

# SCHOOL OF ECONOMICS AND MANAGEMENT Lund University

A Study of the Sales Process of ERP Systems: Wasteful Management or Managing the Wasteful?

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One should always play fairly when one has the winning cards Oscar Wilde

**Title:** A Study of the Sales Process of ERP Systems: Wasteful Management or Managing the Wasteful?

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**Key Words:** Enterprise Resource Planning (ERP), Agency Theory, Opportunism, Relationship Marketing, Principal-Agent Theory

**Purpose:** Describe and analyze the sales process of ERP systems, and discuss its consequences for the parties involved.

**Methodology:** An inductive research design lays the foundation for a case study based on interviews. The analysis of the empirical data is done with a proposed analytical framework.

Theoretical Perspectives: Based on the agency theory, the analysis is tightly knitted together with opportunism. There are three controlling factors: the relation (relationship marketing), the contract (principal-agent theory), and competition.

Results: Three results are proposed: First, two factors forms opportunism—safeguarding and fringe selling. Second, two tools to control opportunism exist, the contract and the relation, the former largely being overlooked, and the latter not being what it is thought to be. Third, there is a need for a feedback loop to correctly address problems stemming from opportunism.

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# 1 Introduction

## 1.1 Background

Davenport (1998) describes Enterprise Resource Planning (ERP) systems as "the most important development in the corporate use of Information Technology (IT) in the 1990s". A rapid development during the late 1990s resulted in ERP-related consultations representing one-third to one-half of the major consulting firms' assignments (O'Leary, 2002). A few years back, the ERP industry was predicted to be one of the fastest growing industries of this decade (Adam and O'Doherty, 2000, ref in Shehab et al. 2004). However, the demise of the Dot.com era cooled off the market. Recent times have seen the dawn of increasing demand for ERP system implementation (Danielson, 2004). Meanwhile, Microsoft is spending billions of dollars to fulfil their plans of becoming the dominant player in the ERP software market (Friedman, 2004). This development is seemingly reigniting the industry, something Hawking et al. (2004) describes as the coming of a second wave.

# 1.1.1 The changing context

According to Shehab et al. (2004), the past decade has seen a change in corporate climate. The rapid development of IT has enabled easy access to worldwide markets, an access previously reserved for large multinational corporations. This has dramatically accelerated the trend of globalization, thereby exposing even small- and medium-sized companies to global competition. To increase competitiveness under these conditions, it is crucial for companies to adapt to the tide of time (Rao, 2000). New requests must be met: demands of rationalizing organizational routines and business processes to gain an improved level of efficiency in response to the macroeconomic benefits of a low-cost nation; boosting transparency of both internal and external functions to aid in strategic decision-making; and increasing availability and just-in-time capabilities to be able to swiftly respond to market fluctuations. The growing number of companies facing these challenges has led to the boom of an industry of integrated information systems, more popularly called ERP systems. They have been broadly defined as "enterprise-wide packages that tightly integrate business functions into a single system with a shared database" (Lee and Lee, 2000). Another definition is "comprehensive software solutions that integrate organizational processes through shared information and data flows" (Shanks and Seddon, 2000, ref. in Newell et al. 2002).

#### 1.2 System evolution

The roots of ERP systems can be traced back over 30 years when computerized systems were first used for rationalizing business processes. During

the 1970s, a system called Material Requirement Planning was used in the manufacturing industry to optimize material flows and reduce working capital. In the 1980s, the system evolved into Manufacturing Resource Planning, including essentially all internal functions of a corporation, with added functionality for product costing, marketing, etc. This integration of functions developed during the 1990s to form the present definition of ERP systems, with the ambition to include all functions, internal as well as external, in an integrated software solution. Most ERP systems of today are module-based software packages, each supporting different activities. The modular constellation makes the systems scalable and, to some extent, able to be customized (Davenport, 1998). At present, different modules supply support for: sales, distribution, material management, production planning, financial and cost accounting, human resource management, and other information regarding manufacturing, supply chain, and customer relations (Boykin, 2001, ref. in Shehab et al., 2004; Chen, 2001; Yen et al., 2002, ref. in Shehab et al., 2004).

#### 1.2.1 Problem discussion

Today's focus on core values, manifested by the trend of outsourcing internal functions, has led the old giant corporations to increasingly divide their value chain into a network of companies. To uphold control, a form of vertical integration is created by closely integrating the entire value chain into business-to-business networks (Davenport, 2004). Using the same software throughout the entire chain facilitates this integration. Therefore, partnerships will often be limited to those with the same ERP system, making it a requirement rather than a business enhancer—a view considering an ERP system being a price of entry for running businesses (Boykin, 2001, ref. in Shehab et al., 2004). In this sense, it is possible to view ERP systems as an institutional phenomenon. The question is not whether to buy an ERP system, but rather which one to choose (Chen, 2001). When acting with the institutionalized interpretation of sound behaviour, it should naturally be rewarded by the investors (Cornelius, 2005). Research has also shown that the financial market responds positively to the decision of acquiring an ERP system (Hitt et al., 2002; Hayes et al., 2001).

The costs, both direct expenses and employed resources, of implementing such technically advanced software as ERP are substantial. Additionally, it is not uncommon for the projects to overrun both its time and cost budgets (Fryer, 1999). These circumstances have made the implementation a risky business, which may even lead to the bankruptcy of the company (Scott and Vessey, 2000). Especially small- and medium-sized companies have found that this project risk is overwhelming; they often do not have the same robustness and buffer as larger companies have (Rao, 2000). The lifespan of an ERP system is approximately 8 years, but the present development

is to further extend this time (Scala Business Solutions, 2002). This means that the acquisition process rarely occurs, especially with regards to most companies that are going through the process for the first time.

As mentioned in Shanks and Seddon's (2000) definition, ERP systems are comprehensive products. They are often generic systems with their own predetermined logic. The complexity of these systems is so great that the implementing companies usually have to renew their organizational structure, culture and processes. However, imposing changes may not be in the best interest of the business. The re-engineered process may result in a loss of competitive advantages (Davenport, 1998). A result of the complexity involved is that the expectations of the implementing companies are generally not met by the new ERP system (Granlund and Malmi, 2002).

In conclusion, three main characteristics of an ERP system can be isolated. Firstly, it is an institutional phenomenon, meaning that all companies will strive for it. It is perceived as an absolute requirement for survival in today's harsh reality of global competition. Secondly, it is indeed a risky investment; failure can lead to the demise of an entire corporation. Thirdly, it is a complex matter—both the product itself and the implementation process. The complexity, and the fact that it is seldom purchased, makes it virtually inevitable to hire external competence in the implementation process.

These factors combine to form a project that every company must undertake; a project that crucially must be a success, and that this success is largely dependent on an external source. These circumstances put the customer in a strongly dependent position towards the vendor of the systems. Naturally, such a position could be exploited by the vendor.

#### 1.2.2 Current research

The paper by Shehab et al. (2004) presents an extensive overview of the research in the field of ERP systems. Research has outlined the growth and promises of these integrated systems, as well as the many difficulties and high costs associated with the implementation (Stensrud, 2001, ref. in Shehab et al., 2004; Al-Mashari and Zairi, 2000a, ref. in Shehab et al, 2004; Gardner et al. 2002; Appleton, 1997, ref. in Shehab et al, 2004; Davenport, 1998; Adam and O'Doherty, 2000, ref. in Shehab et al. 2004; Scheer and Habermann, 2000). There has been research aimed at the difficulty of evaluating the results of the systems, as there are many aspects to consider (Markus et al., 2000b, ref. in Shehab et al., 2004). Several models and analytical tools for implementation and evaluation have been proposed, but they lack proper validation since these models share the problem of being difficult to evaluate. (Themistocleous et al. 2001, ref. in Shehab et al., 2004; Parr and Shanks, 2000, ref in. Shehab et al., 2004). The implementation phase has been heavily engaged in the academic discourse. Many studies try to sort out

important factors for a successful implementation, referred to as Critical Success Factors (CSF) (Bancroft et al., 1998, ref. in Shehab et al., 2004; Nah et al., 2001). There are many studies dealing with the complexity of the systems and how to address this matter (Markus et al., 2000a, ref. in Shehab et al., 2004). However, most studies cover the topics of implementation and post-implementation. Shehab et al. (2004) regards the issue of the acquisition process to be mostly left unexplored.

This can be considered to be a very interesting process in determining how the relationship between customer and vendor will evolve. Partially related, few studies deal with the vendor's part in a successful implementation. Though some of the proposed CSF can be directly linked to the interplay between vendor and customer, the issue is mostly seen customer-related, leaving the vendor as a mere brick in the wall. While factors such as training of employees, budgeting time and resources, and setting realistic expectations clearly show a strong presence of interdependence; the focus on internal aspects of the customer, e.g., communication and signalling, is a clear sign of the bias towards the customer.

Neglecting the vendor side might obstruct a fuller view of the process. It can be of interest to observe this process from a more general stance, thus gaining a holistic perception of the problem of acquiring an ERP system. This process is defined as the sales process, not only covering the process from initial contact to the signing of the contract, but also the marketing attempts to identify the customers. In the sales process, much is at stake, contracts are written and relationships are established. The nature of this interaction sets the arena for the future; giving the customer an opportunity to rebalance the scale of power and decrease the dependency on the vendor's knowledge and performance.

Based on these arguments, it would be of academic interest to further investigate the sales process and study the nature of this interaction.

#### 1.3 Purpose

Describe and analyze the sales process of ERP systems, and discuss its consequences for the parties involved.

# 1.4 Questions at issue

By observing the sales process, the interconnection between two parties is studied, the vendor and the customer. Furthermore, the interconnection can be characterized as the customer being dependent on the vendor, who holds the key to knowledge and has the opportunity to take advantage of this fact. In terms of information asymmetry and opportunistic behaviour, such an interconnection is well described by the agency theory.

The implications of the agency theory is well known, so is the risk of

opportunistic behaviour. Broken down further, this is no other than the basic concepts of trust and self interest. From the customer's point of view, these two concepts are of great importance; being led through the complex process of an acquisition of an ERP system, the customer must trust the vendor to be unselfish and acting in the former's best interest. On the other hand, the vendor should be keen on making the customer feel assured about the investment, thereby increasing the chance of confirmed sales by reducing the customer's decision-making uncertainty, as well as developing a good marketing tool by gaining a satisfied customer reference for future sales (Gao et al., 2005). This lays foundation for the interesting predicament of whether the vendor is willing to give up his/her advantage in information superiority to please the customer.

Using a theoretical framework based on the agency theory, the vendorcustomer relationship will be analyzed. Moreover, its characteristics and consequences aimed to be explored further will be illuminated. Using this model, the intended purpose can be more precisely specified by three questions:

Using the agency theory, what possibilities of opportunism are involved in the sales process?

What tools can be used to control opportunism in the sales process?

How can these tools be properly managed to reduce opportunism in the sales process?

# 2 Methodology

In this section, the concrete working process is presented in two parts: the chosen approach and a methodological discussion. The former starts with the research design being presented, followed by the data gathering background and the data gathering process. The methodological discussion starts with the alternatives to the presented method; later, aspects such as replicability, validity, and reliability are being considered.

# 2.1 The chosen approach

#### 2.1.1 Research design

The background of this paper hints towards a context with a high level of complexity; not only the intrinsic complexity of the actual systems, but also social abstraction layers. Hence, when observing and evaluating such a process, it is vital to detect subtle details and uniqueness of the collected data. Furthermore, flexibility is also of great importance; during the process of completing a paper, proposed problems and their understanding can change. In general, open-mindedness is called for in order to conceive a more nuanced understanding of the underlying chain of events. To effectively fulfil the purpose of this paper, a case study design was chosen.

Bryman (1989) describes a case study as a research design with a strong emphasis on context; seen from a higher level of abstraction, this allows the reader to feel that they know what it is like to be in the organization being studied. In addition, he also describes the case study design as being useful for providing an understanding of areas of organizational functioning that are not well documented. Ultimately, the reader will be provided with a frame of reference to evaluate and interpret events. Also, according to Jacobsen (2002), case studies are well suited for research design where theory is supposed to be the output, not the input, of the greater study.

In this paper, the unit of analysis is defined as the sales process of ERP system within the mid-size ERP market, defined as holding companies with annual turnovers of 50 SEK million up to 10 SEK billion. Consequently, no separation of corporate entities has been made; conclusions are drawn on a mid-size ERP market base, and not on single companies. A delimitation of the case study is that only the vendor side of the vendor-customer relationship was studied.

Because of the somewhat vague circumstances of the case itself, an inductive reasoning is preferred. Jacobsen (2002) isolates three important aspects of inductive reasoning: little or no expectations, the acquisition of relevant information, and the systematization of the amassed information. The latter two point out important requirements for the handling of data, while the first is more of a preparatory nature. Following such reasoning, data gathering is put before theoretical analyses. N.B., no analysis should be made

before the data gathering—the empirical findings should not be distorted in any way. Consequently, the analytical process is therefore initiated after acquiring a higher level of understanding of the proposed problem. Also, the analytical process can be done with a suitable choice of theories, given that the researcher has succeeded in getting better familiarized with the case.

## 2.1.2 Data gathering background

In a methodological approach, resources are scarce. Thus, choosing many variables and a larger sample size will not be plausible. Naturally, one has to choose between a large sample size with less variables, and vice versa. When a phenomenon is to be described, there is a high propensity for a large amount of variables being put forward, limiting this amount of variables will seriously inhibit the analysis. This together with the exploratory nature of this paper, choosing many variables and a smaller sample size is a natural choice.

A qualitative research method forms the empirical base of the case study: five interviews made with companies acting on the ERP market in Sweden. Having less interviews, it would have been difficult to acquire a fuller perspective of the case; having more, issues regarding whom to value the most had evolved, the case would have grown too large. As forementioned, the chosen definition of the ERP market is of a broad nature. When choosing the companies, breadth once again was chosen in favour of a narrow set of companies. Hence, the chosen set differs in the number of employees, company size, existing in-house production, etc. The common denominator is that they all sell ERP systems, and that they all are focusing on the mid-size market. More specifically, this company function, i.e., sales and marketing, is generally viewed as the pronounced key to success within the chosen set of companies.

After choosing the set of companies, data has to be collected. Naturally, the stated purpose of this paper is of an exploratory nature. When trying to understand and describe a phenomenon, interviews are both intuitive and effective. By collecting data via interviews, another methodological stance is taken, closeness to the corporate subject. This closeness is crucial when achieving a high level of detail. Regarding the individual character of an interview, the general aim of the interview was to capture the greater situation, not to obtain the interviewee's personal opinion. Although the interview approach is not a perfect holistic approach, its high degree of feasibility and efficiency has made it a natural choice for this paper. In order to complement the interviews, secondary data sources such as Annual Reports were used to a smaller extent.

#### 2.1.3 Data gathering process

Before interviewing any ERP vendor, an orientation interview with a ERP system developer, referred to as Omega, was held. The purpose of this interview was to get a basic overview of the ERP market from a party that holds no direct selling company function. When the companies had been chosen, the respective corporate entities were contacted. They were briefed of the overall purpose of the paper, and were asked if they were interested in participating in the interviews. All of the contacted companies responded positively. One interview was made per chosen company. Generally, the interviewee was a senior salesperson, and the location was at the office of the given company. The interviews were of an open semi-structured character. Bryman (1989) considers an open interview as being relatively simple to conduct, yet fulfilling its purpose—to understand a complex situation. Such traits make the open interview an attractive mode of gathering data. The interviewees were neither told in great detail of the theme of the interview, nor given any questions in advance, thus minimizing the influence of the theme itself on his/her interview responses. The questions were by majority of an open nature, following a pre-set order. The individual durations were up to two hours long. None of the interviews were recorded; simple pen and paper were always used to make the interviewee feel comfortable with the situation. To ensure the integrity of all interviewees, they were granted full anonymity. After the interviews, each person interviewing wrote down his notes in a transparent manner. No editing or reviewing between different interviewers was made in this stage; this to ensure that details and differences were not discarded before the analysis was made.

# 2.2 Methodological discussion

#### 2.2.1 Alternatives

According to Jacobsen (2002), assuming a deductive reasoning, a researcher has beforehand built some theoretical foundation conceiving the base from which the empirical findings are evaluated. In other words, deductive reasoning has strong hypothetical features; a hypothesis, the theoretical foundation with its assumptions, is tested against the empirical findings, the reality. Ultimately, this implies a closed reasoning, not very favourable when trying to keep an open mind when studying phenomenological behaviour. This said, Jacobsen (2002) argues that a researcher will always subconsciously delimit and quantify any studied phenomenon in advance. Arguably, in this case, with its pronounced focus on open interviews, such behaviour will have little or no effect on the outcome.

With a quantitative research method, once again, one lands in a hypothetical context; in some way or another, a questionnaire needs to be produced. This fit poorly to the scope of this paper where ability to up-

hold flexibility is an important matter, together with the ability to discern the unique perspective of each respondent. Simply put, a phenomenological stance cannot easily be quantified and standardized to fit into a generic questionnaire approach. Jacobsen (2002) states an advantage of quantitative research; to some extent a smaller sample can be used to generalize the larger population. However, in this paper, the aim is to generalize within the case itself and not beyond.

#### 2.2.2 Replicability

An issue regarding a qualitative research method is the replicability of the findings. The qualitative approach is commonly used to draw conclusions regarding some underlying phenomenon. Here, Jacobsen (2002) sees an uncertainty, shifting the qualitative searchlight can result in different output from the units of analysis. Oftentimes, the phenomenon itself might be of a constant nature but opinions and knowledge of it may change over time. Ultimately, differentiated output from the units of analysis might lead to other conclusions being drawn.

In the greater population from which the set of companies were chosen, sales and marketing are important corporate functions. All the vendors are well aware of the greater notion of trust, and more importantly, they are constantly trying to improve. Hence, the larger phenomenological context is known and addressed by the companies. Had a similar setup been used again, it is highly probable that the same answers would have been given. Of course, the actual data might be interpreted differently and thus leading to different conclusions. Nevertheless, the replicability of these findings is judged to be strong.

#### 2.2.3 Validity

Another important issue of the chosen methodology is the validity, internally as well as externally. Bryman (1989) states that internal validity means correctness of the results, and that external validity means that the findings can be generalized.

According to Jacobsen (2002), the first part of this issue deals with, not only if the right persons within the set of companies have been chosen, but also if these persons have given a representative picture. Regarding the delimitation of only studying the vendor side of the vendor-customer relationship, given the scarcity of methodological resources, there are three motivational factors. Firstly, because of the aforementioned asymmetry of information, it is more probable to find information on the vendor side. Secondly, while it is relatively easy to find an interviewee on the vendor side, it can be more difficult to find a good representative on the customer side; e.g., a high internal turnover of managerial tasks will make it difficult as people

who have experience of selling ERP systems might have moved on to other tasks on the corporate ladder. Thirdly, since the ubiquitous symbolism of ERP systems in contemporary corporations, knowledge regarding the acquisition process might be considered to be sensitive information. By choosing senior salespersons as interviewees, the difference in experience between the chosen companies is minimized but not eliminated. Studying a course of events and letting people describe it can result in certain important parts being left out, mainly because interviewees does not reflect these parts. Furthermore, choosing similar interviewees at the different companies imposes another problem, working in an industry for a long time may lead to blindness, one loses the ability to see the subtle details. Moreover, salespersons might also show a convincing and sales-focused character; conceiving a clear and transparent opinion might be problematic. As an attempt to validate the empirical data, a first draft of the paper will be sent to the interviewees for corroboration.

Regarding the second part, the external validity, the purpose of this paper is not to make sweeping statements about a general ERP industry. In the large-size ERP market, the vendors' scope is of an overly complex nature involving a plethora of parties. On the other hand, in the small-size ERP market, the vendors' scope is too small and simplistic to be a good subject of study. Choosing companies broadly within the mid-size ERP market, secures good coverage of the segment, and therefore a higher level of validity is reached within the selected segment. However, due to the nature of the case itself, internal validity is prioritized above external validity; the case study is well suited.

#### 2.2.4 Reliability

Reliability of data is crucial for all methods. As Jacobsen (2002) states, the interviewer influences the interviewee by the way the questions are formulated but also by the interviewer's appearance. It is impossible to completely eliminate this effect. However, it can be reduced dramatically by making the interviewees feel comfortable with the interview situation. The chosen locations of the interviews and the method of taking notes were two large factors ensuring the interviewees feel comfortable. Moreover, the method of taking notes and the way the collected data was handled minimized the risk of loss or corruption of data. Considering the inductive approach, the interviews were held within a narrow time frame, i.e., a quicker data collection. According to Jacobsen (2002), this is preferable when empirical data form the core of the work.

# 3 Empirical Data

This section presents the data obtained from the interviews with the vendors. It starts with a brief introduction of the interviewed vendors, then proceeds with their views on the ERP market. The data is presented by the following categories: the sales process, contractual issues, and relationship management.

# 3.1 Presenting the data

In order to present the sales process as broadly as possible, the empirical findings are presented by subject and not by company. The aim of the interviews was to get a general sense of how business is conducted; this purpose will not be aided by focusing too narrowly on company-specific details, such a procedure could drown important empirical data in research noise. Also, a less company-specific presentation will help to avoid disrobing the companies' veil of anonymity and protect their integrity. General statements without direct references to specific companies are views of all five companies. Any perceived subjectivity is a mere reflection of the views and opinions of the company representatives.

# 3.2 Company introduction

# 3.2.1 Company Alpha

Alpha is a vendor of solutions for information technology and consulting services. The company group, located in Sweden and Denmark, has a turnover between 500 SEK million and 1 SEK billion. Most of its revenues is earned through consulting services. Three different ERP systems are implemented by Alpha. One of them is an in-house product, while the other two are sold on behalf of their partners. Alpha's own product is targeted towards medium-sized companies within the retail and wholesale commerce industry. The systems provided by their partners are used as complementary products, mainly directed towards companies operating with manufacturing and distribution activities.

# 3.2.2 Company Beta

Beta is a unlisted company with approximately 40 employees deployed at five locations in Sweden. The company offers consulting services associated with the implementation process of ERP systems. The assignments are advantageously solved using software from one of their two partners. However, the customers often already have some sort of ERP system and Beta may have to adapt to this software. By retailing their partner's ERP systems, they address companies with up to 200 employees.

#### 3.2.3 Company Gamma

Gamma is an international company, operating in over 40 countries. In Sweden, the company is represented in several cities all across the country. Its overall turnover is around 2 SEK billion to 3 SEK billion. Half of this originates from consulting services and the other half is equally divided between license and hardware revenues. Gamma expresses that the license share of revenue is to be increased, due to the higher profit margin of licenses. The service Gamma provides is the delivery of complete ERP solutions. Their targets are mainly manufacturing and distribution companies from the mid-size market.

## 3.2.4 Company Delta

Delta is an unlisted company with approximately 30 employees. Its business is located at the three larger city areas in Sweden. The concept of Delta is simplicity and they provide relatively inexpensive ERP solutions. Their ERP systems consist of two brands, a simple one for smaller companies and a more complex one for larger companies. These two systems enable Delta to provide and implement ERP systems in companies of different sizes; from the small firm to large companies with a turnover of 20 SEK billion.

## 3.2.5 Company Epsilon

Epsilon has a turnover of approximately 3 SEK billion, equally derived from licenses and project consulting. Their product is internationally distributed, even though Scandinavia is considered to be their core market. The company describes itself as a provider of business solutions with a focus on selling licenses. A typical customer of Epsilon is operating within manufacturing, distributing or service industry and has a turnover between 500 SEK million and 25 SEK billion.

## 3.3 The ERP market

According to Alpha, the Scandinavian ERP market is unique. This market has a high density of vendors and many of the larger producers are located in the area. Alpha considers these circumstances to cause the competition among software producers increase, also confirmed by Beta. The competition among consulting services has at the same time decreased. This divergence is due to segmentation of the market both in regards to industry activity and size of the customer.

All the interviewed vendors confirm that the market is segmented. Also, Gamma points out that it is needed to specialize in some industry activities. However, according to Gamma, some vendors declare themselves to be experts in all fields. Hence, some vendors even try to sell in areas where they do not have adequate competence. Gamma regards the ERP market as matured, little or no growth rate at all is expected. Delta states that the demand for consulting service is large, but the demand for software is lower. This is unfavourable for software producers as the profit margin is higher in licensing than in consulting. Another issue is centralization; vendors concentrating their operations within major cities, leading to less competition in the rural areas.

However, Epsilon is of another opinion. They imply that the competition is not getting any higher and sees an unchanged situation. Beta gives a fresh perspective of competition as they state that although competition to receive a contract with new customers is high, future sales to existing customers are not difficult.

The interviewed vendors agree that customers nowadays are more aware of what they need. According to Gamma, this has led to much more specific business solutions. Then, according to all the interviewed vendors, an evolution of the ERP market can be observed; the product-based situation of past times has in present day been replaced by a more complete scenario with services, education, business process re-engineering, hardware, and software all being parts of a modern ERP system. Also, the focus is shifted from the product itself onto what the acquired business solution can deliver.

Gamma and Delta also agree that the customers are spending more resources on information technology; resulting in more extensive and sophisticated solutions. They further see that this is leading to even more distinct industry segmentation. Another kind of segmentation development is presented by Alpha. According to them, vendors selling their own ERP systems will concentrate on their software, while others will focus on consulting.

Alpha also denotes that new large competitors, SAP and Microsoft, will try to seize the mid-size ERP market, an opinion shared by Gamma. Beta agrees that more comprehensive systems will be implemented in even mid-size companies. Furthermore, Beta believes that the future licenses will be free with consultant fees as the only expense.

#### 3.4 Sales process

The sales process is a company-specific procedure, part of core processes that forms the company itself. For Gamma, this is thoroughly documented, a regulated and standardized process registered as company property. The others see it more as a natural way of doing business; a semi-standardized process that has evolved through the years, partially customized for each customer. Epsilon stresses the importance of intuitive skills while Beta sees the key as being the chemistry between the respective representatives. Delta points out that making a sale is not a science; though the process might be standardized, a good salesperson must be able to adjust and add value to the customer in order to truly maximize the end result.

Standardized or not, to clinch the contract, all companies go through the same basic steps: marketing, qualification and negotiation. The marketing stage picks out companies that fit the vendor's market focus and companies that are good business passes through the qualification stage. The negotiation stage is the period of proposals and counter-proposals that hopefully will lead to a signed contract. These stages are being described below as discrete steps whereas in reality the companies see it as a continuous transition with the next stage overlapping the previous one.

# 3.4.1 Marketing

The marketing stage aims at locating sales objects and establishing communication channels. In order to direct their efforts at a potential target, companies first need to identify a possible customer. This involves scanning the market and evaluating whether potential targets fulfil the desired profile set by market strategy, thereby roughly sorting out the actual companies of interest. When a target has been set, contact needs to be made. This is mainly done by phone calls, during which more information is gathered to better make sales arguments. Beta combines the phone call with sending a standardized letter where they formally present their systems and capabilities. The goal with the first contact is to establish an interest and gather more information to further evaluate the profitability of continued engagement. Delta considers the evaluation to be the most significant part of the sales process, as it is of uttermost importance not to be entangled in a relation with low profitability and small chance of successful implementation. These initial steps serve as a screening process for providing a realistic number of likely sales opportunities. Gamma states that 50 percent of the companies passing this initial phase should result in a confirmed sale.

#### 3.4.2 Qualification

When initial contact has been made with an interested customer, the evaluation is intensified in a stage of mutual qualification. For the vendor, the intention is to make sure it is possible to deliver an acceptable solution. This is done by frequent meetings, intended to identify key processes to see openings for improvement. Gamma and Delta make an organizational map, to clarify organizational power structure and identify key personnel. This will aid in deciding where to direct the relationship building attempts. Delta says it is important to discover conflicting wills amongst key personnel and departments early, as this may be an surmountable obstacle on the route to a fruitful relationship.

The customer's major criterion would be whether the vendor is able to deliver the desired value adding system. The customer's wants are generally not of a technical nature; usually, a somewhat clear problem is proposed,

calling for a wide range of services and resources to solve the issue. According to Epsilon, the customer is only interested in receiving a functional system—information regarding technological abstraction layers are considered irrelevant. The vendor then performs demonstrations of their system's capabilities. These demonstrations may alter the customer's expectations, expectations that have to be matched by the reality the system can provide. Beta describes it as a interchanging process of demonstrations and specifications. Gamma states that the qualification should end with a preliminary go/no-go, leading the relationship into a negotiating phase.

#### 3.4.3 Negotiations

As the parties draw closer to a contractual agreement, the vendor's investigation deepens. In parallel with the investigation, specifications for the final solution are being discussed. As more and more information is being unveiled before the consulting firm, specifications and expectations have to be open for negotiation. Delta considers this repeating matchmaking to be one of the most difficult things in the sale process. When both parties are satisfied with a proposal, a contract tying them legally is signed.

#### 3.4.4 Variations

The pattern described represents the most commonly occurring sales process: the vendor identifying an opportunity for a new sale. However, it does not necessarily need to be the vendor initiating the contact. In the case of Delta, sales are almost exclusively initiated by the customer. This also applies in a lesser degree to Epsilon. For the others, it is of a more seldom occurring nature, but still present.

The marketing stage will appear altered with a different initiator. Direct marketing efforts are replaced by indirect marketing, the most important factor being mouth-to-mouth marketing by previous customers. Delta stands out by performing almost no direct marketing at all. The company always adds extra consultation hours to perform beyond expectations and gain satisfied customers, resulting in 60 percent of their new customers being referred by existing customers. The rest are sought by indirect methods such as exhibitions, advertisings, and an enticing corporate website. In the case of Gamma, they aim to have two-thirds of their customers acting as references. Alpha uses relations with other consultants to recommend them to their customers. Beta states they are often recommended by the system developers, as customers often feel more confident when using this channel of communication.

When the customer actively searches for vendors, they often have several alternatives. Delta and Epsilon assume a handful of companies are being approached by the same customer. With many offers at the table, the vendor

needs to put more effort in to win the deal. According to Delta, the company that is able to gain the most information about the customer will get the contract. Delta says this is not an ideal situation; they want the sales process to be vendor-controlled. More resources spent in the uncertain early stages will increase the project risk for the vendors in the race.

From the ERP vendor's point of view, there are two distinctive types of sales to be made: sales to new customers and future sales to existing customers. The basic steps of sales for both types show a general similarity, the difference lies in the effort needed from the parties involved. The initial stage of evaluation and contact is simplified as there already is a point of reference and an established channel of communication. Furthermore, the process of gathering information and qualifying each other is greatly reduced, as the parties have good knowledge of each other since their previous engagement. Mostly, sales to existing customers involve implementing a new module or upgrading an old one, a matter decisively less complicated and less comprehensive than implementing a new system from scratch. This makes selling to existing customer less costly. However, as stated by Gamma, gaining new customers is essential. If not for business growth but for the sake of survival, as it is virtually impossible to retain all old customer relations. Alpha, Gamma, Delta and Epsilon, all producing their own ERP systems, consider new customers as more attractive due to the aforementioned higher profit margins from licensing.

#### 3.5 Contractual issues

When the companies have agreed to doing business with each other, a contract is signed. In the contract, the parties have ratified their intentions in a legally binding agreement. This is to assure the functionality of the product. Depending on what the product consists of, all the various parts such as software or hardware are specified. All the interviewed vendors state that the contract reflects how they should act and focus on their commitment in the implementation process rather than on the perceived outcome. On the subject of measuring this perceived outcome, Alpha states that it is purely evaluated on financial terms; though the other interviewed vendors were not as explicit, all vendors but Gamma did not show any different approaches. Gamma had a more complete approach, using soft as well as hard evaluation parameters. Epsilon sometimes adds performance incentives as a negotiable option in order to receive an optimum balance of customer attraction and own satisfaction. Both Gamma and Delta state that an agreement based on performance would be an interesting option, even though neither of them utilizes it. Delta continues saying that larger customers are probably more willing to try such an agreement than smaller ones. According to Beta and Epsilon, the contract is a rather thin document, a mere formality where only the most highly prioritized issues are addressed. In addition to this contract,

a general framework for the agreement is presented.

The total cost for the customer consists of three parts: a software license, hardware and the consultation services. The first two parts have relatively fixed and well anticipated costs, while the consultation costs are more unpredictable. Common for the interviewed vendors, they debit the amount of hours spent on the project. The price per consulting hour is specified in the contract. These vendors also specified a maximum limit of acceptable amount of hour spent. Beside this limit, Alpha has a minimum limit underwritten as well. Alpha applies the method of adjusting price debit per hour depending on how many hours are spent in relation to the set limits. If more hours were needed than the limit allowed, a lower price per hour is debited. If less hours were required than the lower limit, a higher price per hour is debited.

Gamma does not think that such a time-based incentive works well, as this leads to several bargaining opportunities for the customer. To avoid bargaining, Gamma's approach is not to sell the consulting hours directly as a number of hours. Instead, they apply a method to sell as much of their services as possible to a fixed price, such as system training. Beta states that the higher limit of consulting hours is actually seen more as a lower limit and to debit fewer hours than this would be a loss.

Another kind of time-based incentive is applied by Epsilon. They may have a clause in the contract stating that a bonus is to be received if the project is finished before a specific time. The contract also includes other parameters. Alpha exemplifies that they offer support arrangement. The conditions in the contract are regularly established under penalty of a fine, if no other negotiated solutions are met.

#### 3.6 Relationship management

The sales process is not perceived as a discrete interval of time, but as a continuous process expanding beyond the signing of the contract. With a new sale being confirmed, a target is set on future sales to the same customer. Marketing for these future sales are done by caretaking of relationships. It is also important to keep good relations as a safe and satisfied customer becomes a good reference in indirect marketing for new sales. All interviewed vendors hold managing the vendor-customer relationship as a important factor leading to profitable interaction; without it, it would be difficult to successfully implement any of their products. Alpha says customers buy with their hearts and not with their minds, and states that a good relationship is more important than just providing the best product.

In the case of Gamma, relationship management is part of their business concept and it is a systemized process. The customers are partitioned into different categories, each with documented instructions on how to be managed: the relationship itself is said to be closely linked with ongoing business

aspects, acting as centrepiece for decision-making. Gamma stresses the fact that each relationship will evolve differently and for each customer a unique marketing plan is developed, to be used internally. Attempts are made to quantify the relationship but it is difficult and rarely used. Epsilon also have structured documentation on how to build relationships, but says they are seldom applied as it is a more intuitive skill. Interestingly, Epsilon stresses the importance of the relationship as a springboard to make their customers aware of business aspects unknown to them, shifting focus from the actual products themselves on to a more general business approach, often leading to business process re-engineering.

To build and maintain the relationship, Gamma has regular meetings with the board of directors of the purchasing company. They try to keep informal contact with key personnel, identified by their organizational map. This map has to be updated regularly as new employees join the company, contact with these may have to be established. The goal is to firmly obtain and retain a customer, which is why all contacts within the purchasing company need to be maintained regularly.

Another factor to bear in mind is to decide who should represent the vendor. Initially, when the relationship is new, it is usually a salesperson who maintains the contact with the customer. As the relationship progresses, more consultants get involved. However, Alpha uses the same person for both sales and implementation. Alpha uses multiple connections to mirror customer organization, e.g., connecting an business consultant with the head of the finance department. By this procedure, people with the best knowledge of the business aspects of the company are targeted; long term relationships are also preferred, corporate positions with high turnover is generally not targeted. Alpha states that key persons to locate in a company are the *super users*, people in lower levels having the best knowledge of the current system and the best abilities to learn the new system. By educating these, they in turn will be able to teach the rest of the staff and act as a sort of local service centre.

# 4 Theory

Here, the theoretical foundation of the paper is described. In the given order, theoretical elements regarding the agency theory, opportunism, competition, the principal-agent theory, and relationship marketing are put forward. Towards the end, an overall concept is presented where the theoretical elements are combined to serve the paper with an analytical framework.

# 4.1 The agency theory

According to Eisenhardt (1989), the agency theory is defined as a relationship where one party delegates a task to another party. It is essential for an efficient relationship to share information and risk. Eisenhardt's model has three topics with sub-sets of assumptions: the human nature, the organization, and information.

Three key assumptions about the human nature of the two parties are made. Firstly, both parties act in self-interest in order to maximize their respective wealth. Secondly, bounded rationality holds all information regarding the delegated task is too expensive to gather. Therefore, according to Nygaard and Bengtsson (2002), the parties have to make decisions without obtaining all relevant information. Lastly, the two parties are considered being risk averse, if the risk for one party increases there will be a demand for higher compensation by the other party.

The first assumption regarding the organization is a partial conflict of goals. Jap and Anderson (2003) explain the reason for the existence of a goal conflict with a simple example: often customers want more for less, while the vendor offers less for more. In the corporate environment, when two wealth-maximizing organizations in relationship, do not share the same beliefs regarding the road to success, there is a goal conflict between them. The second assumption is that the criterion for effectiveness is efficiency, i.e., a process is only evaluated for doing things right and not for doing the right things. To gather information in order to profoundly evaluate the intrinsic true effectiveness will be too costly. The last assumption is about asymmetry; information not being uniformly allocated between the principal and agent means that there is an information asymmetry between the two parties. The asymmetry rises, not only because of the high cost of information gathering, but also because one party does not want to share proprietary information as well as information that can be used in negotiations to maximize wealth.

Regarding information, only one assumption is made; information can be purchased, but as mentioned above, the cost can be very high. This is rather self-evident, that if information can be shared, it can be, beyond all reasonable doubt, bought as well.

From the issues above, two problems arise: an agency problem, and a

risk-sharing problem. The proposed goal conflict together with the high cost of monitoring the other party defines the agency problem. The risk-sharing problem arises because the two parties do not share the same beliefs in how wealth is maximized, i.e., they have different attitudes towards risk.

The agency theory has developed into two different streams: positivist and principal-agent theory. According to Berle and Means (1932), the positivist agency theory deals with the management relationship in public organizations and therefore that stream is excluded. The latter, principal-agent theory, is the scope of a later section.

# 4.2 Opportunism

Williamson (1985), ref. in Gutiérrez et al. (2004), defines opportunism as "self-interest seeking with guile . . . [which] includes but is scarcely limited to more blatant forms, such as lying, stealing and cheating . . . [opportunism] involves subtle forms of deceit". Originating from a contractual approach, Gutiérrez et.al. (2004) state that the risk of opportunism emerges when humans with self-interest participate in a relationship with unevenly distributed information. The effects of opportunism are clear, one party has more information than the other and can therefore exploit the other party's inferior position. Achrol and Gundlach (1999) argues that if opportunism is not mitigated, it can easily ruin the foundation of a long-term relationship. Hence, creating and maintaining structures in a relationship preventing opportunism, is crucial but undoubtedly a difficult task.

Hart (1983) states that the level of industry competition has a great influence in neutralising opportunism. However, the competition is an external input to the level of opportunism and therefore can not be controlled by the company. Moreover, Achrol and Gundlach (1999) propose that both legal contracts and social safeguards can, and shall, be used to mitigate opportunism. The former deals in formalizing contracts; the latter deals in building a relationship with the other party. Contrary to competition, both legal contracts and social safeguards can be controlled by the company.

Hodgson (2004) argues that Williamson (1999), ref. in Hodgson (2004), ascribes the elimination of the opportunism as a sensational improvement in the level of trust and reliability. Hodgson (2004) also says that Williamson (1999), ref. in Hodgson (2004), interprets that if opportunism were absent, a market without any relative and absolute advantages would form. Furthermore, Williamson (2000), ref. in Hodgson (2004), states that opportunism is the only reason why promises cannot be used to solve the problem with noncontractibility issues in relationships. As a summary, Hodgson (2004) states that there are more things than opportunism influencing a relationship and even if opportunism were absent, there could still be conflict; there would still be a use of hierarchical structures and contracts in order to regulate and control the relationship.

## 4.3 Competition

When more than one firm act on a market, the result is competition between the participants. If more firms enter the same market segment, the competition increases, and the customers will have an increased freedom of choice. According to Winter (1971), ref. in Hart (1983), competition can be seen as a mechanism of natural selection, i.e., survival of the fittest. Moreover, Hart (1983) shows that competition will eliminate the opportunity to one-sided performance slack in a relationship; if discovered, the customer can simply choose another vendor. Conversely, a lack of competition will allow a company that does not perform at its best to survive. Hence, if the natural selection does not work properly, given the opportunity, one party can act in self-interest and increase the risk of opportunism in a relationship.

Discussing market segmentation, Grant (2005) stipulates that a clear definition of the relevant market has to be made. Companies acting within the same relevant market are considered competitors. Hence, a high level of market segmentation partitions the broader market into sub-segments where there are fewer competitors and, accordingly, a lower degree of competition.

# 4.4 Principal-agent theory

In the research of the principal-agent theory, a general theory describing the employer-employee, lawyer-client, buyer-supplier, or any other agency relationship is proposed. The greater theory contains a set of assumptions that are followed by logical deduction. When compared to its positivist sibling, according to Eisenhardt (1989), the principal-agent theory has a broader focus and is of a greater interest in general. Furthermore, while the positivist stream identifies different contract alternatives, the principalagent theory indicates which one of these contract alternatives is the most appropriate given various contextual parameters. The focus of the principal agent theory is on formalizing the relationship between the principal and the agent. This formalization can be done either by way of outcome-based or behaviour-based contracts to optimize the relation. According to Nygaard and Bengtsson (2002), an outcome-based contract shunts the risk to the agent. Only if the measured result fulfils the goal stated in the contract, the agent is compensated accordingly. On the other hand, if a behaviour-based contract is chosen, because of the inability of the principal to monitor the behaviour of the agent, the risk is balanced towards the principal.

The model describing the principal-agent scenario is simple. It assumes an existing goal conflict between the principal and the agent; an outcome that easily can be measured; and an agent who is more risk averse than the principal. While the first two are straightforward, the third is not as obvious. Tentatively, agents cannot diversify their employment and should therefore be risk averse and principals, who are capable of diversification,

should be risk neutral. In order to describe the model, Eisenhardt (1989) proposes two cases. The first case is where the principal knows what the agent has done. Given that the principal approves of this observed behaviour, the behaviour-based contract would be most efficient. Naturally, an outcome-based contract would needlessly transfer risk to the agent who is assumed to be more risk averse than the principal. For the second case, where the behaviour is not easily observed, Eisenhardt suggests two options for the principal: investing in an information system or contracting on the outcome of the agent's behaviour. When investing in an information system such as budgeting systems, reporting systems, and additional layers of management, these reveal the behaviour of the agent to the principal. Thus the situation is similar to the first case with observable behaviour. In formal terms,

**Proposition 1:** Information systems are positively related to behaviour-based contracts and negatively related to outcome-based contracts.

Contracting on the outcome of the agent's behaviour will naturally align the goal to that of the principal, but at the price of transferring more risk to the agent. Furthermore, Eisenhardt (1989) says that the outcome might be affected by exogenous variables such as economic climate, competitor's actions, technology change, etc. Naturally, when outcome uncertainty is low, the cost of shifting risk to the agent decreases and outcome-based contracts becomes more appealing. On the other hand, with high outcome uncertainty, outcome-based contracts are less attractive because of the high cost of shifting risk to the agent. In formal terms,

**Proposition 2:** Outcome uncertainty is positively related to behaviour-based contracts and negatively related to outcome-based contracts.

Having made these two propositions, Eisenhardt (1989) shows the heart of principal-agent theory—the trade-off between the cost of measuring behaviour, and the cost of measuring outcomes and transferring risk to the agent. However, the principal-agent model can be extended in numerous ways; redefining the risk aversion for both the principal and agent; relaxing the goal-conflict between the principal and agent; altering the programmability of the agent's behaviour; altering the measurability of the outcome; extending the length of the agency relationship.

According to Harris and Raviv (1979), ref. in Eisenhardt (1989), as the agent becomes less risk averse, it becomes more appealing to pass risk to the agent by way of an outcome-based contract. Naturally, when the agent is more risk averse, it is more costly to pass risk to the agent. In formal terms,

**Proposition 3:** The risk aversion of the agent is positively related to

behaviour-based contracts and negatively related to outcome-based contracts.

Of course, the reasoning of Harris and Raviv (1979), ref. in Eisenhardt (1989), can be applied to the case of the principal, only inverted. In formal terms,

**Proposition 4:** The risk aversion of the principal is negatively related to behaviour-based contracts and positively related to outcome-based contracts.

Relaxing the assumption of goal conflict between the agent and principal might also affect the balance of outcome-based contracts versus behaviour-based contracts, according to Demski (1980), ref. in Eisenhardt (1989). A smaller goal conflict will make the agent behave as the principal wishes, thus increase the appeal of behaviour-based contracts. Consistently, the opposite applies when the goal conflict intensifies. In formal terms,

**Proposition 5:** The goal conflict between principal and agent is negatively related to behaviour-based contracts and positively related to outcome-based contracts.

Eisenhardt (1989) defines programmability as the degree to which appropriate behaviour by the agent can be specified in advance. Consequently, the more programmable a task is, the easier it is to be observed and evaluated. Hence, a behaviour-based contract will be a natural choice. Switching to a non-programmable situation with a non-deterministic behaviour will obviously render the outcome-based contract more attractive. In formal terms,

**Proposition 6:** Task programmability is positively related to behaviour-based contracts and negatively related to outcome-based contracts.

With a strong kinship towards programmability, according to Eisenhardt (1989), the measurability describes how easily the outcome can be sampled and evaluated. According to the principal-agent model, the outcome should be easy to evaluate. However, many different reasons can be found making this measurement strenuous: tasks can simply take a long time to complete; they can involve a complex structure of joint team efforts; the outcomes in itself might be of a soft nature and not of a hard nature that can be readily measured. Accordingly, such a situation, with a low level of measurability, will make the outcome-based contract more attractive. In formal terms,

**Proposition 7:** Outcome measurability is negatively related to behaviour-based contracts and positively related to outcome-based contracts.

Finally, Lambert (1983), ref. in Eisenhardt (1989), brings forth the last extension: prolonging the agency relationship. It is natural that a long relationship might lead to the principal being an apt observer of the agent's behaviour. In the opposite situation, the short-term relationship, information asymmetries are arguably higher, making the outcome-based contract more attractive. In formal terms,

**Proposition 8:** The length of the agency relationship is positively related to behaviour-based contracts and negatively related to outcome-based contracts.

# 4.5 Relationship marketing

In a contemporary context where the supplier-customer relationship is a vital part of conducting business, Hougaard and Bjerre (2003) states a fundamental assumption:

the value of relationships 
$$>$$
 the values of exchanges. (1)

Indisputably, such a strong statement about the value incorporated within a relationship strongly encourages researchers to establish a new paradigm of marketing strategies. Hougaard and Bjerre (2003) defines the actual supplier-customer relationship as: "a relationship is composed of the sum of exchanges and contacts between supplier and customer over time via the regulating mechanisms in work and the parties' intentions for the future based on mutual understanding". It can clearly be seen that such a relationship does not differentiate between the supplier and customer; each party's contribution to the relationship is equally weighted. Also, the mutuality is obviously seen in a longer time frame, thus myopic demeanour is not naturally included.

Hougaard and Bjerre (2003) then define relationship marketing as: "Company behaviour with the purpose of establishing, maintaining and developing competitive and profitable customer relationships to the benefit of both parties". Serving under the initial assumption, it is obvious that relationship marketing must be profitable for both parties. Not only that, relationship marketing must be considered as the key to gain a competitive advantage. Another important statement of Hougaard and Bjerre (2003) is that marketing management must consider three different objectives: the management of the initiation of customer relationships; the maintenance and enhancement of existing relationships; and the handling of relationship termination. Thus, they clearly point out that relationship marketing is not of virgin birth, it is a concept that needs to be carefully planned and executed.

#### 4.5.1 Relationship marketing levels

Palmer (1996) argues that a large problem of relationship marketing is the positioning of the concept; when relationship marketing really should be about manifesting a strong dyadic engagement, it has been associated to be a simple mean for the supplier to buy loyalty. Viewed as a short-term tactic, relationship marketing may not by definition be seen as a measure to long-term competitive advantage. To add nuance to the concept, Palmer (1996) classifies relationship marketing into three broad categories: a tactical, a strategical, and a philosophical level.

Serving as a tactical tool, relationship marketing is little more than a sales promotion tool. Such loyalty schemes may often give rise to opportunistic behaviour. Ultimately, according to Barnes (1994), ref. in Palmer (1996), such opportunism will not render any commitment to the supplier from the customer side, rather to the incentive itself.

When relationship marketing is of a somewhat developed nature, it has risen to a strategic level. There, Liljander and Strandvik (1995), ref. in Palmer (1996), reason that a customer is tethered by the supplier through legal, economic, technological, and time affiliations. Interestingly, Dick and Basu (1994), ref. in Palmer (1996), comment that such strong bonds might lead to customer detention instead of the intended retention. A company that does not enjoy a deeply established mutual relationship with its customers may have a problem in sustaining the relationship, given a change in external factors. Barnes (1994), ref. in Palmer (1996), states that seen from a distance, a seemingly stable relationship might actually be built on shaky ground with inherent discrepancies in knowledge, power, and resources instead of mutual trust and empathy.

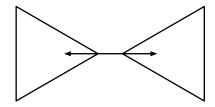
Palmer (1996) believes that, in a higher state of consciousness, on a philosophical level, relationship marketing addresses the very core of marketing philosophy. Traditionally, marketing definitions focus on customer needs where as relationship marketing shies away from products and their life cycles to refocus on customer relationship life cycles. When marketing is conceptualized as the integrated sum of customer orientation, competitor orientation, and inter-functional co-ordination, Narver and Slater (1990), ref. in Palmer (1996), point out the key features of a relationship marketing philosophy: using all employees of an organization to profitably meet the lifetime needs of targeted customers better than their competitors can.

Besides the three-level approach to relationship marketing, Palmer (1996) also describes circumstances when relationship marketing would be unrealistic. First of all, parties of an exchange may simply not be interested in a profound relationship, e.g., a customer perceiving the aforementioned customer detention, as opposed to the desired effect of customer retention, might ultimately lead to unwillingness to commit. Another straightforward case, the customer does not want an asymmetric relationship where they become

dependent on the supplier, deals with reciprocity. Naturally, in a situation with the parties' dependencies between one another being imbalanced, flexibility in adapting to the changing dyad might suffer since actions may not be reciprocated. Social structures lie as foundation to the next case: formalized buying processes may prevent a relationship based on social bonds. In a situation entirely based on social structures, there is an obvious risk of corruption. To suppress such behaviour, a formalization of the process is introduced. However, if this formalization is exaggerated, social structures will deteriorate, thus making it difficult for relationships to prosper. Another aspect of formalization, legislation, leads to the customers' increasing level of confidence reducing their need for an ongoing relationship. In many markets, legislation has reduced the intrinsic risk of buying goods and services from previously unknown markets. Thus, in such a market, entering a close relationship to hedge against risk is somewhat unnecessary. Lastly, relationship marketing might add costs, putting a firm in a cost disadvantage in a price sensitive market. In such a reality, in a complex dyadic relationship that is difficult to quantify in financial terms, there is a probability of money being spent on processes that are not clearly contributing to a cost advantage.

# 4.5.2 Key account management

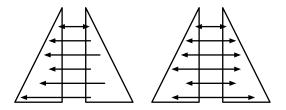
The greater shift towards relationship marketing undoubtedly calls for a shift in management styles as well. Abratt and Kelly (2002) regard Key Account Management as one of the more significant marketing trends dealing with this new managerial context; it is a strategy used by sales organizations to serve high-potential, multi-location accounts with complex needs requiring individual attention through a carefully established relationship. Furthermore, a key account is a client or customer that is pivotal to conduct a successful business in the chosen market. Put concretely, Hougaard and Bjerre (2003) isolate three distinct types of key account management: contact, coordinator, and integrator.



Source: Hougaard and Bjerre (2003)

Figure 1: A contact relationship

The contact type, see Figure 1, is commonly referred to as "one face to the customer". It is usually used in newly introduced key account management. Hougaard and Bjerre (2003) points out several reasons for this; the similarity to the traditional supplier/customer relationship, the focus on the actual sale to the customer, and the limited need for change. Obviously, a point-to-point relationship is very similar to the traditional supplier/customer relationship since the person responsible of the relationship is also responsible for the supplier's sales to the customer. Also, the limited surface of contact does not allow any deeper insights of the interaction, the focus is on the sale only. However, the last point shows that a point-to-point relationship does not imply great investments; it is a cheap and simple way of managing the relationship, making it attractive for early stages of dyadic commitment.

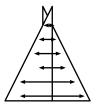


Source: Hougaard and Bjerre (2003)

Figure 2: Passive and pro-active coordination

Hougaard and Bjerre (2003) sees the coordinator type, see Figure 2, as subdivided into two types: passive and pro-active coordination. In the former, the supplier is not interested in adapting to the individual customer's needs. Oftentimes, this means that the person responsible for the customers has less time per customer. Consequently, this leads to a situation where the customer gradually has to initiate communication via other ways than the key account manager channel, becoming the initiating party. Pro-active coordination, is mainly characterized by three points: a definite break with the traditional supplier/customer relationship; an acknowledged close dialogue with the customer; and strong personal relationships between the various

individuals in the two organizational entities. Of course, when the established relationship centres on the customer as an entirety, the traditional supplier/customer relationship is breached. Naturally, having a closer relationship to its customers, the supplier acknowledges a close dialogue as the prime instrument to gain a necessary overview. Oftentimes, this overview is supported by close personal relationships throughout all the organizational exchanges.



Source: Hougaard and Bjerre (2003)

Figure 3: An integrator relationship

When the key account relation type is the integrator, see Figure 3, Hougaard and Bjerre (2003) states that it can sometimes be difficult to distinguish who is the supplier and the customer. In such a situation, collaboration is imperative; the concept radically breaks with traditional supplier/customer relationship. The actual exchanges here are juxtaposed with a business aspect, oftentimes, leading to a focused effort on the greater business aspect. Therefore, traditional selling processes can rarely co-exist with the integrator model. As the name implies, all levels of the two different organizations are involved in this integration. The bottom-line focus is to develop and strengthen the supplier/customer relationship, customer profitability, and also the customer's profits.

Senqupta et al. (1997), ref. in Abratt and Kelly (2002), highlights three crucial elements of great importance for the key account management process. Firstly, the performance of the key account manager is inversely proportional to the number of accounts under his/her responsibility. Logically, the more accounts a key account manager has, the less amount of hours will be spent on each account, decreasing the overall performance. Secondly, the larger part of the compensation received by key account management is still being evaluated on a monetary basis. This failure to reward the strategy-building role of the key account manager might be of a contradictory nature; the greater focus on relationship management is to build a competitive and profitable relationship on a long-term basis, not to insure short-term wealth. Lastly, for the key account manager, it is vital to use contemporary information technology in order to enhance their abilities, no stone should be left unturned in the pursuit of top-notch performance.

# 4.6 The analytical framework

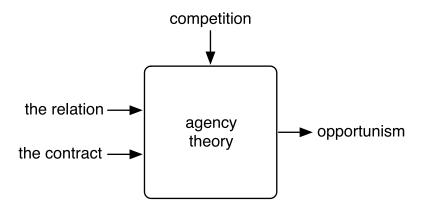


Figure 4: The analytical framework

The analytical framework used throughout the analytical stages of this paper is shown in Figure 4. The framework itself centres on the problems addressed by the agency theory. Three factors affect these problems: competition, the contract, and the relation. The factor of competition is assumed to be exogenous, it cannot be influenced by a single player on the market. The latter two, the contract and the relation, are viewed as the two ways to foremost minimize the agency problem. Last, but not least, the output of the agency problem is assumed to be opportunism.

# 5 Analysis

In this section, the empirical findings are analyzed with the proposed analytical framework. The analysis is divided into the same four categories as in the empirical data section: the sales process, competition, contractual issues, and relational issues. The section closes with a summary of the possibilities of opportunism.

# 5.1 The sales process: an agency theory perspective

## 5.1.1 Human aspects

Having Eisenhardt's (1989) three agency theory topics in mind, the sales process can be described as follows. Regarding the three assumptions about people, self-interest, bounded rationality, and risk aversion, bounded rationality is the strongest contender. The initial imbalance in knowledge between the vendor and customer regarding the product and services being bought is a large probability for self-interest. However, since the event of a sale is a relatively structured process, this probability is lessened. Also, the process itself leaves ample space for being tailored to customer needs and demands; this will further reduce the likelihood of the agent acting out of self-interest. N.B., the self-interest is not seen on an individual level; it is the vendor who might act in self-interest—not individual employees.

Regarding the risk aversion, since the majority of companies push hard for having a large proportion of their customer as reference customers, the impact of market reputation is large. In the situation where an ERP system fails, seen from a theoretical viewpoint, the customer stands to lose the entire investment. From the market side, if other potential customers learn about this failed investment, that might adversely affect future business streams with the given vendor. Consequently, the vendor faces the risk of deteriorating goodwill; hence, putting a large portion of future revenues at peril. For the vendor, this implicates a risk averse behaviour, based on a market risk. As a result, many of the interviewees saw the go/no-go decision as very important. If a faulty go decision was made, their entire market reputation was put at stake. Another clear sign in the empirical findings, the absence of outcome-based contracts, shows that vendors are more risk averse than the customer.

Seeing large flows of information in early stages of the sales process implies a situation with bounded rationality. Having a complex sales process of an ERP system will naturally lead to a bounded rationality; it is difficult to fathom the entirety of the process to take the correct decisions. Large flows of information could be interpreted as sign of the severity of this bounded rationality; if the customer had had complete information, no information would have been exchanged.

## 5.1.2 Organizational aspects

On the subject of the organizational assumptions, Eisenhardt (1989) makes three assumptions: a partial goal conflict, efficiency as measurement for effectiveness, and an information asymmetry. Beginning with the least strong, a partial goal conflict, one can see two aspects of the issue. The first, on a long-term basis, there is no explicit goal conflict. The vendor expects customers to act as referrals to future clients. In addition, there are examples of vendors trying to over perform, i.e., delivering more than clients ask for. In the end, these two facts show a large possibility for an alignment of interest. Hence, there will be little or no goal conflict on a long-term basis. The second, seen on a short-term basis, the situation is different. Supportive of what Jap and Anderson (2003) says, there is a clear and obvious risk of the situation where the customers wants more for less, while the supplier offers less for more. This short-term discrepancy stems from the complex nature of the product itself; it is difficult to quantify in economic terms, and offer a wide range of services. This leads to an opportunity for the vendor to take advantage of the situation, therefore a short-term goal conflict arises. Its duration is limited to the period where the actual price is negotiated: correspondingly, its effect is not as widespread as it first seems. This said, both aspects of goal conflict can co-exist—they are not mutually exclusive.

Interestingly, all interviewed vendors used financial measurements to evaluate their sales process and product functionalities. Such a clear use of efficiency as measure for effectiveness can have serious results when being used to evaluate the complex multifaceted nature of an ERP system. The blunt character of financial measurements can lead to a situation where several important facts are overlooked. Moreover, it is by nature very difficult to describe qualitative parts with quantitative measures. Nevertheless, several of the interviewed vendors mentioned measures beyond the financial genre. However, they had been abandoned since they regarded the problem of formulating and evaluating them as too large.

The largest issue under the organizational topic is information asymmetries. As seen in the empirical findings, there are large information flows and a pronounced desire to better know the customer. Seen from a higher level of abstraction, the process can be described as follows. In the beginning of the sales process, the vendor has a large pool of information regarding ERP systems, and the customer has little or no information at all. In order to make the customer ready for receiving the vendor's information, the vendor needs to learn about the business processes of the customer. This implies that the agent has the greater initiative; the agent has information not only about his own products but also about the customer's reality. When this foundation has been laid, the pool of information regarding ERP systems is transferred to the customer, i.e., the ERP system is delivered. All in all, this means that the initial information asymmetry is a large problem, being

reduced with time.

## 5.1.3 Information aspect

The last topic, information being purchasable, needs some clarification. Since the product is of a complex nature, in the sales process, it can be difficult to even isolate which information that needs to be bought to lessen the agency problem. Not only that, it might also be difficult to price such information; many different aspects might form the constituency of the required information. Pricing will then be complicated and demand an extensive set of resources. In the situation where the correct information can be targeted and priced, another issue appears; information might be proprietary or of sensitive nature, it might be used as negotiation power against the other party.

## 5.1.4 Implications towards opportunism

As Eisenhardt (1989) says, the agency theory introduces two problems: an agency problem and a risk-sharing problem.

Firstly, regarding the first aspect of the agency problem, the high monitoring cost, there are two issues: the complexity of the product itself and its high degree of abstraction. As mentioned earlier, it is difficult and costly to monitor the entirety of the product—software, hardware, and service issues. The product's high level of abstraction is implied by the customer's discrepancy between knowing what to get and how to get it; they will probably know why and what they are buying, but seldom have any deeper knowledge about the delivered solution. In the empirical findings, this shows by the fact that customers only want to know how to operate their ERP system, not necessarily to learn how to tailor and control intricate functionalities. Secondly, as mentioned above, two aspects of a goal conflict can be seen, one long-term and one short-term. The long-term aspect has little impact while the short-term can have strong impact throughout the sales process. The vendor can control his revenues by way of two parameters, price and volume. The latter is of the greater importance: add-on features, consulting hours, educational services can be used to increase the vendor's revenue. Of course, some are more fixed than others, but still there is a possibility for a partial goal conflict.

Regarding the risk-sharing problem, as Eisenhardt (1989) points out, the basis for the risk-sharing problem is the different attitudes towards risk between the customer and vendor. The vendor, having two different sources for risk aversion, the balancing act involving the market risk, see section 5.1.1, and the risk stemming from the inability of diversification, see section 4.4, will become more risk averse than the customer. Naturally, this entails a

situation where the customer and vendor might not agree on actions concerning risk.

# 5.2 The competition

There are two clear trends in the empirical findings regarding the competition: the growing market segmentation, and low market growth rate.

The former shows itself as large companies such as Microsoft and SAP are planning to enter the mid-size market. Obviously, these companies must see potential profitability in the chosen mid-size segment. Therefore, the competition is regarded as relatively weak. This deployment affects current vendors, they are growing more willing to explore niche markets. The chosen niches are selected by way of careful industrial analysis; tentatively, according to Grant (2005), this will further decrease the competition. Also, according to Winter (1971), ref. in Hart (1983), the competition can be seen as a case of survival of the fittest, the companies which does not seem fit enough will chose a more specialized narrow niche, further decreasing the competition.

The latter of the two empirical findings also points in the same direction. The low market growth forces the companies already active the market to differentiate into other profitable segments. It can be assumed that when companies search for a potential market segment to niche into, they consider the competition already present in the proposed segment. Consequently, one does not differentiate into a market segment where the competition is considered to be high. Furthermore, the low market growth is a formidable market entry barrier. Hence, a vendor who does not have large resources at his/her disposal will not enter the mid-size market. The fact that large corporations such as Microsoft and SAP were rumoured by the interviewed vendors to be considering this move, also support this. All in all, the market shows a moderate level of competition, fitting into the reasoning of Hart (1983), this will lead to a increased possibility of opportunism.

#### 5.3 The contract

#### 5.3.1 Reviewing of the contract

Among the empirical findings, the balance is leaning towards behaviour-based contracts. Although a few exceptions are present, the majority saw outcome-based contracting as less feasible. According to Nygaard and Bengtsson (2002), behaviour-based contracting will shift risk towards the principal. As forementioned, this goes hand in hand with the agent's risk aversion. However, there is little or no progress over the years in the style of contract writing. A majority of the interviewed vendors saw the contract as a mere formality; using the contract as a mean to address risk-sharing problems was not frequently seen. Logically, if behaviour-based contracts are used to

such an extent, it implies that the behaviour of the agent is easily observed, and also approved by the principal. However, in this scenario, both the first and second statement can be disapproved. The whole process is not easily observed because of its great complexity and size; amongst others, due to organizational slack and wasteful management, the behaviour can arguably not always be approved. Also, it would be too costly to monitor and evaluate the agent's behaviour on a continuous basis. Interestingly, as seen in the empirical findings, there were rumours regarding a large producer of ERP systems dropping license fees and instead focusing on consulting revenues; arguably, that could be seen as progressive contract writing—showing a shifting trend in the ERP market.

#### 5.3.2 Predictions

Although the behaviour-based contract is the most common contract type, there are reasons to believe that outcome-based contracts will grow more common in the future. One vendor already uses such contracts; others saw it as a future possibility. Also, since customers are growing more familiar with ERP systems in general, it is likely that they will ask for different contract types, relieving them of project risk.

When analyzing the situation with the propositions stated by Eisenhardt (1989), four propositions clearly point in the same direction: outcome uncertainty, programmability, measurability, and the length of the relationship. Firstly, since the customer is relatively clear in asking for a concrete solution, the outcome uncertainty should be low. Secondly, the programmability on the other hand, i.e., how this solution should come about, must be low. Finding out exactly what has to be done to solve the stated problem is often difficult and costly. Third, the measurability should be high; once again, since the customer knows what he/she wants solved, it must be somewhat measurable. Fourth and last, the time frame of the sales process of an ERP system could be regarded as short. Of course, the life span of an ERP system could be counted in years, but the most active part of the vendor-customer relationship takes place within a much shorter time frame. Looking back at the propositions, they all point towards the use of outcome-based contracts.

In this case, Eisenhardt's (1989) other propositions regarding information systems, the risk aversion of the agent, the risk aversion of the principal, and possible goal conflicts, do not conclusively point towards the opposite, behaviour-based contracts. Firstly, in present times, information systems are being used whatever the contract type is. Secondly, the goal conflict, with co-existing long- and short-term goal conflicts, is judged to be too disparate to decide which type of contract to be used. Lastly, the two propositions regarding risk aversion, support the use of behaviour-based contracts since the vendor is more risk averse than the customer. However, both propositions are really two sides of the same coin; if one is set, the other will follow.

Furthermore, since the four propositions that support outcome-based contracts are so distinct and the nature of the parties' risk behaviour is not as stringent, the propositions regarding risk aversion was deemed less important.

# 5.4 The relationship

## 5.4.1 Positioning of the relationship

All interviewed vendors regarded forming long-term relationships with their customers as very important. From a technical viewpoint, the relationships themselves are often formed by the vendor mirroring the customer's organization. Also, they are, to a large extent, handled informally. Interestingly, all interviewed vendors gave accounts of the superior position of knowing the most about the customer, i.e., the one vendor with the most information will get the contract. Therefore, an obvious dichotomy exist, on one hand, the vendor wants a long-term relationship with strong touch of dyadic influences. On the other hand, the vendor wants the relationship in order to get the contract and nothing more. When compared to Palmer's (1996) reasoning about whether the sole purpose of relationships is to buy loyalty, obvious similarities can be seen, one positive interpretation and one negative. In this case, the relationship can be seen as a simple mean to buy loyalty; if a vendor gathers more information than a competitor does, they will win the deal, i.e., the customer's loyalty. Also, buying loyalty is mostly done in abstract terms; the vendor allocates resources in both time and money to build this relationship in order to show the customer his great commitment and drive.

#### 5.4.2 The level of relationship

When analyzing the relationship between vendor and customer with Palmer's (1996) three levels, several facts stand out. First of all, the relationship is clearly seen as a sales promotion tool. This is mainly justified by two empirical findings: the social factor of selling ERP systems, and future sales to the same customer. Firstly, all interviewed vendors mentioned large social factors in the sales process, people buy with their hearts and not with their minds. Secondly, having a relationship with a customer entails a strong propensity of future sales. Although the notion of a relationship implies a long-term duration, the relationships are shown to be most intense in their initial stages rather than being equally distributed across the entire duration. Therefore, if the relationship is judged on the amount of information being passed through, their respective duration are on short-term basis. Also, the relationship itself resembles a sales point, something that is needed in order to show commitment to the customer and to secure the sale. As Hougaard and Bjerre (2003) define relationship marketing, the concern is to establish,

maintain, and develop competitive and profitable relationships between both parties. Emphasizing the relationship as a sales point, and not the competitiveness and profits thought to emanate from the relationship, shows that the relationship might not be what it is intended to be.

Another aspect of the relationship is the vendor's need to get familiarized with the customer. As mentioned above, in order to secure the contract, the vendor needs to gather as much information about the customer as possible. Furthermore, when the contract has been secured, the vendor often delves into a deep business process re-engineering of the customer's business processes. When seen as a relationship issue, this re-engineering could be seen as a mean to boost the ties between the vendor and the customer. Concurrently, the customer becomes more dependent on the products sold, and thus, the vendor as well.

Among the interviewed vendors, some mentioned the aspect of a close direct interaction regarding the customer's business aspects—a clear sign for a relationship on a philosophical level. Nevertheless, few accounts of how this higher level should be established, maintained, and developed were given. Hence, it is difficult to tell if this indeed is a relationship on a higher level. When critically reviewed, two points become clear: the relationship as a sales promotion tool, and the large degree of customer detention. Accordingly, a relationship with such characteristics is on a tactical level, possibly reaching strategic levels.

## 5.4.3 Key account management

With the tightly knit information flows in the sales process, it is obvious that the modes of key account management are on a higher level. Often the process involves large corporate entities; naturally, such scenarios demand clear channels of communication. Three empirical findings stand out: the vendor wanting to control, the vendor not adjusting to the customer, and strong social bonds. The vendor will try to control the actual sales process; a situation with the customer controlling negotiations, etc. was not seen favourable. Also, the re-engineering process is shifted towards the customer, the vendor wants to adjust as little as possible to uphold efficiency. Lastly, strong informal means of communication were stressed, serving the vendor with a wide range of modes of contact. These points fit well into the second category of Hougaard and Bjerre (2003), the coordinator category. All interviewed vendors gave the same impression of wanting to gain an initiative and control over the sales process. This can be seen as a means to gain an overview of the process, as described in the pro-active coordination. Also, this urge for control will lead to many strong personal relationships being initiated, also described as pro-active coordination. However, since the vendor does not want to overtly adjust to the customer, but wants to sell standardized products, this is a clear sign of passive behaviour. Also,

with a strong emphasis on informal channels of communication, this further strengthens support for the passive coordination.

With the alleged focus on the relationship, the structure of the key account management should be the integrator model. No clear sign of vendors explicitly looking beyond the exchanges in favour of the business aspect of the relationship itself was seen. Furthermore, no strong focus on customer profitability and the customer's profits could be seen. Also, there always seemed to be a clear distinction between the vendor and the customer.

# 5.5 Possibilities of opportunism

# 5.5.1 Forerunners of opportunism

Because of aspects such as bounded rationality, information asymmetries, goal conflicts, and risk aversion, there is clearly a strong possibility for problems as pointed out by the agency theory. These are the agency problem and risk-sharing problem. As a part of the agency problem, the monitoring problem can be difficult to tackle. Combining the monitoring problem with the problem of risk-sharing can lead to an even stronger challenge. According to Gutiérrez et al. (2004), opportunism emerges when there is unevenly distributed information. Arguably, both the agency problem and the risk-sharing problem stem from unevenly distributed information. The former is perhaps more intuitive, monitoring- and goal conflict problems are problems of incorrectly distributed information. The latter can be seen as unevenly distributed information where the customer is unaware of the vendor's risk aversion. Naturally, in such a situation, the customer might react negatively to the vendor, demanding more compensation for every unit of increased risk. Thus, seen from the customer's viewpoint, opportunism has struck.

## 5.5.2 The regulating factors

As seen in the analytical framework stated before, three factors affect the complications emanating from the agency and risk-sharing problem: the level of competition; legal safeguards, i.e., the contract; and social structures, i.e., the relation. Clearly, the stakeholders can control the last two factors. Both factors are powerful tools to control the given problems.

# 6 Discussion and results

Here, the analysis will be discussed, answering the questions at issue. Since the previous section, the disposition has changed; here, instead of basing it on the proposed analytical framework, it shall be based on the topics addressed by the questions at issue.

## 6.1 Opportunism

The analysis has shown a clear asymmetry of information between vendor and customer, see section 5.1.1. The customer is in a state of strong dependency on the vendor; he/she is forced to act with bounded rationality, see section 5.1.2, and make decisions without sufficient knowledge of valid conditions to realistically anticipate the outcome.

#### 6.1.1 Risk

The agent not being able to diversify, and thereby increasing his/her risk aversion relative to that of the the principal, is a general assumption of the agency theory (Eisenhardt, 1989). In this paper, since an ERP system is affecting the company as a whole and therefore making diversification of the risk more difficult for the customer, this risk is considered of lesser importance. However, this does not relax the assumption of an agent being more risk averse; because the outcome is not only a function of agent behaviour but also of internal factors of the principal, the principal should be willing to accept a higher risk (Eisenhardt, 1989).

Two concepts of risk have been found to be dominant in the case of ERP systems: a project risk and a market risk. The project risk is seen within an isolated ERP project. At stake is not only direct expenses in form of invested capital and employed resources, but also indirect effects of risking key business processes and the loss of strategic advantages. Naturally, this risk is strongly connected with the customer.

The market risk is the endangerment of the vendor's ability to attract future customers. If the project fails in the eyes of the customer, the vendor risks not only future sales opportunities to the customer but loss of market goodwill.

#### 6.1.2 Defining the reality

Increasing goodwill is dependent on the satisfaction of the customer; it is vital for the vendor to ensure that the customer feels contented with his purchase by being able to reap the benefits of a more effective organization. However, this raises the question of how well the customer can observe the effectiveness gained. As argued in the analysis, see section 5.1.2, results are being measured in the form of productivity and efficiency, and overlook other

important aspects. To be able to fully evaluate the intrinsic effectiveness of the system, a customer must compare different alternatives. Since the customer has little information of the reality of the systems, the vendor will define this reality. Relevant comparisons are therefore limited to the reality the vendor provides, and observed levels of efficiency within this narrow environment will be assumed to be measures of true effectiveness. This gives the vendor an opportunity to create a reality suited for his/her own objectives. Hence, opportunistic behaviour could be involved in creating a pseudo-reality, coloured by the vendor's own agenda.

This potential opportunism is revealed in two forms: safeguarding and fringe selling.

### 6.1.3 Safeguarding

The long term goal of a successful implementation is shared by both parties, see section 5.1.2. The vendor's goal is aligned with the customer because of the market risk involved. Although they share this goal, the vendor wants it regardless of costs for the customer, while the customer wants the costs to be justified in cost-benefit terms. Because the vendor strives for customer satisfaction, fabricating this justification will suffice. To secure a successful implementation, the vendor will have incentive to overstate the number of consulting hours needed, the extent of education required, etc. He/she will have incentive to lower the customer's expectations, giving room for a perceived better performance. This will lower the bar to reach a result the customer will feel contented with, and thus lowering the market risk for the vendor. All of this involves the vendor tampering with the pseudo-reality, thus safeguarding the customer's satisfaction.

However, this is a narrow road to walk; while wanting to safeguard the customer's satisfaction, the vendor also needs to make sales arguments; a matter which rhymes ill with lowering expectations and overstating costs. In the end, the vendor must be able to show that the investment is worthwhile, which will constrain the safeguarding within certain limits. Finding these limits, the vendor will have to evaluate how much the customer is willing to pay, a classic salesperson's skill. Since ERP systems could be a pre-requisite for staying in business with important partners, the alternative cost of not implementing could lever the threshold of acceptable costs.

Introducing a bidding process, the vendor's focus on making sales arguments will override safeguarding. When several vendors are involved in the process, the customer will get several realities defined and the maneuverable space for safeguarding will likely decrease. This will only occur to some extent; since the proposals are based on sparse information as compared to when the vendor had been chosen, there will be opportunities for safeguarding during the upcoming negotiation phase.

### 6.1.4 Fringe selling

In the short term, there is a goal conflict between vendor and customer, see section 5.1.2. This is sprung from the basic business concept of profit; both parties wish to maximize their profit. There are two ways for the vendor to increase profits: price and volume. Price is a constant factor, since licenses and cost per debited hour are relatively fixed. However, by increasing the volume of sales, profit can be increased, regardless of benefiting the customer. Thus, via this fringe selling, the vendor can increase their profit at the expense of the customer, resulting in a goal conflict.

This can be exemplified as follows. The customer being guided through the pseudo-reality could be persuaded to discover needs he/she did not know existed. Since these needs are defined by the reality provided by the vendor, they may have little relevance in the real world, making the customer end up with more than he/she had bargained for.

Furthermore, if the contract is based on neither outcome nor expense, the vendor will not be rewarded for giving these special attention. E.g., only if it is stated in the contract that expenses have a fixed maxima, there is little motivation to remain below this point. Consider a situation when a vendor feels they have successfully implemented the ERP system at a lesser cost than predicted in the contract. Although not motivated in terms of cost-benefit for the customer, the vendor will have incentive for further increasing effort as it will yield a higher income. In fact, this will also be ensuring the success, thus giving the vendor a double incentive.

At this point in the discussion, the first question at issue can be answered:

Using the agency theory, what possibilities of opportunism are involved in the sales process?

The analysis has shown the potential of opportunistic behaviour. This is manifested in the pseudo-reality the vendor provides for the customer, and takes the form of safeguarding and fringe selling. Safeguarding is the act of securing the customer's perceived satisfaction in a value-destroying manner. Fringe selling is the vendor's use of increased sales volumes for higher profits at the expense of the customer.

## 6.2 Controlling tools

As presented before, contracts and relationships can be seen as tools managing the possibility for opportunism. Seen from a higher level of abstraction, they differ in their fundamental disposition; contracts are traditionally seen as a hard financial formalization while relations contextually contribute with flexibility and work as means of communication. They are presented in the following sections.

#### 6.2.1 The contract

As pointed out in the analysis, contracts are most commonly behaviour-based for the ERP vendors. Consequently, the principal is bearing a majority of the risk. Partitioning the risk as such, an imbalance appears. Arguably, both parties in the process of selling an ERP system should bear risk; a party that adds uncertainty of outcome from a certain task should naturally be held responsible of the observed result. Two factors speak in favour of using outcome-based contracts: a theoretical analysis based on principal-agent theory, and the empirical findings regarding the evolution of the ERP market.

As seen in section 5.3.2, the analysis of the empirical data by way of Eisenhardt's (1989) propositions results in outcome-based contracts being favoured. Contributing the most to the result, the customers have a clear knowledge of what they want but neither have they got any resources nor capabilities to fulfil this want. Knowing what they want, the observed result can easily be compared to the original want; also, being precise about their want, the observed result should not differ much from the original want. On the opposing side, aspects such as goal conflict and risk aversion are not conclusively pointing at behaviour-based contracts. Of course, as stated in section 5.1.2, short-term goal conflict can be observed. But with a longer time frame, as the intensity of the interaction wears off, these effects decline in magnitude. Ultimately, since the long-term goal congruence co-exists with the short-term goal conflicts, the proposition regarding goal conflict will be inconclusive. Regarding risk aversion, with the reality provided by the vendor mentioned above, the level of risk aversion of one party is not always perfectly correlated with the resulted risk partitioning—with an illdefined reality, correlation will be weak. Hence, based on the propositions regarding risk aversion, a clear-cut conclusion can not be drawn.

When the ERP market is seen from a historical view point, the empirical findings show an apparent shift of character. In the infancy of the market, customers focused on buying hardware per se; hence the product itself was based on hardware and not on functionality. Obviously, from the vendor side, the sales process was relatively simple. When formalizing such a situation, the simple structure of behaviour-based contracts was considered a natural choice. As the market evolved, the basis was switched; when ERP systems began addressing general business aspects, the product was based on functionality and not on hardware. By addressing business aspects, the simple structure of behaviour-based contracts could be regarded as obsolete. Securing the functionality of the targeted business aspects, a close interaction between the vendor and the customer is important. With such closeness, not only the customer but also the vendor should be directly dependent on a favourable outcome. Therefore, regulating such an interaction is best done with an outcome-based contract.

Obviously, the use of outcome-based contracts will favourably rebalance the observed risk between both parties. Also, the vendor will have strong incentives to act in the customer's best interest. Unfortunately, outcome-based contracts impose two new problems; how to find the essential information to evaluate, and how to quantify that information. However, as time passes, within the ERP market some form of standard practice will most probably evolve. Thus, in present time, for a vendor acting as a first mover, adopting a more innovative style of contract writing might convey competitive advantages.

### 6.2.2 The relationship

To sum up the analysis of the relationship, see section 5.4, three factors stand out: the use of the relationship as a sales promotion tool; the aspect of customer detention; and its relatively short time frame and intense nature. With these factors in mind, the relationship does not resemble true relationship marketing. Once again, as Palmer (1996) points out, true relationship marketing should place the relationship and not the offered product as centre of attention—the direct aim is to increase the profit of the customer via the relationship. Two factors are in favour of cultivating a relationship: a theoretical analysis based on relationship marketing, and, once again, the empirical findings regarding the evolution of the ERP market.

In the case studied in this paper, business process re-engineering forms the inner core of the interaction between vendor and customer. The vendor offers an ERP system, which needs careful implementation in order to fulfil its specification; serving as a basis for the implementation, the business processes of the customer often need to be re-engineered to fit into the new context. Clearly, many relational aspects are involved as the interaction has to be as lean as possible, yet delivering profitable results. Hence, in the situation of a customer acquiring an ERP system, as section 1.4 points out, trust is a large issue. Naturally, once the customer has chosen its ERP system, they must trust the vendor, and thus, the need for a positive relationship is born. At this level, the scenario fits very well into Hougaard and Bjerre's (2003) definition of relationship marketing, see section 4.5. A relationship is formed, that is supposed to benefit both parties; also, there is an obvious nurturing of the relationship itself.

Once again, the historical view on the ERP market also hints of the benefits of relationship marketing. As mentioned above, there are two situations: basing the product on functionality or on hardware. In the first case, there is no pronounced need in having a deeper relationship, the product itself is relatively well defined and clear—the closeness to the customer is not that great. In the second case, the need for a relationship is obvious. Simply put, the vendor offering functionality in a wide variety of business aspects implies a closeness to the customer, and logically, as argued above,

that closeness is best handled by a relationship.

As seen above, the relationship, once correctly utilized, can truly be of a value-adding nature for both the vendor and the customer. The vendor can quickly and effortlessly deliver its solution, and the customer can feel at ease with its re-engineering process. Also, the customer's trust in the vendor is based on honest grounds, i.e., it can be considered an absolute trust. In the case of a dishonest vendor, the customer might still have trust, but the trust itself can only be relative, i.e., had the customer been able to review all information, they would not have trusted the vendor.

However, as pointed out by Palmer (1996), see section 4.5.1, it can not always be assumed that relationship marketing is realistic. Two of his proposed cases are regarded as applicable to the ERP market. Firstly, the customer might simply not be interested in a deep and close relationship; aspects such as the customer having restrictive corporate policies and being scared away by an observed customer detention might create a hesitant customer. Secondly, with customers growing more knowledgeable about ERP systems, the hedging aspect of a relationship is unnecessary.

Furthermore, whether the high demand of resources and capabilities in relationship marketing is justified, is another interesting aspect. Intuitively, see Equation 1, when the actual value of the relationship is less than the value of exchanges, no relationship marketing can be justified. The customer adopting this quantitative approach might frown upon such a costly relationship.

At this point in the discussion, the second question at issue can be answered:

What tools can be used to control opportunism in the sales process?

Two tools to control opportunism have been presented: the contract, and the relationship. While the former deals with hard facts, the latter manages soft aspects. The empirical findings show that the contract was not seen as a strategic instrument of reducing opportunism. Two aspects of strategic employment of the contract can be seen: a market-strategic aspect where the progressive contract writing is seen as a source for competitive advantage; and a customer-strategic aspect where the contract should reflect a direct responsibility on the vendor's behalf. The empirical findings also show that vendors consider their formed relationship to be something they are not. The alleged relationships when compared to relationship marketing theory turn out to be on a lower level than anticipated. Finally, two imbalances appear. Firstly, the hegemony of behaviour-based contracts show of a risk imbalance. Secondly, the slant towards the relationship to lessen opportunism shows an imbalance in deployment between the contract and the relationship to address opportunism. Should these imbalances be attended to, this would undoubtedly benefit both parties.

## 6.3 Improvement of control

Given a situation containing opportunism and with a set of controlling tools, the notion of observability arises. Obviously, there is a need to be able to see when and how to apply these controlling tools. In the proposed analytical framework, this observability is somewhat described by the information aspect, see section 5.1.3. The observability inherits two characteristics from the information aspect—the difficulty of isolating the correct information and how to price this information.

## 6.3.1 Observability

Observable opportunism can be defined as both parties being aware of potential opportunism. If this situation applies, both parties will want to reduce the potential opportunism; the buyer because opportunism has a negative effect on business; the vendor because a safe customer is better than an unsafe customer (Gao et al., 2005).

Consider the case of imperfect information. Then, in order to observe opportunism, the vendor must spend resources to disclose opportunism. Logically, if no resources are spent, the possibility of disclosing opportunism is slim. On the other side of the vendor-customer relationship, the customer might for any reason be able to observe the opportunism. This entails a situation where the vendor does not eliminate the opportunism seen by the customer, simply because it goes unobserved. Consequently, the vendor's inability to respond to the situation will most probably deteriorate the goodwill of the relationship—its chances for adding value to both parties would hence be severely lessened. Ultimately, the vendor must act pro-actively to see and anticipate possibilities of perceived opportunism on the principal's behalf.

### 6.3.2 Feedback loop

Naturally, the problem of deteriorating goodwill could be partially solved by spending more resources on disclosing opportunism. Measurements must be taken and evaluated, and countermeasures must be launched. Keeping the analytical framework in mind, this procedure will be displayed as a feedback loop from the output, opportunism, to the controlling tools, the contract and the relation, as illustrated in Figure 5. In the ideal case of full observability, perfect information is implied; hence, the sources of opportunism, the agency problem and risk-sharing problem, disappear.

Nevertheless, the empirical findings reveal that this concept is not directly used by any of the interviewed vendors; if so, it is formalized only in financial terms, thus not completely covering the wide scope of opportunism. Another issue to consider is the cost of measurement; if these are higher than the value being destroyed for the vendor, he/she will not see

this as beneficial.

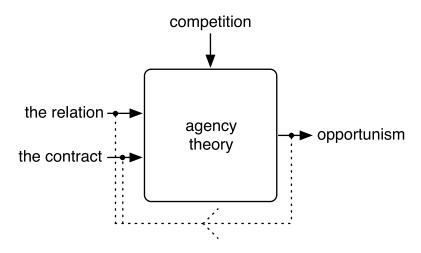


Figure 5: The analytical framework with the proposed feedback loop

At this point in the discussion, the third question at issue can be answered:

How can these tools be properly managed to reduce opportunism in the sales process?

With the customer aware of potential opportunism, the vendor must measure and evaluate possible sources of opportunism to avoid deteriorating goodwill. More so, in order to be as thorough as possible, the measurement and evaluation must cover and serve both parties' contractual and relational aspects. This is done by none of the interviewed vendors, possibly because the measurement cost is deemed too high. With an incomplete perception of the context, the effect of the controlling tools will be limited—they will not be directly affected by the context. Mathematically speaking, decreasing the domain of the controlling tools will also generally decrease their range, implying a sub-optimal reduction of opportunism.

# 7 Reflections

## 7.1 Implications for future research

This paper studies the relationship between two parties. Since the empirical data solely is based on the vendor, to get a fuller view of the relationship, a natural continuance would be to study the customer. An interesting aspect would be to study the customer's view on opportunism, as the perception rather than the actual existence of opportunism is an recurring theme of the paper. However, as pointed out in section 4.2, the emphasis on opportunism might not be solidly founded.

As seen in the discussion regarding the third question at issue, a recurrent aspect is the collection of information as means to reduce opportunism. The basis of the agency theory assumes this information can be purchased. As proposed in section 5.1.3, there are two issues to be considered when acquiring this commodity: the location and identification of the needed information, and its pricing. However, an important issue is not considered—in order to make a complete financial analysis, the alternative cost must be considered. Chances are that the cost of opportunism do not exceed the cost of collection the information, and therefore the investment is not worthwhile. This is an interesting field for future studies. Also, to be able to estimate the cost of opportunism, arguably, even more information needs to be collected. Thus, the financial analysis itself will also be resource demanding, not only must the alternative costs be considered, but also the cost of the analysis itself.

As mentioned in section 6.2.1, there are implications of an evolution towards a standard practice in quantifying the outcome of ERP systems. Further research on the evolution of these measurements would be of interest. Related research would be an in-depth study of the present trends and signs of this proposed evolution.

## 7.2 Methodological considerations

Upon hindsight, two methodological aspects can be addressed: replicability and validity. First, this paper is deemed to be highly replicable. Although the interviewees showed different ways of going about, they gave similar accounts when describing the general nature of the sales process. Thus, if repeated in a similar setup with different interviewees, the results will probably be similar to the gathered results of this paper. Second, a fleeting subjective observation was made—a slight difference in the business approach between large and small vendors. This could be seen as lessening the validity, the chosen vendors could have been selected from a more narrow perspective. However, as they gave similar accounts when describing the general nature of the sales process, this lessening of validity is judged to be small in magnitude.

## 7.3 Theoretical considerations

In selling an ERP system, obviously, a task has been delegated from one party to another. Hence, the agency theory was chosen as the theoretical foundation. In this theory, the relationship is controlled by a contract, more precisely described in the principal-agency theory. However, the contract only deals with hard aspects of the interaction and not with softer ones. To describe the softer side of the interaction requires another theoretical aspect, namely, relationship marketing. The relationships observed in the ERP market exhibit factors such as mutual trust and confidence. Hence, using this theory is rather natural. When using the proposed analytical framework, no theoretical conflicts have arisen—it has served its purpose well. Altogether, since all the elements of the theoretical framework are well-founded and regularly seen in scientific discourse, this adds further validity to this paper.

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# B Interview information

Vendor: Alpha

Representative: Senior Salesperson

Date: 22-04-2005

Place: The company office

Time: 120 minutes

Interviewers: Kullenberg, Löfgren, Mannesson, Mansson

Vendor: Beta

Representative: Senior Salesperson

Date: 09-05-2005

Place: Coffeehouse by George, Lund

Time: 90 minutes

Interviewers: Kullenberg, Löfgren, Mansson

Vendor: Gamma

Representative: Business product manager

Date: 02-05-2005

Place: The company office

Time: 120 minutes

Interviewers: Kullenberg, Löfgren, Mannesson, Mansson

Vendor: Delta

Representative: Senior Salesperson

Date: 26-04-2005

Place: The company office

Time: 90 minutes

Interviewers: Kullenberg, Mannesson

Vendor: Epsilon

Representative: Senior Salesperson

Date: 13-05-2005

Place: The company office

Time: 90 minutes

Interviewers: Kullenberg, Mannesson, Mansson

System developer: Omega

Representative: Senior Salesperson

Date: 20-04-2005

Place: The company office

Time: 120 minutes

Interviewers: Kullenberg, Löfgren, Mannesson, Mansson

Agenda setting questions:

How would you describe the sales process?

How would you characterize the relationship with the buyer?

What services do you provide?

What is your view on the competition in the ERP industry?

Specific questions:

Is the sales process differentiated by customer?

Is the salesperson involved in the implementation process?

What are the areas of interaction between vendor and customer?

What does the contract contain?

Are there any incentives used in the sales process?

What is promised as a result of implementing an ERP system?

Does the observed results affect the current sales process?

Is the relationship being evaluated? If so, how?