# THE INTERCONNECTEDNESS OF 'BEST PRACTICES' – HOW SMALL AND MIDSIZE COMPANIES CAN GAIN FROM SELECTING THE LARGE COMPANIES' IT

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**ABSTRACT**

Today's companies can take advantage of state-of-the art information technology (IT) as enterprise resource planning (ERP) systems, business intelligence software and web-based services to facilitate their business. Many of these technologies are general in their design – i.e. they are of-the-shelf solutions available to a wider customer group. Within the information systems (IS) discipline this has lead to the managerial advice that companies should evaluate the IT-vendors prevailing market position and the prospect of their future (taking in consideration e.g. the vendors solvency). This paper is empirically focusing ERP systems – company wide information systems that comes with a standard set of pre-defined procedures called 'best practices' – and it presents two cases that illustrates how these ERP systems inherent the best practices that the IT-provider has developed in cooperation with its prevailing customers. Following the European theory on markets as network, i.e. an approach developed within the IMP Group, a alternative managerial advice would be to assess the vendor's business network. Thus, this paper puts forth the later approach and discusses how a company contributes respectively benefits from selecting an IT-provider that develops enterprise systems for their respectively industrial sector. The paper puts forth two cases where one illustrates how a company is involved in the development of a IT-vendors best practices and the other case illustrates how a company gets best practices by looking at the IT-vendors customers.

The two illustrating case studies are carried out at Kanthal AB, a company within the Sandvik Group, and at CH Industry AB, a small supplier to Volvo Construction Equipment. Whilst the larger company Kanthal had to go through a process of software customization to get the adequate functions in their ERP system CH Industry has instead gone with the standard package. The customization that Kanthal required has later become one of the IT provider's features, i.e. a new best practice, something that other customers can benefit from. CH Industry has also selected the same complex and comprehensive ERP system as Kanthal even if their need, as a rather small company, should be of another nature. CH Industry has though selected a competitive standard package and they motivate their choice of ERP system by relating to the IT-provider's customer base. Implicit CH Industry understands that the IT-provider's customer network will mean that their ERP system will be offered continuous improvements and upgrades, and they will thereby getting state-of-the-art best practices even in the future.

The paper concludes with discussing the interconnectedness of best practices – whilst Kanthal are an active partner in the development of a set of best practices, CH Industry is a company that benefits from prevailing best practices. The implication of the cases is that a company benefits from an awareness of its IT-vendor's wider business network. Companies needs to – as well as considering the IT provider's solvency, market position, and evaluations of the technology as advised by managerial information system theories – evaluate the IT-provider's prevailing customers and their business procedures and preferences.

**Keywords**

*ERP system, business relationships, business network, adaptations, interconnectedness, information Technology (IT), IT-provider, best practices*

## INTRODUCTION

Much of the information exchange that takes place in today's business landscape is taken care of *enterprise resource planning* (ERP) *systems*; standard computer based information systems that are acquired as software packages (modules) that can be adjusted to a certain degree by the customer. The advantage with ERP systems is that they can handle most of a company's transaction need and that they unify an enterprise by demanding coherent concepts as well as treating all business data through one (virtually) central database. (Davenport, 1998, O'leary, 2000) The ERP systems have had, since their great boost in the 90's, a rather bad reputation given that research showed that a large percentage of the projects were considered being under-budgeted, to short scheduled, and not being able to deliver what they originally was promising. Even so, companies has learned their lessons and today companies implements the core functionality first and the supporting processes later (DavenportG. and Cantrell, 2004). Another aspect that indicates that it has become a mature technology is the merger of existing companies to fewer but larger ERP vendors, not to mention that Microsoft has entered the ERP arena.

ERP systems are commercial of-the-shelf (COTS) solutions that are acquired from IT-providers (ERP vendors) that often offer both the software and the services needed to get the ERP system up and running. The process of selecting a vendor can be a struggling one. Is the ERP vendor considered strong in the company's industry sector, do they offer a specific module that the company can benefit from, and are the appropriate support available? During this selection process the vendor's *best practice* need to be evaluated. A best practice is the vendor's description of how a specific business process is to be performed in an optimal way. The company that search for a ERP system thereby has to review what business processes (best practices) that each vendor offers. It is also worth noticing that the best practices are the vendor's best practices – i.e. not some general standard for how to do things. This means that the best practices are differing depending on vendor and their way of structuring business processes. When evaluating different vendors their financial solidity and market share is also interesting – will they be around in five or ten years? (Davenport, 2000) The process of selecting a IT-provider thereby is multi-dimensional where both the technology, its functionality, and the vendor *per se* has to be evaluated.

When depicting the selection process some ERP vendors will stand out as more promising and suitable depending on which industry sector that the company is active within, see figure 1. As a practical example, a small- or medium size enterprise (SME) producing both high- and low voltage components may find a ERP vendor that are considered strong for high voltage products (i.e. ERP vendor 1 in figure 1) and another ERP vendor that offers best practices for low voltage products (i.e. ERP vendor 2). There are also other potential ERP vendors (i.e. ERP vendor 3) but they are offering modules for other industries, e.g. the food and textile industry, and they hence become uninteresting in the selection process. Once the potential ERP vendors are identified, the selection process goes in to details reviewing both the functional and technical details of the enterprise system (O'leary, 2000).

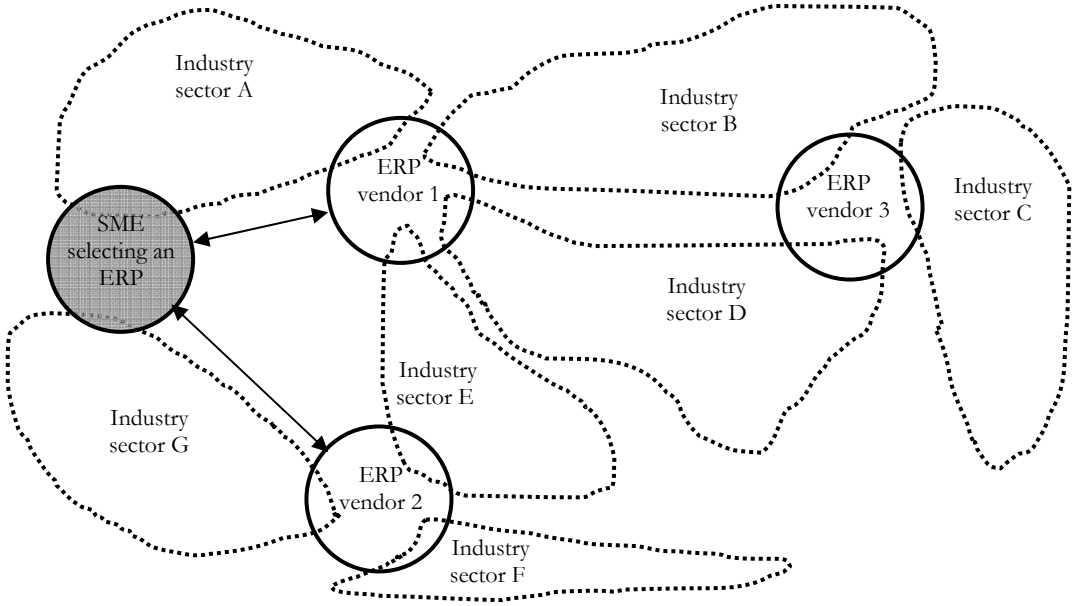


**Figure 1** –ERP vendors and their experienced strengths in different industries

To make a point, the previous description of how companies select ERP vendors has been oversimplified and shortened. The bottom line is that the selection of ERP vendors takes its starting point in the ERP vendor's organizational resources and its segmentation of markets. That is the normal and generic approach when companies search for a ERP system. A segmented 'market' is though a rather anonymous entity. As an alternative approach this paper proposes another approach where the ERP vendors prevailing business network is taken into consideration. To illustrate how ERP systems are brought into a company, and how their best practices come about, two case studies are presented. The first case study illustrates a company that needs to be highly involved in the creation of new best practices given that the ERP vendor initially couldn't offer the processes that the company needed. The other case illustrates a company that selects a ERP vendor based upon some of the provider's existing customers and thereby got access to the best practices that they use. Before the cases are presented an overview of the relational – and network – perspective that will be used to analyze the cases and to describe the managerial consequences of these studies are offered.

## BUSINESS RELATIONSHIPS AND NETWORKS

Håkansson and Snehota wrote 'No business is an island' (Håkansson and Snehota, 1998) and the implications of their reasoning is that no company can be seen as stand alone; it is connected to other actors in its environment, and the company is part of a business network that includes dozens of suppliers, subcontractors, customers and so on. These business relationships and networks have been studied for some decades, especially within the Industrial Marketing and Purchasing group (see www.impgroup.org), and the findings include both theoretical discussions and empirical studies. Early studies focused on the business between a customer and a supplier, i.e. a business relationship, but the research expanded to comprise also a wider structure, i.e. a business network (Håkansson and Johanson, 1992).

A business relationship starts with a dyad, i.e. two companies doing business with each other. Both the customer and supplier seek stability and the loyalty that develops makes the creation of new or the change of old relationships a time consuming process where both partners must be engaged. (Håkansson, 1982, Ford, 1990) The buying and selling process between companies was early conceptualized with the interaction model that depicted a customer and supplier in a defined environment. When two companies continuously do business with each other (interact) a business relationship develops between them and the business relationship becomes itself more than the individual transaction that takes place between the companies. With this theoretical approach a business relationship becomes complex phenomena involving several simultaneous exchanges of different types that can be (i) product and/or services, (ii) financial, (iii) information, or (iv) of a social nature. These exchanges require different forms of investments such as money, time, trust, and commitment but also technological and procedural *adaptations*. Both the supplier and the customer are active in the interaction and a business relationship is based on the repeated exchanges that the two partners carry out over time. (Håkansson, 1982) Exchanges can be defined as the process where two business parties, one seller and one buyer, obtains something which they need, not had before, and which increases their respective value (Alderson and Miles, 1965). When returning to this paper's setting, a company and their ERP vendor, the ERP system becomes the product and service exchanged. To implement and utilize an ERP, a lot of information needs to be exchanged as well as the financial means for the delivered ERP system. In this process social bonds, which work as a lubricant for the new business relationship, will also be developed. The company and ERP vendor thereby becomes linked to each other forthcoming.

The interaction that takes place in the relationship between a customer and supplier usually lasts for several years (Ford, 1980). The temporal aspect is thereby one of the business relationship's important features; given that it often is long-termed makes the involved partner's conditions stable and supportive. Through the partner's repeated exchanges, which are closely linked to a specific product or service, the ongoing business relationship becomes a unique entity involving mutual adaptations made throughout time. The adaptations can have been made to the product, e.g. in this paper to a ERP system, or it can have been made to the supporting activities that upholds the ongoing exchanges. The uniqueness of these business relationships means that the business relationship has become hard to replace for the involved company; a change of partner would require that the long process of establishing new routines and

making investments in adaptations and gathering the other partners trust had to be repeated all over again. (Johanson, 1989)

Viewing the market as a network existing of (long-term) relationships between companies have become more and more common through the years. (Håkansson and Snehota, 1995, Ford et al., 2002, Håkansson and Ford, 2002) The business network perspective steams from the interaction approach described above where the exchanges between two companies and the behavioral elements as adaptations and institutionalized behaviors can be described as a business relationship. When we widen the perspective to view two or more connected business relationships we can define that as a business network. (Emerson, 1981, HallenJohanson and Seyedmohamed, 1991, Håkansson and Snehota, 1995) This means that what takes place in one business relationship also affects the other relationships (Hallen et al. 1991; Håkansson and Snehota 1995). This means that the business relationships that are *interconnected* can affect the other business relationships and that the actions of what one company do not only influence the business relationships the company is involved in but also relationships that are connected via the company's partners and even further away (Cook and Emerson, 1984, Axelsson and Easton, 1992, AndersonHåkansson and Johanson, 1994).

Following this reasoning, a company can thereby get benefits or disadvantages by getting involved in a new business relationship that thus involves new interconnected business relationships. These new connections may also involve prevailing customers and suppliers as well as competitors. When widening the perspective each company is involved in a web of business relationships and each company can hence be defined by its business network. The learning that take place in one business relationship is useful even in other business relationships (NobeokaDyer and Madhok, 2002). The company's business network thereby sets the limits for what the company can do and the company does, at the same time, influence the other actors of the network (this principle is illustrated in figure 2 below).

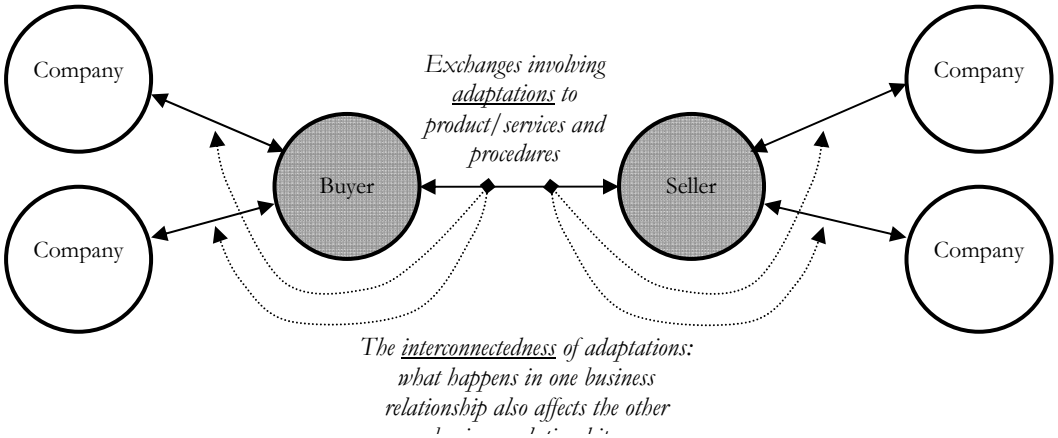


**Figure 2** – An illustration of this study's central theoretical concepts

The need for adaptations and the interconnectedness works in several dimensions. SMEs can, for example, adapt their products to accommodate the need of an important customer as a need to secure their future collaboration (Johnsen and Ford, 2006) and the customer can, in their turn, demand changes in the focal business relationship based upon changes preferences from the end-customer. There are also companies that strives for vendor managed inventory (VMI) (GayCharlesworth and Esen, 2007), i.e. that the suppliers' need to keep track of the customers warehouse and send new parts when needed – something that forthcoming can be extended in the supply-chain (i.e. it will result in a form of interconnectedness in several steps).

## ON METHODOLOGY

The two cases in this paper is based upon a research project, spanning 11 companies and more than 100 interviews, carried out between 2002-2006. Case studies encourage multiple data collection methods and the case studies involved interviews (both recorded as mp3 and written depending on the respondent's preferences), observations, documents, access to web pages and information systems, data schemes, and

multimedia. The cases was designed inspired by Yin (2003) with an analysis that followed a coding procedure supported by a theoretical framework holding information systems and business relationship concepts. The two cases that are used to illustrate the importance of interconnected business relationships in this paper are based upon a study of Kanthal AB's (carried out 2002 with 14 interviews) and CH Industry AB's (carried out 2005 with 5 interviews) utilization of ERP systems. The case studies have also been revised with five complementary interviews during 2008. At this point some personnel have left the companies as well as been replaced by new individuals. In these cases both the new and the former staff have been contacted, via phone or email, to complement the earlier collected data. The cases have also been shortened and clarified to fit the purpose of this paper.

## KANTHAL'S NEED FOR A NEW ERP SYSTEM

Kanthal AB, a Swedish industrial company within the Sandvik Group that produces heating components, Have 1,500 employees and a 2,500 MSEK turnover. Kanthal is a global actor with more than 20 subsidiaries worldwide and a large number of partners. In the late 90's Kanthal utilized a legacy system and they were facing the Y2K problem. Besides the need for an ERP system that would not have a problem with the Y2K, Kanthal's IT staff also felt that the existing legacy system did not develop in a direction that was beneficial for Kanthal's business. In this process they scanned potential IT-providers and the ERP systems they offered – a search that resulted in two main candidates; the dominant German ERP vendor SAP and Swedish Intentia (a ERP vendor that was acquired by Lawson 2006). SAP did, however, make some changes to their offer in the last minute and this made Kanthal's IT staff uncertain about SAP as a stable provider and that's why the selection became Intentia and their ERP system Movex.

### CUSTOMIZING A STANDARD PACKAGE

Once the ERP provider was selected the hard work with getting a functional and suitable ERP package began. Kanthal was moving towards a process oriented workflow and that should be supported by the ERP system. A Intentia representative described that 'Kanthal wanted a production system', i.e. the initial aim was to get a ERP system that supported Kanthal's procurement, managed the material- and resource planning, and logistics. The HR module was initially kept out of the project given that the CIO had earlier experiences of how difficult these applications are to implement.

Kanthal's intention was to go with standard solutions as far as possible but there was one fundamental problem with the available Movex modules and their best practices. Whilst traditional industrial production means that several components are assembled to a final product, Kanthal makes several products out of one large metal alloy. Whilst a manufacturer often have thousands of articles that together makes up a number of products, Kanthal based their production of a limited number of alloy's that together made up a product flora of thousands products with different dimensions, qualities, and so forth. That resulted in a large number of product codes that have their origin in one material – i.e. based upon a reverse logic to a traditional manufacturer. This meant that Movex had to be further developed to deal with Kanthal's production. In the end, when all necessary changes had been made, Movex had more than 200 customized adjustments.

Kanthal's IT-manager that handled the implementation of Movex mentioned that the errors that was encountered when Movex was implemented, and during its start-up phase, was mainly problems that had their origin in these adjustment. Kanthal's customer contact at Intentia admitted that these changes were necessary, but Kanthal was not an extraordinary case. Changes are made in most projects. Even if some problems were encountered in the start-up, Kanthal seem overall pleased with their new ERP system. Kanthal's Movex Manager described that Movex 'should support our business considerably better than our old information system and it does. To our favor, this has developed very well!' A couple of years after Kanthal's implementation of Movex Intentia launched a steel module that could deal with alloys becoming several products. This was something that Kanthal's IT-manager thought was a result of Kanthal's demand for an application that had this 'reversed logic', i.e. which made several products out of one alloy.

### CONSTANT IMPROVEMENTS

Once Movex was implemented Kanthal did not settle, instead they continued add functionality as inter-organizational connections via EDI and a web-shop. They also upgraded Movex as soon as Intentia had a function (called multiple unit coordination) that allowed Kanthal to integrate other plants into their ERP system. When other actors, as other plants and partners worldwide, were getting access to Movex the need for 24/7 availability also become evident. To achieve such constant availability, Kanthal utilized the Sandvik Group's IT-support and moved their servers to Sandvik's centralized server park. By doing so, Kanthal is now constant and worldwide available securing that orders and production runs efficient and uninterrupted. All made possible due to Intentia and their Movex ERP system.

## CH INDUSTRY'S ACQUIRING OF A ERP SYSTEM

CH Industry was founded by Carl Hellberg 1948 as a small supplier of welding parts to Munktells AB, the company that later became Volvo Construction Equipment (Volvo CE). Today CH Industry has growth to a company with more than 70 employees and with a stable customer base with *Fortune 500* companies as Volvo Construction Equipment, Ericsson and ABB. CH Industry is nowadays specialized in the production of metal products in small and medium batches, a segment where the competition from low-cost countries is not that strong.

CH Industry's present CEO and owner, Morgan Lindberg, is a grandchild to Bengt Lindberg who became a partner to the firm in the early 50's. The firm has thereby family ties back to the early days even if today's employees are mainly hired labor. The majority of employees at CH Industry are blue-collar workers and the administrative overhead are kept to a minimum (only 9 out of 70 employees); something that seems to be the result of the company's history as a small private owned company and lately due to the implementation of their ERP system. The company had e.g. a 70 MSEK turnover at the time of the case study 2005 and they continue to have a stable growth with a 115 MSEK turnover 2007.

The early business with Munktells AB and later Volvo CE has been nurturing when it comes to expansion. CH Industry had 25 employees 1980, 36 employees 1996, 55 employees 2005, and 70 employees 2008. To support a more efficient production and a continuous growth CH Industry invested in the ERP system Movex from Intentia 2001. Prior to the investment an investigation of potential ERP vendors was made and after some initial contacts and negotiations there where two candidates left; Intentia and Monitor. Whilst Intentia was the world's seventh largest ERP vendor at that time, Monitor was a smaller ERP vendor primary acting on the Swedish market focusing the needs of small and midsize companies. There were also differences between the two ERP systems – Movex from Intentia was the more complex and extensive ERP system but also the more expensive choice.

### THE SELECTION OF AN STANDARD ERP SYSTEM

The final selection of the ERP system was not an easy decision. Even if Movex was considered a more competent solution it was also a more costly technology. There where though reasons to consider Intentia as a supplier given that they seemed stable and that they had a great customer base, a customer base that generated new best practices in the ERP system. With the customers that Intentia had, CH Industry was sure that the ERP system would be further developed in a positive direction. The IT-manager at CH Industry described that 'given that Intentia had [examples of a couple of large companies] we do not need to worry that Movex won't be developed further'. Given that Movex already had well respected, and probably also demanding, companies as customers CH Industry's CEO and IT-manager believed that Movex also would be an assets in the future. The IT-manager described the selection and implementation of the ERP system as a huge task and he pointed out that 'you don't want to implement a new system like that after five years'. Given that CH Industry's management planned for further expansion, as well as increased customer expectations, it was important to get an ERP system that also would stand the test in a future more demanding situation.

CH industry started with acquiring modules for the ordering, production and logistics 2001 and they added the HR module the year after. In contrast to Kanthal, CH Industry did not make as many adjustments. CH Industry did instead complement the ERP systems with other information systems.

Thus, besides the ERP system CH Industry used a Lotus Domino Document Management system for storing and handling the customers' drawings. This information system was not integrated with Movex given that would be too costly, but references in the production descriptions displayed by Movex meant that the workers could see drawings of what they should produce using a Microsoft Imagine application.

### EFFECTS OF THE ERP SYSTEM

Once CH Industry had the enterprise system from Movex up-and-running changes could be done to the organization. One radical change was to reduce the staff that dealt with orders and transformed them into manufacturing instructions. Given that Movex made the MRP runs automatically the order staff was cut down from six to three persons (and today they are only two and a half persons dealing with the order as a result that they have learned the system and hence have became even more efficient). With Movex CH Industry could also go from having daily production schedules to having the production schedule updated four times per day. The production thereby became more flexible and it also became possible to alter scheduled production when suitable.

Movex have just not only reduced the need for order handling staff, it has also made the production more efficient. One example is the welding department where the plant holds four rigs where automatic welding takes place. The rigs and the welding equipment can all do the basic welding tasks but there is only one rig that can do more complex tasks. Traditionally the welding was only seen as one production task and this lead to that production sometimes was stopped given that a demanding part had to wait for the advanced rig to complete a standard component. By giving the four welding rigs different identities in Movex the bottle neck is removed. Movex takes the differences between the rigs into consideration when doing the MRP runs and the advanced rig can thereby be used as efficient as possible.

Movex also became a central factor when it came to CH Industry's quality work. As a supplier to the vehicle and telecom industry, standards as ISO9000 and ISO14000 must be followed. Movex is continuously mentioned in the standard documents that describe different procedures but the ERP system also has functions that can increase the quality itself. The Quality Manager described that 'quality is A and O [and] Movex is a part of the quality work. [Movex] was expensive, not to mention the yearly fees, but it has made the production more effective'. Movex can e.g. automatically alarm when a tool has made 5000 holes and thereby needs to be replaced. The Quality Manager sometimes referred to Movex as 'the most important machine we have'. Today CH Industry has hired a new Quality Manager and his primary task is to help the company achieve TS16949 (an extension and development of the ISO9000 quality standard) which is the current requirements in the industry and here Movex procedures will be even more apparent. Through the standardized procedures in Movex the workers can easier rotate between tasks and this prevents the production to stop due to a key worker´s absence.

Movex also allows CH Industry to be interorganizationally connected to all its customers via EDI and this made all the transactions running smoother and orders being handled with quicker. Some of the larger customers require some form of interorganizational connection if the supplier shall be considered an 'A-supplier' and with Movex this problem is solved. The former IT-manager also describes how, even if Movex was more expensive than Monitor, another company that implemented the less expensive Monitor spent three months and 250.000 SEK on a new EDI connection whilst CH Industry only needs a day to get an EDI connection to a new customer. Movex has thereby offered pay-offs given that is a more complete ERP system. If CH Industry's competence is not enough to deal with the technical aspects of getting Movex interconnected with their partners, their ERP vendor Lawson (i.e. former Intentia) supports them when they discuss the technical matters with e.g. a supplier and thereafter helps CH Industry to get the necessary technical interorganizational connections. CH Industry can thereby focus on their business activities. But Movex, and the support by Lawson, does not only help CH Industry to fulfill formal aspects as supplier evaluations; it is also a proactive support when it comes to be evaluated by the customers correctly. The previous Quality Manager mentioned that Movex signals when a new order with a delivery date shorter than contracted arrives. In these cases one of the Customer Managers can contact the customer and inform them that they have registered an incorrect order. With this function CH Industry avoid getting bad delivery statistics due to inaccurate specifications from the customer and the customers also notices that CH Industry is a conscious and active supplier. All these functions is based upon the best practices that comes with Intentia's (i.e. Lawson's) ERP system Movex.

### A PROSPEROUS FUTURE

CH Industry has not migrated from Intentia's Movex to Lawson's Lawson M3 given that the CEO do not feel that a upgrading will give that great benefits. What has happened since Lawson acquired Intentia is that they have stopped supporting the salary-function in the HR-module but this is not a central feature in CH Industry's business so they have purchased another software for this task that, according to the CEO, 'was even better and easier to use'. Besides that, Movex has performed well even if the number of sales and hence transactions have had a steadily increase. In 2008, Movex handled an order pace of approximately 20,000 order-lines per week. At the time of Movex implementation CH Industry's IT-manager also believed that their largest customer, Volvo CE, would require access to CH Industry's data to be able to virtually integrate their production into Volvo Construction Equipment's own. That has though not been realized; Volvo Construction Equipment has instead elaborated with new queuing-techniques where CH Industry is given access to some of Volvo CE's production data (i.e. a form of VMI).

The CEO describes that a new change of ERP system no longer feels as needed as when they implemented Movex given that it does a good job. If there would be a change in the future there can be an upgrade or a change of ERP vendor – they thereby do not feel obligated or locked-in by Movex even if they are pleased with how the ERP system and the support of the IT vendor works today. A minor flaw is that Movex is experienced as more function-oriented than process-oriented and that is where an future update can make a change. Besides that, Movex is doing its job and the investment that seemed huge 2001 has paid-off.

## DISCUSSION

ERP systems are standardized company-wide information systems that are offered by ERP vendors. The functioning of these ERP systems are partly adjustable to the ERP vendor's customer's needs, i.e. usually some form of technological adaptation takes place. These regular adaptations are though positive for the ERP vendor that, through these changes, updates the ERP system and thereby makes it even better. The two cases presented in this paper are based upon the same IT-provider, the ERP vendor Lawson (former Intentia), and their ERP system Movex (today labeled Lawson M3) but this seem to be the only resemblance. Kanthal, that is a financial stable global actor belonging to the Sandvik Group, could afford to select an IT-provider that did not fully comply for their need of functionality but that seemed more reliable during the negotiations. When the decision to go for Movex was made, Intentia could not offer a best practice that supported Kanthal's production from one alloy to several products. This meant that before Movex was up-and-running more than 200 changes had been made, software adaptations that initial could cause problems but that was not that unusual according to Intentia's representative. This problem was of a temporary nature given that Intentia thereafter launched a Steel module. Given the experiences from the business relationship with Kanthal the ERP vendor Intentia could offer a new best practice to other customers – a feature that meant that the procedures that Kanthal had became standardized solutions (i.e. best practices) in the ERP system and hence made the risk for flaws and errors smaller given that what earlier had been a customized solution now became standard functionalities.

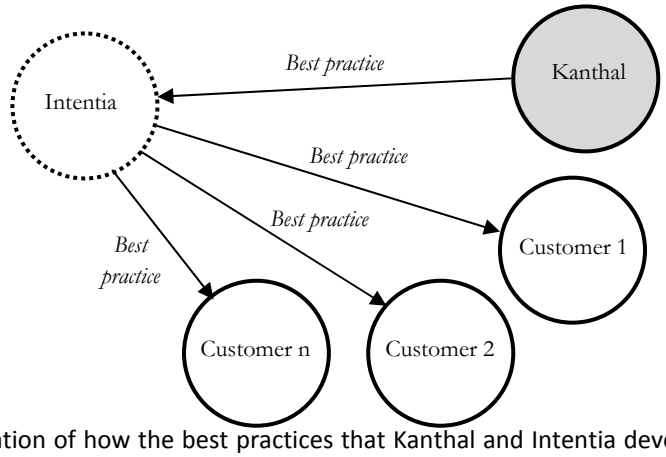


**Figure 3 –** An illustration of how the best practices that Kanthal and Intentia developed later could be utilized by the IT-provider's other customers

In the case of Kanthal new best practices was developed together with Intentia. Once developed these procedures became parts of a Movex Steel module. This means that the IT-provider (Intentia) could use the new best practices in other (present or new) customer relationships, see figure 3 above.

CH industry is on the other hand a SME with less financial means and they thereby do not have the same possibility to get a customized ERP system. However, CH Industry identified a possibility to get the best practices that larger companies had by selecting an IT-provider with large and successful customers. By assessing the ERP vendors in that way, CH Industry could get the same ERP system and best practices as its role model companies. Figure 4 below illustrates this approach by showing how best practices that Intentia had developed in their present business relationships could be utilized by CH Industry.

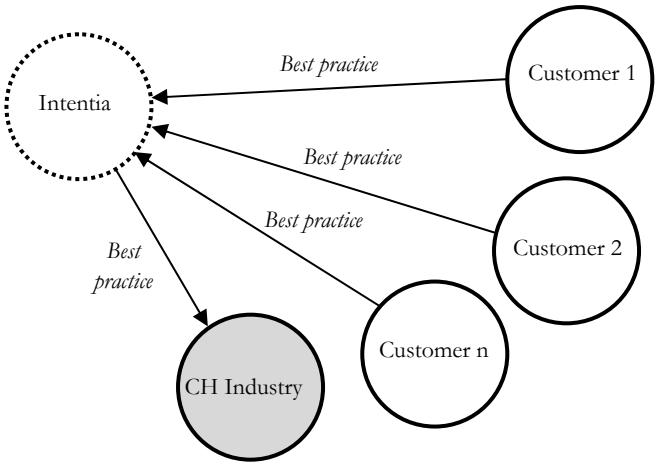


**Figure 4 –** CH Industry getting best practice from the IT-provider's customer relationships

The Kanthal case illustrates how the customer-IT-provider business relationship between Kanthal and Intentia (today; Lawson) leads to the development of new best practices that later becomes a standard feature. If Lawson later gets more customers with similar needs as Kanthal they have the possibility to sell the steel module that is partly a result of the business relationship with Kanthal, and that includes the best practices that Kanthal required. The adaptations made to the ERP system, based upon an established business relationship, can thereby be used in other business relationships.

The CH Industry case is then illustrating the reverse situation – a company that initiates a business relationship with Lawson given that they have other business relationships with companies that are perceived as having well developed best practices (that are believed to be manifested in the IT-providers ERP system). The strategy that CH Industry applied is based upon a (probably tacit) awareness of the importance of the interconnectedness of business relationships and the adaptations they bring. When choosing an ERP system it is not only the price of the system that are considered but other aspects are as important; like how the IT-providers customer network looks like (in this paper; what customers do the IT-provider have and how can that impact the company?). When a SME is selecting an ERP system and is choosing between two or more IT-providers the company can assess the IT-providers' customer base and find the one of them that have customers that can be considered role models when it comes to best practices (i.e. successful business process) and that most likely will demand regular updates of their ERP system. In the CH Industry case, the ERP vendor had a base of customers (including large firms) that aimed to be in the forefront when it comes to utilize technology and they thereby became an interesting partner. Another way of perceiving this is that the interconnected relationships were of great importance for the buying company and that it, at the same time, was a mean for the IT-provider to get a new customer.

By approaching a managerial decision as a ERP system selection with a network perspective that take other, interconnected business relationships (cf. Hallen et al. 1991; Håkansson and Snehota 1995) in consideration, it becomes evident that the IT-provider's connected business relationships influenced the buyer's choice of ERP system. Another way of describing this is that *a company can evaluate the interconnected business relationships to get suitable best practices* – i.e. what connected business relationship does the IT-provider have, what is the performance of the IT-providers customers, and what kind of best practices is the result of these connected business relationships? In contrast to just evaluating the ERP-vendors

segmentation of markets (see figure 1) a approach applying a network perspective does instead moves the focus to discrete, and existing companies, see figure 5.

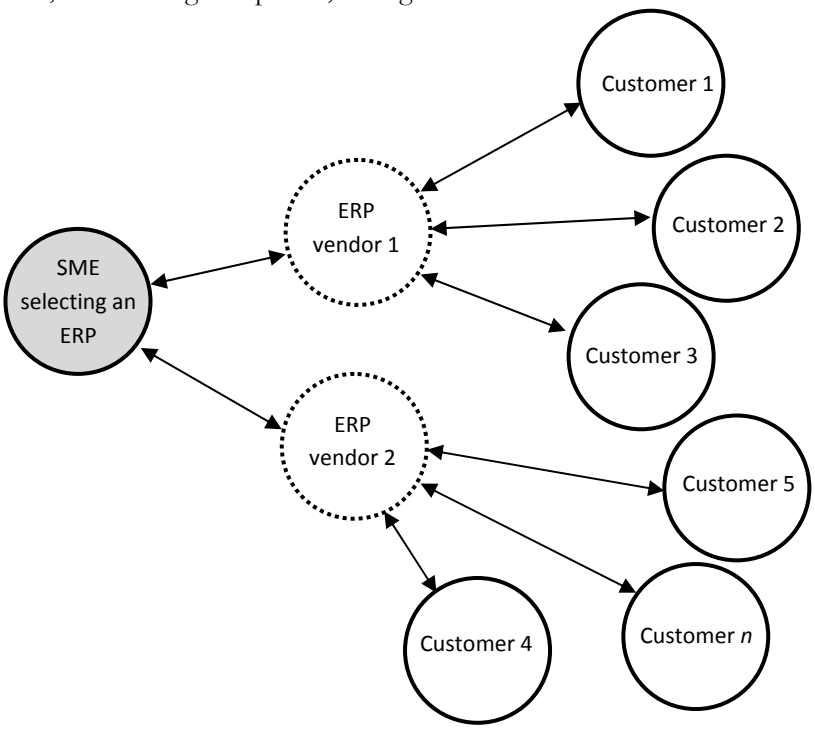


**Figure 5** – A alternative approach to ERP vendor selection; Which ERP vendor's customers' do have the best practices and will engage themselves in continuous developments of the vendor's ERP system?

In this article the benefits of selecting a ERP vendor with competitive customers have been presented and, following the CH Industry case, that such action can be worth the higher monetary cost that such system results in. It is also worth mentioning that an ERP project imposes a huge organizational change and that a more complex ERP system also requires more IT skills within the company. An alternative is that a service provider that can take care of the ERP system's maintenance is available but this also involves a cost. Thus, when assessing the interconnected companies more comparisons than the best practices needs to be done.

## FURTHER STUDIES

When choosing an ERP system it is not only the price of the system that are considered but other aspects are important, e.g. as in this paper were the importance of the IT-provider's connected business relationships are highlighted and the significance of the IT-providers customers' best practices. Further studies in this area can be to go deeper into the situation of a smaller company and its IT-provider and scrutinize the connected business relationships in-depth. Another interesting question is under which conditions it is beneficial for smaller companies to invest in the technologies developed for large corporations. The case presented a company with a mid-size production and a steady expansion; would other conditions be as beneficial?

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