM at Visma states that it is relatively easy to predict whether an implementation will succeed depending on if the project group is encouraged to prioritize the implementation. The RM at iStone agrees with this statement and highlights the consultants' responsibility to communicate the importance of commitment. This may be difficult as an external actor, which is why a standardized model can be useful in order to provide guidelines that the consultants can refer to.

### **5.3 The impact of vendor-consultancy relationship on the role of the consultant**

There are underlying themes in the empirical data that indicate differences in the consultants' role within an ERP implementation depending on the ongoing elaborated vendor-consultant relation.

Unikum and Jeeves are collaborating with partner-firms partly in order to increase their availability toward user organizations. The article by Sarker et al (2012) emphasize the benefits with having partner-firms located close to the client organizations and highlight that it results in a more diverse customer base and increased availability. AgressoUnit4 realizes that their strategy requires some additional local offices and traveling for the consultants but they are convinced that the advantages with their strategy outweigh the disadvantages. They are, for instance, collaborating with partner-firms in Australia, where they believe the market conditions are more appropriate for that structure. The location is according to the CEO of Repona, besides the size of the company, one of the reasons why SAP is using partner-firms during the entire ERP life cycle. The availability facilitates the communication between the consultants and the client

organization. Metrejean and Stocks (2012) are emphasizing that human interaction and communication skills are important characteristics of a successful ERP consultant since they may decrease the risk for misunderstandings and conflicts. The continuously highlighted and discussed pedagogical skills are vital in order to manage knowledge transfer and have, for instance, according to Maditinos et al (2012) a significant effect on ERP implementation. The availability of the consultants has also an effect on the consultant's role and is, in accordance with Sarker et al (2012), one advantage with the partner-firm model that Unikum and to some extent Visma adopts. Another aspect to consider, regarding communication, is the collaboration between the consultants and the system developers. A recurrent scenario is when client requests regarding system adjustments that the consultants are unable to manage. The consultant is therefore in need to communicate with the systems developers in order to provide a desired solution. The RM at Infocube states that this process consists of more than one step since the required competence most often is found outside the organization. Unit4Agresso, on the other hand, manages this through direct communication to colleagues within the company, which could decrease the degree of distortion. This indicates that the vendor-consultancy relation has an impact on the consultants' lines of communication. Two kinds of communications have been elaborated; the client-consultant communication may be improved through the partner-firm approach since it increases the availability while the communication between consultants and system developers may be enforced due to shorter lines of communication. This indicates that the vendor-consultant relationship has an impact on the role of the consultant seen from a communicative perspective.

The literature study (Pabedinskaitė, 2010) describes the transfer of knowledge from consultants to users and emphasizes the interconnection between consultant support and knowledge transfer (Maditions et al, 2012) as well as that education of users is one of the main tasks for the consultants (Chang et al, 2013). In this thesis the transfer of knowledge is also highlighted but in a somewhat different context, namely the education that ERP-vendors provides to their partner-firms. The empirical data indicates that all ERP-vendors require education in order to become a partner-firm. The educations are linked to licenses that often are a requirement in order to provide consultancy services. When consultants are employed by a system-vendor the education is managed internally and can therefore be customized to a larger extent, which might have an

impact on the role of the consultant. The examined consultancy-firms, as well as the literature study (Metrejean & Stocks, 2011; Mische, 2000), emphasize the importance of having experience from working within the user organizations. The system-vendors could hire less experienced employees and offer them comprehensive training programs led by more experienced consultants. Although this thesis is based upon a small sample, the reasoning above indicates some differences in the role of the consultant, as a result of different training methods between the vendor-consultant relationships.

The role of the consultant has mainly been elaborated from a business perspective, softer variables cannot however not be entirely excluded due to the human nature of the consultants. The IC at Unit4Agresso argues that consultants are more like to be committed to a system if they are working closer towards the system vendors. In addition, the respondents from iStone and Infocube were more inclined to refer to their “closest” vendor when describing their activities and relations. It might be that the consultant’s commitment towards the system vendor has an impact on the provided services. Objectivity is therefore, in accordance to Metrejean and Stocks (2011), important to have in mind when communicating with various stakeholders. Another discussed soft factor is the risk of internal competition and regards consultancy-firms providing services to more than one system. The risks are especially high when the partner-firms have different margins on different system. The RM at Infocube states however that this issue mainly considers the employees involved in system retailing and has therefore no direct effect the role of the consultant.

## 6. Results & Discussion

*This final chapter aims to present the results and thereafter conduct a discussion beyond the purpose of the thesis. The discussion will take on alternative methodologies and elaborate on how the results may differ. Lastly, the thesis will go way beyond the formal purpose and look into the future of ERP and the role of the consultant.*

### 6.1 Results

The purpose of this thesis has been to describe different types of vendor-consultant relations and analyze how these effects the role of the consultant in the context of ERP. As presented in the methodology, three different versions of vendor-consultant relations in ERP implementation have constituted a basis throughout the thesis. The findings are summarized in figure 6 below and are presented according to these three models. The figure illustrates advantages and disadvantages with having consultants' in-house or using partner-firms in system implementation. The figure also illustrates why consultancy-firms choose to provide services for several ERP systems. A summary of what impact these relations have on the role of the consultants is thereafter presented.

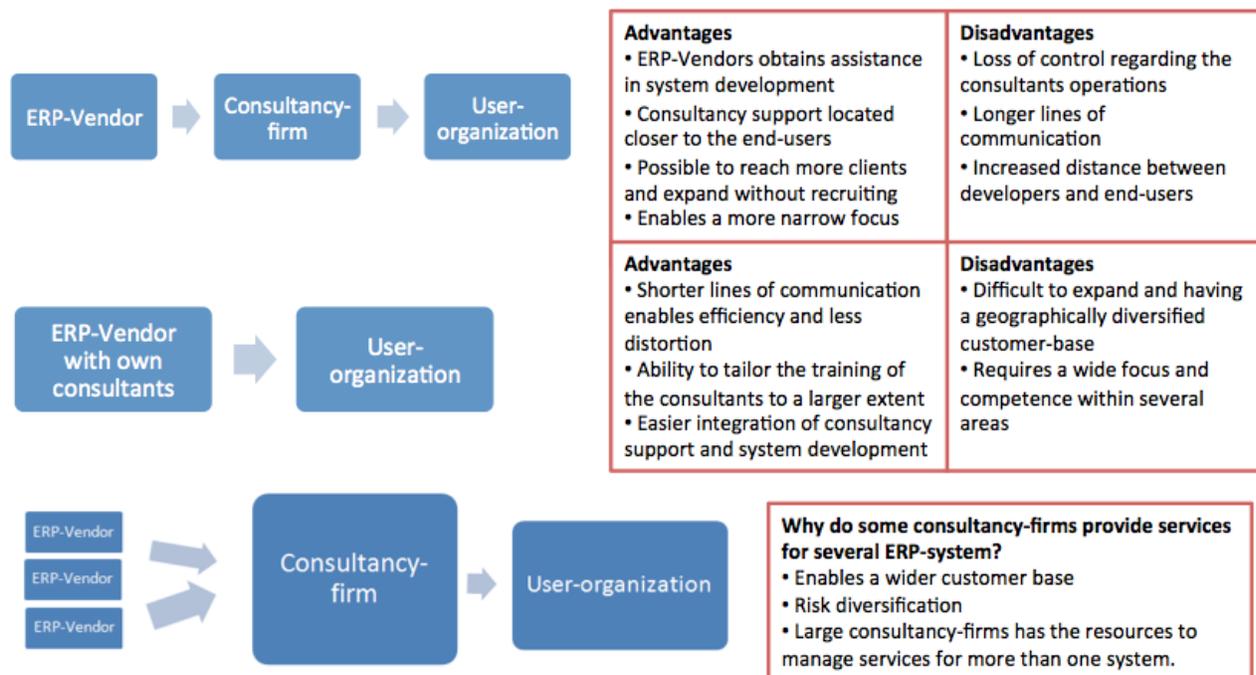


Figure 6. Description of vendor-consultants relations

### **The impact of the vendor-consultancy relation on the role of the ERP consultant**

Findings have indicated that the relation between the vendor and the involved consultants has an impact on the role of the consultant in ERP implementation. The relations impact is presented below:

- There are indications on differences in the lines of communication. Consultants employed by the system-vendor can easier communicate with the developers in comparison to consultants at partner-firms. This might enable a greater flexibility towards clients' requirements in their provided services.
- The degree of commitment towards the ERP-vendor may also differ. Consultants employed by vendors seem to be more committed to the particular system.
- Knowledge transfer requires different pedagogical skills depending on the context. This since the ERP-vendors educates its partner-firms who thereafter are accountable for educating the end-users. This process increases the risk of distortion in comparison to the case where the ERP-vendors directly educate the end-user.
- The education of the consultants can to higher degree be customized if it is managed in-house. This might have an impact on the role of the consultant since it favors those employed by ERP-vendors.
- Consultancy-firms with more than one system within their supply may have internal competition in their retail causing tensions within the company. This has however solely an indirect impact on the role of the consultant involved in implementation.

## **6.2 Discussion**

The presented data within this thesis has, as mentioned in the method, ongoing been reviewed critically in order to ensure the validity. All case companies are well established and the respondent are all experienced and posses a good insight into the industry. There may, however, be alternative methods to fulfill the purpose of the thesis. The ambition was to conduct information regarding both the role of the consultants, the case companies' strategies and the vendor-consultant relation. Although input has been received within all those areas, the answers regarding the role of the consultant have been relatively standardized. The authors realize for instance that more than one interview could be performed with consultants working in implementation projects on an everyday basis. A learning is that when case companies are asked

to select the most appropriate respondent they are likely to choose someone within a senior position. The study could for instance be complemented with additional interviews at the case companies with consultants in their workforce, where one consultant and one manager could be interviewed. This approach would likely result in deeper understandings regarding the role of the consultant.

Parts of the results are more of a technical nature while others refer to structural characteristics. From a technical perspective, the licenses and certifications that the ERP-vendors issues to partner-firms has attained much focus throughout this thesis. Some licenses concerns programming and these enables vendors to obtain assistance from its partners in the system-development. This increases the value for the system-vendors as well as the consultancy-firm since they are able to provide new solutions to their clients. The respondent has been positive towards this structure and emphasized that it gives credibility and enables the consultants to continuously develop. Other results are of a structural nature where, for instance, the different lines of communication have been described and continuously analyzed. Geographical presence is emphasized as one of the benefits with the partner-model. However, is it legitimate to claim that physical attendance is a crucial factor in 2013 with all possibilities to remote communication? Another structural matter is the ability to control partner-firms operations. The need for control seems to be an important factor in spite that the industry must be considered as knowledge intense. An implication that lies beyond the formal purpose of the thesis is that company size seems to have an effect. Smaller user-organizations tend to prefer smaller system-vendors, smaller system-vendors seems to use less control towards their partners and larger consultancy-firms are more inclined to provide services for several ERP systems. This indicates that the company-size should be held constant, although this would likely be difficult to enforce.

The methodology of this thesis has provided insights regarding companies that lie outside of the directly examined companies. Information concerning SAP has for instance been conducted via Repona and iStone, since they are partner-firms to this system-vendor. These companies are highly dependent on SAP and have gained great insight in their business and strategy. This information has been reviewed critically due to that sources is solely indirectly a part of the company. The approach has anyhow contributed to that a comprehensive view has been given of

the industry despite of the limited amount of case companies. In order to examine a certain partnership in-depth, one ERP-vendor including a selection of their partner-firms could have been studied. This would give insight in a certain partnership by investigating it from different angles, the understanding of the industry as a whole would however be less valid in comparison to the chosen method. The thesis would also be enriched if at least two companies within a certain relationship i.e. an ERP-vendor and one of its partner-firms would have been examined. This would result in a more unbiased view regarding their relations.

### **6.2.1 Contributions**

This thesis has contributed with an extensive description of this particular industry and the underlying mechanisms that controls involved actors' actions. It has embraced a theoretical as well as a practical view, which enables both academics and practitioners to obtain value from this thesis. This thesis has been generated from a Business Administration perspective and more publications within the perspective of Business Administration, such as this thesis, will hopefully increase the understanding of this area. The knowledge within the subject seem to be generally low among Business students, which could be explained by Business Schools today's focus on traditional theories. ERP seems to be a topic that to a large extent concerns informatics students, which is questionable since the ERP system is essential within most companies to streamline business processes. Most Business graduates may in the future work in or with ERP systems as consultant, user or within management in user organizations. This thesis may hopefully inspire readers within this field and contribute to reduce this knowledge gap

Several articles within the examined topic are relatively short and precise. They are briefly presenting a model for ERP implementation or mention some CSF's without going into details regarding what the models or these factors actually mean. This method, where CFS describes and analyzes a certain phenomena, is questionable since the definition of success varies. This thesis consists of several descriptions of important considerations within an ERP implementation and aims to provide in-depth knowledge regarding the examined topic. The thesis does not only say that top management support and commitment are CSF's, it also analyzes why and how these should be managed. This is performed through follow-up questions that which are impossible to

perform in quantitative research. In these senses, the data presented within this publication contributes to the research within several areas within the academia.

### **6.2.2 Future research**

The examined subject has been rewarding and interesting and the feedback from the case companies regarding the purpose of this thesis has been positive. There are, however, things that could have been performed differently which creates opportunities for future research. Some alternatives were initially dismissed due to the limited time frame while others emerged throughout the thesis.

Two alternative methods have been identified which likely would can add value to this particular purpose and topic. One possibility would be to complement the qualitative case study with a quantitative study. This would likely provide a broader insight in the underlying mechanisms that affects the role of the consultant within an ERP implementation. To solely investigate the purpose of this thesis through a quantitative approach would, however, likely not results in many valuable understandings due to the lack of in-depth answers. Another complement to the methodology of this thesis could be to broaden the scope and examine users-organizations that recently have experienced an ERP implementation. The examined sample might have presented the role of the consultant in a positive manner and user-organizations could therefore have contributed with an additional and likely more critical view on this particular role. Hence, additional studies with the same or similar purpose would be interesting and could add value. Another option could be to narrow the purpose into studying the impact of the vendor-consultant relationships on the role of the consultant in a certain phase of the implementation.

Alternative research areas, within the examined topic, have arisen during the process of the thesis. One could be to make an in-depth description of the licenses/certifications that most ERP-vendors issue and what implications these have. This would provide an insight for the buyers of consultancy services regarding what these licenses actually means. Another possibility could be to study whether user-organizations have demands on a certain amount of licensed consultants in a particular project. A further interesting topic could be to study the vendor-consultant relationships impact on the procurement process in an ERP system. This would examine the

interorganizational control and include questions regarding how subjective the partner-firms, providing retailing for more than one ERP-vendor, actually are. Another interesting topic to study is what lies ahead for the industry and, furthermore, the future role of the consultant which will be discussed in the final section below.

### **6.2.3 The future of ERP**

This thesis has studied the present role of the consultant. Valuable insights has, however, been given regarding the development and the future of the role of the consultant. The authors have, based on these insights, and formulated a hypothesis considering the future of the ERP industry.

Budgets for ERP- and other IT-projects, often exceed limits and the expectations are seldom fulfilled. Awareness of this among organizations may increase their demands on the vendors and consultants. This may result in:

- That the customers requires test period before they acquires the licenses.
- The customers demand a fixed price which includes the system and all required consultancy support in order to perform a successful implementation.
- The vendors adopt the “freemium model” meaning that a standard set of modules are provided for free and customers is charged for additional modules, user-licenses, consultancy support and training hours.

If the customer requirements are not fulfilled in the negotiation, they can easily change to another system since most systems are relatively similar. In conclusion, there is a risk that the amount of implementation failures, in combination with increased competition, results in developing the industry towards becoming controlled by the users instead of the suppliers. The companies within the industry must adopt a proactive approach to maintain a competitive position. It is important that companies within retailing of ERP systems are objective and they have to communicate that an implementation requires commitment due to its complexity. This could increase user-organizations commitment to these projects and perhaps lower clients’ expectations, which could result in a decreased failure rate. The ERP-vendors can also cope with increased requirements by developing its products. All case companies agree upon that the future ERP systems will be cloud-based and they are all working towards being a part of this

development. Another trend is to make the systems easier to use and future ERP systems will likely be inspired by other media, such as Facebook, Gmail or other information services that are easy to understand and use. The future development will also have implications on the role of the consultant. Increased requirements on the successful implementations contribute to making the role of the consultant even more important. The consultants must be proactive in order to detect deficiencies within client organizations and be skilled enough to communicate these before they become a threat to the project. The consultants must, in addition, be able to take a managerial role and find solutions that lie outside of ERP system if needed. Most companies within the sector are aware of the rapidly changing industry and that they need to adopt a proactive approach in order to stay competitive.

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## Appendix

### **Interview questions - ERP vendor with own implementation consultants**

#### About the company

Tell us about the company?

What is your role in the company?

Tell us about your customers?

What services and products do you provide?

#### Strategy in implementation and the role of the consultant

Describe an implementation where you are hired as consultants?

Which different roles have employees who participate in an implementation project?

Would you say that you are active at all stages of implementation?

How flexible are you towards the customer's requirements?

Would you say that you have a standardized or flexible approach to implementation?

How has the role of the consultant evolved over time?

Mention a number of critical success factors for an ERP implementation?

- Considering the consultant
- Considering the client

#### Questions related to the ERP-industry

Do you think that the role of the consultant would be different depending on whether they are working with a system that you own your self compared to when working with a system that is owned by a partner?

Do you think that the implementation strategy would be different depending on whether they are working with a system that you own your self compared to when working with a system that is owned by a partner?

How are you collaborating between the various functions within the company? For instance, between implementation consultants and programmer/developer?

How is your system different from your competitors?

How flexible would you say that your system is?

## **Interview questions - ERP vendor with partner consultants**

### About the company

Tell us about the company?

What is your role in the company?

Tell us about your customers?

What services and products do you provide?

### System related questions

How flexible are you facing the customer's requirements?

What do you think separates Pyramid from other systems?

How flexible would you say that the system is?

Do you think that the system would have been different if you offered retailing and implementation in-house?

What do you think separates your system from other systems?

### Vendor-consultant relationship

Describe how your relations with your various partner companies look like.

How do you look upon that your partners sell more than one system?

How does the selection process look like?

How can contracts with a partner look like?

Do you have much contact with your partners?

How would you describe the control of your partners from your side?

How do you invoice your partners?

Does it require some type of license to be a partner? Must this be renewed?

Are there any guidelines from your side of how a system implementation should look like? If yes, please describe those.

Does it happen that your partners have any comments regarding the system? How to do you respond to such input?

Do you work jointly with your partners regarding system development?

### Questions related to the ERP-industry

Have you thought about selling and implementing the system in-house instead of using partners?

How do you think that the company would look like if you had sold and implemented the system in-house?

Do you have any contact with the end users? If yes, describe this contact.

Mention a number of critical success factors for an ERP implementation?

- Considering the consultant
- Considering the client

Do you think that there are any specific factors for implementation system for your system?

## **Interview questions - Consultancy firm providing services for one ERP system**

### About the company

Tell us about the company?

What is your role in the company?

Tell us about your customers?

What services and products do you provide?

### Strategy in implementation and the role of the consultant

Describe an implementation where you are hired as consultants?

Which different roles have employees who participate in an implementation project?

Would you say that you are active at all stages of implementation?

How flexible are you towards the customer's requirements?

Would you say that you have a standardized or flexible approach to implementation?

How has the role of the consultant evolved over time?

Mention a number of critical success factors for an ERP implementation?

- Considering the consultant
- Considering the client

### Vendor-consultant relationship

Describe your relation to the system-vendor.

Why did you choose this particular system-vendor?

Describe how the selection process looked like from both sides.

How your agreement with the system-vendor does look like?

Have you any ongoing contact with the system-vendor?

How would you describe the system-vendors control on its partners?

How do the invoicing look like?

Does it require some type of license to be a partner? Must this be renewed?

### Questions related to the ERP-industry

Have you thought about offering services for more than one ERP system?

How do you think your business would look like if you would provide services to more than one system?

How do you think that your implementation strategy would look like?

How do you think your business would look like if you would own the system yourself?

What critical success factors do you think are specific to the system you are providing services to?

What do you think distinguishes the system from other systems?

How flexible is the system?

## **Interview questions - Consultancy firms providing services for several ERP systems**

### About the company

Tell us about the company?

What is your role in the company?

Tell us about your customers?

What services and products do you provide?

### Strategy in implementation and the role of the consultant

Describe an implementation where you are hired as consultants?

Which different roles have employees who participate in an implementation project?

Would you say that you are active at all stages of implementation?

How flexible are you towards the customer's requirements?

Would you say that you have a standardized or flexible approach to implementation?

How has the role of the consultant evolved over time?

Mention a number of critical success factors for an ERP implementation?

- Considering the consultant
- Considering the client

### Vendor-consultant relationship

Describe your relation to the system-vendors.

Why did you choose these particular system-vendors?

Describe how the selection process looked like from both sides.

How does your agreement with the system-vendors look like?

Have you any ongoing contact with the system-vendors?

How would you describe the system-vendors control on its partners?

How do the invoicing look like?

Does it require some type of license to be a partner? Must this be renewed?

### Questions related to the ERP-industry

Do you think that the role of the consultant looks different depending on if they are providing service for an ERP-system that their employer own comparing to if the system if owned by a partner-firm?

Do you think that the implementation process would have looked different depending on the system is owned by the own company comparing to if the system is owned by a partner-firm?

Do you think that the role of the consultant looks different depending on if the company works with one ERP-system compared to working with more than one system? Would the implementation process look different?

Compare the different systems that you are providing services to? Considering flexibility, usefulness etc.

## **Interview questions - ERP-vendor providing own consultants and collaborating with partners**

### About the company

Tell us about the company?

What is your role in the company?

Tell us about your customers?

What services and products do you provide?

### Strategy in implementation and the role of the consultant

Describe an implementation where you are hired as consultants?

Which different roles have employees who participate in an implementation project?

Would you say that you are active at all stages of implementation?

How flexible are you towards the customer's requirements?

Would you say that you have a standardized or flexible approach to implementation?

How has the role of the consultant evolved over time?

Mention a number of critical success factors for an ERP implementation?

- Considering the consultant
- Considering the client

### Vendor-consultant relationship

Do you provide the consultancy support in-house or through partner firms?

Why have you chosen the approach above?

Describe how your relations with your various partner companies look like.

How do you look upon that your partners sell more than one system?

How does the selection process look like?

How can a contract with a partner look like?

Do you have much contact with your partners?

How would you describe the control of your partners from your side?

How do you invoice your partners?

Does it require some type of license to be a partner? Must this be renewed?

Are there any guidelines from your side of how a system implementation should look like? If yes, please describe those.

Does it happen that your partners have any comments regarding the system? How do you respond to such input?

Do you work jointly with your partners regarding system development?

### System related questions

How flexible are you facing the customer's requirements?

What do you think separates Vismas systems from other systems?

How flexible would you say that the systems are?

What do you think separates your system from other systems?