Knowledge sharing with ERP - system within companies

Bachelor Thesis in Business Informatics

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Kunskapsdelning inom företag med ERP – system

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Abstract

We started this research because we had some wonderings concerning knowledge sharing with different business systems. Today in businesses it is important to share knowledge to become more effective in their work. To be able to fulfil customers needs fast and always being professional when giving information that considers businesses products and services, we believe that the ERP – systems make the information flow faster and connect all departments of the company. This will increase company’s communication and knowledge sharing.

We have interviewed the managers in two different companies; one that produces electric installations material, and one who is selling services and knowledge concerning business system.

This research showed how the ERP – systems works, how it connects all the parts and processes of a companies. It is an important tool for running an effective company and to be able to use and share the knowledge of the employees within the company in the most efficient way.

We found that an implemented ERP – system creates new knowledge for the users and starts to share old knowledge in a more efficient way. As well as it connects all the processes in the company and the employees gets a picture of the company and their roles. This is a great benefit for the company; it will make them stronger than their competitors and provide them with better teamwork for an effective and better future for the company.
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Sammanfattning

Utgångspunktarna för detta uppsatsarbete är våra funderingar om kunskapsdelning med olika affärssystem. Idag är det viktigt att dela kunskap inom verksamheter för att bli effektivare, på så sätt som att möta kundernas behov snabbt och alltid vara professionella vad det gäller kunskaper som rör verksamhetens produkter och service som erbjuds kunderna. ERP – systemet gör informationsflödet snabbare och sammankopplar alla avdelningar som använder det så de kan kommunicera och dela kunskap inom verksamheten.

Vi har intervjuat anställda på två olika företag, ett som tillverkar elektriskt installationsmaterial och ett som säljer sina tjänster och kunskap om olika affärssystem.


Våra slutsatser är att ett implementerat ERP – system skapar nytt kunskap för användarna och den gamla kunskapen börjar delas på ett mer effektivt sätt. Efter implementeringen av systemet sammankopplas även alla processer inom verksamheten, de anställda får en klarare bild av verksamheten och deras roller i den. Detta är en fördel för verksamheten som gör dem starkare än deras konkurrenter och gör det möjligt för de anställda att arbeta tillsammans för en mer effektiv och bättre framtid för verksamheten.
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1 Introduction

This chapter describes some background of ERP – system (Enterprise Resource Planning) and knowledge sharing. It will give the reader information why we will write about the ERP – systems and how it shares knowledge. We will also describe our problem, our main research questions, and our purpose with this research.

1.1 Background

We have noticed that companies are growing much faster now days and the challenge between companies is getting harder. Companies are developing in many ways and improving. One way is to implement right business system that suits your company. Another important issue is to consider how knowledge is shared within the company. Knowledge sharing is an important issue now days and it is possible to share it much faster then earlier because we have technology that makes it possible and easier.

One way to share knowledge within companies is by using ERP – systems. Further explanation of what ERP is and how it is used when sharing knowledge will be explained in the chapter ERP - system (Chapter 3.6 ERP – system).

ERP – systems are an important part of many companies today. All companies have information that flows through their organizations. These business systems help them share information and knowledge faster, in this way business become more efficient. This thesis will include definitions and explanations of knowledge sharing by ERP – systems.

The employees need to share their knowledge with each other; it can be done by sharing significant information and data. By sharing knowledge and also cooperate with the co-workers after a while people start to trust each other. This will result in better team work and cooperation. To make the cooperation and knowledge sharing easier people can use different systems.

We were interested from the begging to get more knowledge concerning ERP – systems and what its benefits are. And when we have looked at some old written thesis at our college; we could not find that anyone has written about knowledge sharing with ERP – systems. Our decision was to write considering knowledge sharing and ERP – systems.

1.2 Problem discussion

It can be difficult for companies to be efficient in their work without good communication inside the company. Companies need to share their knowledge between each other to achieve the common goal and use all their resources effectively.

Companies are then trying to find different solutions to improve their knowledge sharing inside the company; one solution can be using ERP – systems. Some companies only need the system for one department and some companies need the system for all departments. This depends on the size of the company, as well as if the company have other systems that support their business.
Further one reason why companies choose to only use some parts of the ERP system is the high costs, which is a disadvantage. It is expensive to buy and implement an ERP – system in companies. Often small companies do not afford to buy a complete ERP – system, therefore they have the option to buy and install only parts of the system. These systems have parts that are building to work separate as well as together. This gives the company’s the option to choose the part of the system they need or afford.

Systems can be complex and time demanding to install. This can be an advantage and a disadvantage for a company. The advantage is that the system covers all the business processes if you choose so, therefore you need time, and instead you will get a really qualitative system. The disadvantage would be that you do not have time to do a proper installation, which can result in non-profit consequences.

When we choose companies to interview, it is necessary that companies use ERP – system. They will help us to understand how ERP – systems work and if it helps them share knowledge.

Problem delimitation

Knowledge sharing will be the main part of this thesis. When collecting information concerning knowledge sharing we discovered that this subject is huge, and therefore we included ERP – systems as well. We want to find out if and how these systems helps knowledge sharing in companies.

We need to delimit it to only some ERP – systems, because they are many and we do not have that much time to look at all. Therefore we found two companies that were close to us and using two different ERP – systems while sharing knowledge.

We decided to interview employees in two small companies in Småland. Our research will be qualitative, which means we need to be able to visit the companies and keep contact with them through the whole writing process.

Target group

The target group for this thesis would be people that are interested in ERP – systems and knowledge sharing. As well as people that woks in companies with different IT – systems and process orientation. Even readers that are not familiar with the academically expressions of some words and subjects, we will give explanations and examples so they can understand. The reader do not need to have any of the backgrounds mentioned before, it is enough that the reader are interested in ERP – systems and knowledge sharing.

Our main research question:

- Does ERP – systems help companies share knowledge within their organization?
  - How important it is to share knowledge within the company?
  - What is the ERP – system’s role in the company?

These are our questions we will focus on and try to answer while writing our thesis.
1.3 Purpose
Our purpose is to find out if ERP – systems help companies to share knowledge and how important is knowledge sharing for them. We will as well try to give some advice to companies we interviewed concerning their ERP and knowledge sharing in the future.

1.4 Chapters that our thesis contains

1. Introduction
This chapter includes the background of our thesis and explains why we will write about ERP- systems and knowledge sharing.

2. Method
In this chapter we explain how we will gather data.

3. Theoretical framework
By reading this chapter the reader will receive information about knowledge, knowledge sharing, and ERP – system and sharing knowledge with ERP – systems. We will explain our definition of knowledge as well in this chapter.

4. Empirical studies
Chapter four consist empirical studies, we will describe different ERP – system that are used in the interviewed companies. In this chapters reader can found information about the interviewed companies also.

5. Analysis
Here we analyse the data, compare and criticize the empirical data with the theory we have gathered.

6. Recommendations
In this chapter we will give our personal recommendations for companies’ further work with their ERP – systems.

7. Conclusion
This chapter contains our conclusion of the thesis.

8. Personal comments and thanks
Finally the last chapter includes personal comments and thanks to people that have been a part of our research.
2 Method

This chapter describes how we have chosen to gather data, why we have chosen to gather data a certain way and what method suits our research best to fulfil our purpose of this thesis.

Declarative and describing knowledge

Our thesis will include both declarative and describing knowledge. The declarative knowledge is our theoretical studies there we explain the main subjects of our purpose with this theses. Examples are the chapter knowledge sharing, where we will explain and give examples of what it means and how it can be shared. As well as describing what ERP – system is and how it works together with knowledge sharing.

After collecting all the data we need, we will relate and compare the theoretical studies with empirical studies. The describing knowledge will be the data that we receive when visiting and interviewing the employees in the companies.

2.1 How we will collect data

The information we will gather while doing the interview we believe will give us more knowledge about the companies, what knowledge sharing means and really how important it is in practice. Moreover we are interested to find out how it is in the real life. We will focus on gather data that is newer, directly from people that use ERP - systems and are involved in knowledge sharing. We choose to interview GARO AB and SYSteam because they are different kinds of companies and use two different ERP - systems. Both companies are middle size companies that are placed in Småland, the well known part of Sweden where new companies are developing and growing. GARO AB is a producing company using Movex and SYSteam is selling their services and knowledge using the ERP – system Jeeves. We choose to investigate two different ERP – systems, because of limited time.

The best solution to get a deeper understanding of the company is by interviewing them, meet the contact person face to face; this will give us an idea how interested they are to help us and how much information they are willing to reveal. After the interviews we will look at the answers from both companies. Rewrite the information we received and compare it. We will analyse their answers comparing to the theory in the last part of this thesis and give the reader a conclusion of our thesis.

2.2 Gather data from Internet and literature

Information concerning theories, definitions, ERP – systems and knowledge sharing we will collect from literature, Internet and articles. The secondary data (Data gathered from books and Internet) will help us to assemble necessary information before we meet the companies.

Here are some words that we looked at while searching information on the Internet:

- ERP – system in companies
Knowledge sharing by the ERP - systems
Knowledge Movex (ERP – system) Jevees (ERP – system) Garo AB SYSteam

2.3 Different types of interviews
The interviews will help us to get answers to our questions. We will gather information by interviewing two managers of these companies. We will first send the questions by mail, in this way they will be prepared to answer on our questions. We will as well contact them further by phone or mail if we have any more questions.

There are three different types of interviews we have reviewed:

- Standardized interview

This type of interview involves you preparing the questions in advance and knows in which order every question is to be asked. This method fits best when gathering quantitative data (Andersson, Claesson & Öman, 1997).

- Non-standardized interview

This type of interview mean that you can ask prepared questions in any order that suits best for collecting good answers. The interview is flexible and adjustable to the situation; beside that it is a method for gathering qualitative data (Andersson, Claesson & Öman, 1997).

- Semi-standardized interview

This type of interview is a mix of the two interview types above. When using semi-standardized interview you can have prepared questions before the meeting. During the interview non – prepared questions can be asked. Result of this course of action gives you more information about the current subject. This method for gathering data is said to be flexible and adaptable to the situation. Used for gathering qualitative data (Andersson, Claesson & Öman, 1997).

We have chosen to use the last type of interview, the semi-standardized type. This method is suitable for our thesis research because we have a subject that is complex. It would be impossible to fulfil our purpose without the possibility asking non - prepared questions in addition to the prepared and being flexible.

Our knowledge about the companies and their background is poor and we need to collect relevant information concerning our purpose. If we only asked prepared questions then the collected information would be diffuse. Being able to have a flexible discussion will give us spared information. This explains and clarifies to the reader how secondary data is gathered and one reason why we choose to gather data in this way.
2.3.1 How we prepared for the interviews

There are different stages to go through when preparing for the interview. The stages we went through defined by Driscoll (2006) are:

Stages

- Agreement
- Preparation
- Interview
- Reconstructions

The first stage is agreement for the meeting; it should include identification of you self by the name, short, general story about you and what you are doing. Here we presented our self and what our purpose with the meeting is, why we want to visit their company.

The second stage is preparation. Research as much as possible about the company, the person you are interviewing and are well known with the subject you are writing about. It is important to have the questions prepared in written form and to take notes. We gathered information concerning the companies on the Internet and also prepared questions we want to ask that will help us with our work.

The third stage is the interview. Start with casual conversation to relax, the questions should be short and open. Give the respondent time to listen and answer. If needed give the respondent information about you, for example your telephone number. When we visit the companies we will tell about our selves first and what we study and why we want to write about ERP – systems and knowledge sharing. We interviewed Karl Johan Wibring, operational manager at SYSteam and Lars Kvarnsund, IT manager at GARO AB. Our plan is to do one visit at each company and interview the managers. Additional questions and contact with Mr. Wibring and Kvarnsund will take place by mail.

Finally the last stage is reconstruction; as soon as possible after the interview you or your group should rewrite the hand written notes of the interview. This will help you to interpret the notes in the right sense. We will also defined the most important information from every interview and write it down. After the interviews we will read through the documented data we collected and rewrote it in the way we interpret the information they gave us, this interpretation will be presented in the empirical studies.

The last thing to consider is to thank the respondent and when finishing the paper sends it to him or her, it will be appreciate. In our group we wrote a mail to the companies and thank them as well as we told them we will send the last version of our thesis to them.
2.4 Qualitative studies – Reliability and Validity

As mentioned before we will interview the managers, and an interview is a qualitative study. In qualitative studies two factors are important to consider, reliability and validity. When doing a qualitative study you work continually with reliability and validity through the project. An interview makes it possible to gather variable data; we get the latest updated information from people that are working with ERP – systems in practice. These managers are reliable, and in a qualitative study high validity assumes high reliability. In a qualitative study we cannot measure the reliability with numbers; therefore we need a high validity. We must describe that data is gathered in a systematic and honorable way. While doing interviews we need to interpret the people we interview and the information they share with us. When the thesis is finished it is important to have described the process of writing the thesis and the result, and always relate to the reliability and validity (Gunanrsson, 2002).

The managers we will interview have knowledge concerning ERP – systems and knowledge sharing, they have many years experience of this and have worked with these subjects in practice, and this makes them a reliable source. We will control this by first send them a document with questions and then meet them to see if their answers are likely to the information we collected from literature and their website. After the interviews we will as well contact them again to see if anything has changed in their answers. We are two persons that will do the interviews, both will document the interviews, in this way our collect data will have more validity. More documents we have and for a longer period increase the reliability and validity in our research.
3 Theoretical framework

3.1 Knowledge
This chapter describes definitions of knowledge so the reader can get an idea what knowledge can mean and how extensive the word is.

3.2 What is knowledge
Knowledge is a concept that is very hard to define. There are many different definitions of knowledge. Still there is no one that can say or put a finger on what knowledge really is.

People have different opinions and ideas concerning the definition knowledge. In addition, the readers also have different thoughts of knowledge, how you define knowledge another person can disagree and define it differently.

Knowledge is shared between and by people in companies. It is important to understand the definition of sharing knowledge, then we can understand how important it is for companies and this is our purpose of this thesis.

3.3 Different definitions of knowledge
The first definition is from the Oxford English dictionary (1999); they define knowledge as the “facts, feelings or experience known by a person or a group of people”.

Bender and Fish (2000) consider that knowledge is based on information transformed and enriched by personal experience, as well as belief and values with decision and action relevant meaning.

Bender, Fish (2000) and Barker (1999) claim that knowledge is something we exchange between each other. We agree with them that knowledge is something that is transferred from one person to others. It can be information within companies that is necessary to be shared between employees. As well as knowledge which one person has and needs to transfer to another person. This information becomes knowledge for the other person who is receiver.

Knowledge is seen as the most important strategic resource in organizations. The company’s management who handles and control internal knowledge is considered critical to organizational success. If organizations have to capitalize the knowledge they possess, they have to understand how knowledge is created, shared, and used within the organization. Knowledge exists and is shared at different levels in organizations (Minu, 2003).

These definitions are few of thousands explanations that can be found in the books, articles and on the Internet. When people read these definitions of knowledge, they will have different opinions and interpret them on their own way. Two persons reading same information can interpret it differently. The same information has different meaning for every person. Therefore it is complex or impossible to have only one definition of knowledge.

There are different categories of knowledge. Weiss (1999) defines these categories as:

Rationalized knowledge is general, context independent, standardized and public. For example methodologies for conducting consulting projects.
This knowledge can be regarded as the explicit knowledge; it is easily to share, collect in written form as well as easily identified, because it is knowledge that an individual can see.

**Embedded knowledge** on the other hand, is context dependent, narrowly applicable, personalized and may be personally or professionally sensitive. This knowledge can be compared with the tacit knowledge, which is hard to codified and learn (Weiss, 1999).

By collecting and synthesizing embedded knowledge the firms are rationalizing the knowledge. This is done to standardize and have it widely applicable. The companies have the possibility to rationalize the knowledge by codifying individual experience, expertise and de-coupling knowledge to its origin basis (Weiss, 1999).

### 3.3.1 Tacit and Explicit knowledge

Another category is concerning tacit and explicit knowledge. In this category the authors have different opinions about the significance of tacit and explicit knowledge.

**Explicit knowledge** is knowledge which can be articulated and written down. Therefore, such knowledge can be externalized, consequently shared and disseminated (Nonaka and Takeuchi, 1995).

**Tacit knowledge** is subconscious. It is understood and used, but is not identified in a reflective or aware way. Tacit knowledge is developed from the practical environment, it is highly pragmatic and often specific to situations it has been developed in (Nonaka and Takeuchi, 1995).

According to Polanyi (1966) tacit knowledge is implied but not actually documented. People “know” it from experiences or have learnt it from other individuals. Explicit knowledge is externally visible and documented (Bernus & Kalpic, 2005).

Skryme and Amidon (1997) define explicit knowledge as formal systematic, objective and codified in words and numbers. Tacit knowledge is intangible.

From these definitions mentioned above the difference between tacit and explicit knowledge is colossal. Tacit knowledge is personalized and learned from experience. For example: to ride a bike or to swim. If you know how to ride a bike then you can explain for another person how to do it. You describe for the other person to get on the bike, start to press the pedals. Now you expect the person to know how to ride a bike. A person that has never ridden a bike still does not know how to ride it. He/she will maybe loose the control and fall down. This person will learn how to ride a bike first after hi/she tries a few times and even fall ones or twice.

The explicit knowledge is easier to explain and transmit. For example learning how to calculate math. By reading from a math book and calculate numbers, the explanation is already documented and this knowledge does not need to be transferred to personally.

When sharing knowledge within companies, employees can for example have a meeting to discuss the new ERP – system. It will be explained how the new system works, what can be improved by using it and described how to use the system. This is an example of tacit knowledge being shared. When you want to share explicit knowledge, the employees will receive a document containing information concerning the ERP – system.
3.3.2 Process of knowledge conversion through four modes

According to Nonaka and Takeuchi (1995) the process of knowledge conversion proceeds through four different modes. We will explain how tacit and explicit knowledge can be shared by each mode.

**Socialization:** Is a process where the tacit knowledge is transmitted between individuals and is accomplished through observation, imitating, practice and coaching (Nonaka and Takeuchi, 1995).

**Combination:** Is the process where explicit knowledge is created and exchanged, during the meetings or conferences (Nonaka and Takeuchi, 1995).

**Externalization:** In this phase the tacit knowledge turns into explicit knowledge through documentation (Nonaka and Takeuchi, 1995).

**Internalization:** A person internalizes explicit knowledge to create tacit knowledge (Nonaka and Takeuchi, 1995).

When discussing these modes we connect some to ERP – systems, one of them is externalization. We will give an example of externalization: When a person, A, who is working at the production department, is having a new idea how he/she will create a new and less costly product. Person A then has knowledge in his head, called tacit knowledge. When explaining the idea to other employees, person A will do that through documented codification that is called externalization. Afterwards person A save this codified data in the database and other employees now have access to person A’s knowledge in a documented form. Now the knowledge is shared.

3.4 Knowledge sharing

This chapter describes what knowledge sharing is and how people can share it.

3.4.1 What is knowledge sharing

Zeldin (2004) defined knowledge sharing not like sharing a cake - you do not come away with half a cake each. Knowledge Sharing is synergistic. In other words - you each enter into a conversation with a whole cake and each come away with an even bigger cake.

According to Robertson (2004), the meaning of knowledge sharing is “to encourage the sharing of knowledge or information between members within an organization”.

It is important to share knowledge within an organization for the development of employees. They can gain knowledge of latest technology or how they can improve the team work and production. If employees have knowledge concerning production and are aware of their work assignment, the production will increase. The organization will extend if the employees, management and production develop and improve (Robertson, 2004).
It is not easy to share knowledge. If the staffs of an organization are told to share their knowledge there will be confusion. The employees will show passive resistance or hostility and are not willing to share their knowledge. It can depend on several reasons; the employees do not trust everybody in organization or they are not willing to share their personal knowledge with co-workers. Employees want to hold on their knowledge for the possibility to improve in the company and receive good references (Robertson, 2004).

When an employee chose not to share his/her knowledge with others, they will probably be left out. The reason is because the co-workers feel that hi/she is not willing to share knowledge and be equally productive. Since the fast development of companies, technologies and products, employees have to work abroad and be able to adapt to new situations. They need to trust their new co-workers and share their knowledge; otherwise their cooperation will not succeed (Suarez, 2006). According to Suarez, 2006 the main reason why employees does not share knowledge depends on the workers being afraid loosing their job. The employees feel if they share greatly of their knowledge, someone else can take advantage of it. One example is; one of the employee’s did a research for the company, which took him/her weeks. After spending a long time doing the assignment, the employee wants to take all credit for himself. Therefore he/she will not share that knowledge with other co-workers.

Chen (2006) has defined knowledge sharing as "activities of transferring or disseminating knowledge from one person, group, or organization to another". A poll of over 1,600 U.S. managers revealed that knowledge sharing is an important process of knowledge management. Gurteen (1999) claims that knowledge sharing culture should be created in the organization. Which includes employees working effectively together, collaborates, share knowledge and information with each other. The employees need motivation for knowledge sharing. One solution is to reward them and another one is to inform the employees why it is important to share knowledge, every individual can gain form sharing their knowledge. Employees need to understand that they will be able to work more efficient, develop personally and make career development.

When sharing the knowledge within the company, best way is to communicate with each other, for example communication between employees and managers. Not every company has the possibility to communicate person to person; instead the knowledge is shared by a system. This system can be an ERP - system which transfers the knowledge through the company. The management gets possibility to control their organization, business processes and employees (Gurteen, 1999).
3.4.2 Factors that influence knowledge sharing

This figure illustrates how to handle knowledge sharing in the organization, why create and share knowledge within the company. According to Nonaka and Takeuchi (1995) a company can not share knowledge without individuals. Creating new knowledge in the company is an important aspect for the company’s development and effectiveness. The individuals have to share, communicate and cooperate with other individuals and groups in the company.

The first circle in the pyramid “Nature of knowledge” represents the tacit and explicit knowledge. Tacit knowledge is the knowledge that can not be codified and transferred. The explicit knowledge on the other hand can easily be shared, documented and codified. The nature of knowledge includes value of knowledge, which means the individuals share and receive knowledge. Moreover they value knowledge additional, it effects their decisions of which knowledge need to be shared, when and to whom (Stenmark, 2001).

The second circle on the left side in the pyramid is named Motivation to share. It explains that people are not willing to share their knowledge without being personal motivated. Stenmark, (2001) maintains there are internal and external factors that influence the motivation of sharing knowledge between individuals. One of the internal factors is knowledge as power. The individuals who have greatly knowledge can use knowledge as power for control and defence. People can be motivated to share their knowledge in order to receive new knowledge. The second factor in this circle is reciprocity, which means give and take. When people realize they are sharing knowledge with others, they receive more, as Gurteen, (1999) claims; individuals develop further by sharing knowledge.

One of the external factors is Relationship with recipient; the relationship effects the motivation for sharing knowledge. If the sender in the relation does not trust the recipient, he/she will not share any of their knowledge or information. The other factor is reward for sharing. It means that employees will probably share additional of their knowledge if they are rewarded later on (Ipe, 2003).
The last circle of the pyramid is named Opportunities to share. The employees need to have the opportunities to share their knowledge. If they do not know how to share their knowledge, the organization can have training programs for the employees and team work. Otherwise they can have technology-based systems that facilitate the sharing of knowledge (Minu, 2003).

All the parts of the figure that we have explained above, that is Nature of knowledge, Motivation to share and Opportunities to share need to work well in a company and be included in the process when improving the knowledge sharing in the company. If one part is missing the knowledge sharing can not be implemented in an effective way (Minu, 2003).

3.5 Our definition of knowledge sharing

We define knowledge in our thesis as information which is relevant for the company. As well as its working ability and all the information that flows through the company. The information that is transferred from one person to another is knowledge sharing. In addition knowledge is information and data that the database contains. When employees use the data and send it between each other, they are sharing knowledge. They learn from each other, employees giving other employees their own knowledge, information they have concerning their work, customers and company. When giving that information to others in the company, knowledge is shared, because this information is considered as knowledge by other employees, which is important for the employees to succeed with the work.

For example: when making a new strategic plan for creating new products you will need to share information and decisions that have been taken. This plan needs to be shared with the employees. When saving the information in the database of the ERP – system, information will be available for all the employees. The employees get information fast and have access to it from their own working place.

3.6 ERP – system

This chapter describes what the ERP – system is. Movex and Jeeves are the two business systems we will come in contact with while writing this thesis.

3.6.1 What is ERP – system

In today’s business environment were the competition is high, everything have to be done as fast as possible. The product should have high quality and produced at low costs. It is important to be able to communicate and share information both inside and outside the company. When the manager needs to inform the employees about an important issue, it should occur fast. Every department of the company should have access to the information and be able to share the information. All this is able in a company when using an ERP – system.
It creates a database that all the employees have access to from all the company. The system facilitates the work within the company since the information is collected in one place. The managers and employees can plan future work better and accomplish individual and team goals. The database has all the information about the processes, company’s customers, strategies, management, economics and overall information of the company and the Intranet. When the database is used by employees to receive and put in information and then other use that information, knowledge is shared in the company. The information becomes mostly knowledge when it is transferred in between users of the ERP – system (Distributed Network Software, 2005).

![Figure 2. ERP - system (Distributed Network Software, 2005)](image)

To accomplish the company’s vision, the company needs to have a high-quality database that keeps all the information concerning the business processes and products. The figure above shows how the ERP-system connects different department in a company. Parts of the figure are sales and marketing, management and operation. Sales and marketing is the business process that includes a company’s sale and marketing strategies. In the other circle we have management, here is the company’s managers that cerate the visions and goals of the company. The management decides how the different processes can be done as effectively as possible. In the last circle are the operations of the company. The operations are the core processes of a company and here are the products created or the services. When combining these three circles the company will have an effective business which has common ERP – system and shares the database the company is using. The ERP – system is connecting company’s business processes and creating a network of knowledge sharing (Distributed Network Software, 2005).

**Information leads to action** – An effective ERP implementation gives employees access to real time information. They can make better decisions and be more effective for the company (Distributed Network Software, 2005).

**Manage the process** - The ERP - system provides the company with tools to effectively connect different business processes and give the company feedback on the implementation of the system (Distributed Network Software, 2005).
**Team effectiveness** – The collaboration and communication tools of the ERP - system bring teams closer within the company. As well as the customers and partners get closer, gain understanding for each other, shorten sales cycles and increase cash flow (Distributed Network Software, 2005).

**Tools for the future** - The technical advancements and global economy has increased the competitive environment, therefore companies need to fulfill these demand. Having an effective ERP – system usable for the employees will enable them to be effective in every working situation (Distributed Network Software, 2005).

Implementation leads to action, manage the process, team effectiveness and tools for the future are few of reasons why companies should implement the ERP – system (Distributed Network Software, 2005). Information and communication are improving knowledge sharing within the company. Company’s employees and managers can satisfy customers and suppliers needs, and create a better relationship with them. The employees are becoming further effective when concerning communication and knowledge sharing in between each other. Using the ERP – system leads to an improved information flow inside the company, suppliers and customers.

The ERP – system can be seemed as a core of the business processes. This means that the system is connecting different business processes in the company, it is created after the business’s idea and vision. It facilitates the control over information and data which is gathered in one place, the database (Rönnborg & Simson, 2002).

3.6.2 **Movex**

Movex is an ERP - system which helps the company to manage the enterprise resources; the financial status, machinery and human skills (Movex, 2001). The system is created for controlling the business and manufacturing. Movex edifies the company’s efficiency for example in the sales, marketing and production. It improves and affords the needed functionalities for collaboration along the value chain. The integration is not needed thanks to the systems broad scope, which reduce costs for the integration (Intentia, 2002). The system has solutions for integrating organizations, for example using different languages.

When using Movex, the managers can easily control the internal resource, budget and still focus on the customer’s needs and wants. The managers can handle all tasks by using Movex which include influential tools. Two of these tools are resource and material planning, and financial controlling. The first tool is used for resource planning and organizational solutions. The second tool is used for controlling requirements, this helps the manager to effectively analyze and plan the most important business processes (Movex, 2001).

3.6.3 **Jeeves**

Jeeves Enterprise is an integrated ERP - system that is developed with newest technology for improving the business processes. It is flexible when using, and improves the communication and information sharing. This leads to effective organizational goals and is a competition benefit (Jeeves tekniska platform2004).
Jeeves is one of the most selling systems in Sweden; the system suits companies with 5 users, as well as companies with 1000 users (Jeeves tekniska platform2004). Why Jeeves is special depends on its flexibility, the company can adjust the system to their needs and change it after time as the organization is changing. Special modules can be bought to improve and update the system.

Jeeves suits every company and other applications, for example Microsoft Office can easily be integrated with the system. The advantage with this system is that it adjusts to the organizations situations; this is why the users prefer the system (Sogeti, 2003). By making it easy for companies to create the system after their needs, they are able to improve their business processes and facilitate the knowledge sharing.

3.6.4 Implementation of ERP – system

This phase in our thesis is written because it is important that the future users of the ERP-systems realize and understand that implementation stage affects the future knowledge and that knowledge is shared even when implementing the system.

The implementation of a new system is not simple. It takes time to implement a system, to adapt to new changes in the company and it is expensive. When implementing an ERP – system, knowledge sharing already starts at that stage. The employees obtain knowledge regarding the system, how to use it and its functions. As well as how the system helps their company’s information flow, by having access to necessary information when needed, everyone in the company will be more professional (Donovan, 1990).

When implementing an ERP – system, the company is able to choose between different modules. Which include different parts of the system that are suitable for the company (Cederlöf, Lindblad & Lo, 2003).

The employees have to change their work strategy and adapt to the new system (Slater, 1995). The management should facilitate the adoption of situational changes, the system and make the employees understand the importance of the implementation (Cederlöf, Lindblad & Lo, 2003). Depending on how employees react to system changes, it can affect the successes of the system implementation and the future knowledge sharing within the company.

3.7 Summary of theoretical studies

Knowledge sharing cannot be described in only one way, we have looked up different definitions and all of them include some parts of the final definition we choose to use through this research. Our concluding definition of knowledge sharing is: All the information that is transferred from one person to another in the company.

The ERP – system is the other important subject in this thesis. These systems are many and are built in different sizes. The two ERP – systems we have come in contact with are Jeeves and Movex. Both systems work in order to help the companies organize their processes and connect them to one database. In the database the employees can find the information that is flowing through the different processes in the company. When using these ERP – systems to share information that is stored in the database, knowledge is shared. We talk as well about the implementation of the ERP – systems; this is an important step we believe, when deciding to have the system. For successful work and re-
sults of the system, the implementation needs to be done by a prepared plan, and when having a successful implementation it will result in effective knowledge sharing, which makes it possible for companies to grow and increase their capacity. We discovered through the research process how important the implementation is, as well as that it is a huge part of the knowledge sharing in companies.
4 Results of empirical studies

This chapter will describe information we have collected concerning companies and their knowledge sharing within the company with ERP – systems. We have visited two companies, GARO AB and SYSteam. Empirical studies of each company will be presented in this chapter.

4.1 GARO AB

When visiting GARO AB in Gnosjö we met the IT manager of the company, Lars Kvarnsund. He presented the company and explained for us how the implementation of the ERP – system took place. How they share knowledge within the company with the system and how important it is for them to share knowledge.

Mr. Kavnsund explained that the company is a privately-owned company and was founded in 1939. The main office of GARO AB is placed in Gnosjö in Sweden. GARO AB’s subsidiaries are placed in Norway, Poland and Ireland. By the year 2004 the company had 250 employees, 120 of these employees are placed in Gnosjö. GARO AB is a manufacturing company, which produces electronic installation materials.

He as well told us that GARO AB use the ERP – system called Movex. This company is depending on their business system. Movex runs the different business processes and connect together the employee’s knowledge in one database, which makes it easier to exchange information within the company. In GARO AB knowledge is shared while the production is on. Customers call to order and the employees need to be able to find necessary information concerning the product. When the employees need information, they can find it in the database. In the database the employees save their information and knowledge concerning a product, service and the organization. The other subsidiaries have their own IT departments and are not connected with the main office in Gnosjö. They are communicating via mail, phone calls and meetings. The main office has an intranet within the company when sharing information besides the ERP – system.

4.1.1 Knowledge sharing in GARO AB

For this company it is important to share knowledge daily. In GARO AB they share knowledge with each other daily, for example when getting an order to produce a product. They need to communicate in between departments and the customer will receive the ordered product. When the company do not have every part that is needed for a product, it is then really important to share this information within the departments. They need be informed what can be promised the customer and inform the customer the delivery time, according to their manager.

We understood when talking to Mr. Kvarnsund, that in their company it is important that the employees can contain a good quality relationship. The employees constantly communicate with each other to be professional and help their customers. For example when one employee is familiar with information concerning a customer. This employee needs to deliver that knowledge to employees who will work with the customer in the future. When working with customers the employees need to enclose information regarding them in the database. GARO AB’s goal is to make their customers satisfied, this is one more reason why employees need to help each other and share knowledge considering the company’s offers and their work.
This type of ERP – system makes it easier for the employees to share knowledge and have updated information in the database. Which facilitates the communication and knowledge sharing within the company, this advantage makes the company effective. Effectiveness can be measured in method of giving fast respond to the customers and saving time by being able to obtain needed knowledge directly. According to Mr. Kvarnsund, this method is implemented at GARO AB. He said as well that this method will decrease their costs in the long run if the company can prove that they comprise knowledge. This results that the customer will receive the right product with the right parts in the right time. Movex is a system that makes it possible to share this type of knowledge, which is an important element for a well working manufacturing company.

4.1.2 Movex in GARO AB

From the interview with Mr. Kvarnsund we gathered this information.

Movex is used in all departments which are sale, economy, production and marketing. When the ERP – system was implemented, the management had a complete and planned process, which took the company 8 – 9 months to implement and start to use the system. The implementation process was a period when many of employees were involved in the process. The employees, who will use the system further was required to learn concerning ERP – systems usage. As well as how the company will benefit from using the system.

When the ERP – system was implemented, the company’s business processes became further structured and organized. Planning of material flow and control of business processes became connected and supported.

GARIO AB’s employees use the ERP – system, few of them are using it further deeply and few only in certain situations, when a number of orders are needed for example.

By having the ERP – system the company contain further clear structure of their processes, products, resources, customers and distributors. The hierarchy has decreased and the work has been delegated. All employees have been delegated their work role and tasks, this is an improving since implementing the ERP- system.

The disadvantage GARO AB point out concerning the ERP – system in their company is their dependence of the system. If the system turns off for 2 hours, the whole company’s processes stop to work. When the production stops in a manufacturing company, their income decrease radically.

4.1.3 Knowledge sharing with ERP – system within GARO AB

When asked Mr. Kvensund in GARO AB if he believes that knowledge is shared with the ERP-system, his answer was: knowledge is definitely shared with ERP – system and this knowledge is an important part of the company’s resources. When the ERP - system was implemented and the business processes become more structured. The ERP – system makes it easy to communicate, which they found as an advantage for sharing knowledge within the company.
The figure describes how the knowledge flow changed after the implementation of the ERP-system in Movex. We made this figure based on the information we received by doing the interview in GARO AB. Before the implementation the knowledge and information was shared within every department separately, the small arrows are showing how the knowledge was shared. When the employees from one department needed information from another department, the information went through every department until it came to the right section. Now by using the Movex, the needed information is easy reached since it is stored in one system including all the information and needed knowledge, the large areas are showing that the whole company has access to the information in the ERP-system. From that database everyone in the company can reach needed information easily. ERP – system make the information easier to share and the knowledge becomes more accessible for the employees.

Mr. Kvarnsund claims that: “the ERP – system has helped to gather information in one database, this knowledge have become easily accessible.” All the employees have access to the knowledge they need for different situations.

The implementation was an important process because it will bring new knowledge to the company. The employees were educated concerning the ERP – system and its function in the company. The systems GARO AB used before Movex were very small, the database contained the information form only one department and one business process was documented and controlled by the system. The employees could not communicate in-between departments and knowledge sharing was poor in the company. The ERP – system according to Mr. Kvarnsund is a very effective and good tool for saving and sharing knowledge within their company. The knowledge is saved in document files and is availed in every department for the employees.
4.2 SYSteam

We have visited their office in Husqvarna and there we met one of their ERP – system sellers who name is Mr. Wibring. He explained for us why they use the ERP – system and how it has improved their knowledge sharing within the SYSteam.

He presented the company, it was founded 1984 in Huskvarna, it is placed all over Scandinavia and has over 1000 employees. The company has today over 3800 customers, and is growing 30 percent every year. Their vision was to create a knowledge company that supports the business development of companies using effective business systems. SYSteam offers their customers an education course to get familiar with the system they will implement. When performing education services SYSteam’s employees usually work in teams. The teams need to communicate constantly, be in contact with their co-workers outside the team and exchange knowledge when needed. The SYSteam works with all type of company’s, small, medium and large that needs support with their business system. The ERP – system this company uses is called Jeeves. The system suits small companies that want to connect some business processes, as well as large companies that want to connect all their business processes.

Through the presentation and the interview Mr. Wibring explained how knowledge is shared and which ERP - system their company is using.

4.2.1 Knowledge sharing in SYSteam

SYSteam is a service and knowledge selling company and for them it is important to share knowledge daily within the company. The employees work in project groups, therefore is constant communication important. Sometimes several project groups have worked with the same customer and collected different information concerning the customer. This information is saved and shared with the help of their ERP-system Jeeves. The knowledge sharing is a meaningful part of their work and cooperation.

4.2.2 Jeeves in SYSteam

When the company’s manager decided to implement the system they educated their employees concerning the Jeeves. The education included explanation of the system’s function and how it will help their company to become efficient and share their knowledge with each other.

This ERP – system has helped the company to connect all the business processes and present a structured picture of the processes. This gains the employees with the possibility to have access to needed information from all the departments.

In SYSteam all the employees are using the ERP – system daily, the users are sellers, consults, project leaders and managers.
4.2.3 Knowledge sharing with ERP – system within SYSteam

The ERP – system works proper and shares knowledge if it is used correctly according to Mr. Wibring. Their ERP – system has helped them to save the information concerning different project groups and their work with different customers. The information regarding customers is saved in the database and the employees have access to the information when needed. In few cases some information is only availed for the employees in one project group. Rest of the employees gets access to that information when the project is finished and the deal is closed.

Figure 3. Knowledge sharing in SYSteam with the Jeeves.
The figure above describes how the organization of the SYSteam look like, the different divisions in the SYSteam and how the Jeeves is connecting the company’s departments. The figure is made based on the information we got from SYSteam when interviewing Mr. Wibring. The small arrows show the ERP-systems connection of the different divisions in the company. Before having Jeeves the different departments could not easily share the information and knowledge, the communication took longer time for the employees within the company. After implementing Jeeves as the figure shows, all the departments, from headquarters that takes the big decisions concerning the company, through the IT/IS department, purchase and marketing are connected by Jeeves. Other departments in the company that are not included in the administration are selling and making the product as well as meeting customers and users to give them service, here has Jeeves as well helped the employees to communicate with the administration to be able to help the customers by having access to the database in any time and access to any information they need.

Jeeves has helped the company to create a better organizational structure. As well as sharing knowledge with Jeeves is going faster and the database is storing all the information that is shared through Jeeves.

SYSteam’s ERP – system works together with other business systems they have, it creates the total base for knowledge sharing within the company. The ERP – system itself is the best tool for connecting the business processes and have employee’s knowledge conducted in one place, the database.

Mr. Wibring said; the implementation phase is important. If the implementation succeeds the system will create effectiveness in the company and new knowledge is already created in the implementation phase. When the system is used in an effective way, besides connecting business processes, advantage of this system is its database. It is useful when customers need information concerning a product or service; the employees have access to it in the database. The employees are seeing the opportunities with the ERP – system and using it to share knowledge, which is important for SYSteam since they are a knowledge business and selling their knowledge to customers.
5 Analysis

We will start by explaining how the ERP – system works in general in companies. Then we will explain how Movex and Jeeves works in GARO AB and SYSteam, as well as how employees are sharing knowledge by the systems they use. We will conclude this chapter by explaining what to consider when using ERP- systems to share knowledge in companies.

5.1 ERP - systems in the companies

The purpose is to see if the ERP – system helps the companies to share knowledge and how the knowledge is shared.

5.1.1 ERP – systems life cycle

An ERP - system has a life cycle that can be related to knowledge sharing in companies. What to consider about ERP - systems and knowledge sharing.

The life cycle consists of several stages, from adapting the decision to buy an ERP – system to retirement phase. Through all these stages both present and new knowledge is shared in different ranges. This is important to consider when implementing an ERP – system and receive positive results of it.

The first stage is adoption decision, here the managers need to consider what ERP - system the organization need. Already here the managers discuss and share knowledge concerning the system and its benefits. They as well analyse the organization’s goals and the systems impact on the complete business. This includes how the knowledge will be shared and if that process will be improved after implementation (Estevens, J. and Pastor, J. 2001).

Stage number two is acquisition. Now the managers decide which ERP – system is the most suitable and makes a decision. Factors that affect the decision are functionality, price, training and maintained services. It is also important to analyze the return on investment of the chosen system. The chosen system needs to support fast and effective knowledge sharing (Estevens, J. and Pastor, J. 2001).

Third stage is implementation of the ERP – system. The employees need training and information concerning the system. This is one of the most important stages in the life-cycle and therefore it will be more explained in this chapter. A successful implantation will result in a successful use of the ERP – system (Estevens, J. and Pastor, J. 2001).

The companies need to be careful when implementing the ERP – system, since it is the first step of business improvement and it affects the future knowledge sharing between the employees in the company. In the majority of all cases companies does not notice any success after the implementation of the system. It frequently depends on the company's operating strategy, planning of business processes and pre – implementation preparation activities are done poorly. In addition to mentioned activities, it can as well depend on employees not being prepared for the situational changes (Donovan, 1990).
GARO AB’s and SYSteam’s managers was aware of the preparation and education they need to offer they employees before starting to use the ERP- systems. The employees from the boardroom to the stockroom need to understand their role and responsibilities before the implementation (Donovan, 1990). The understanding will create new knowledge to the workers involved in the process.

Use and maintenance is the fourth stage of the lifecycle. In this stage the managers and employees are using the ERP – system and knowledge sharing is improved. The functionality, usability and adequacy are important for the knowledge to flow easy and correct (Estevens, J. and Pastor, J. 2001).

The fifth stage is evolution. Here additional capabilities are integrated into the ERP – system. It can be evolution “upwards” which means to add functions as planning and scheduling, data warehouse and business intelligence systems. It can also be evolutionary “outwards” which means applications as customer relationship management, supply-chain management and inter-organizational workflow. All these additional applications are connecting more processes and as well sharing knowledge in these processes (Estevens, J. and Pastor, J. 2001).

The last stage is retirement. All the time new ERP – systems are created that are improved and better. Businesses have more needs while the company is growing and being more international. The managers start to look after improvements, it can be to add new applications to old ERP – system or change the complete system for a new (Estevens, J. and Pastor, J. 2001). SYSteam implemented their ERP – system in parts, therefore they could add new parts of the system of the latest knowledge and technology. This is a good possibility if the company wants to get stronger and better than competitors. Therefore mangers should never see the ERP – system as one time process, this is something that needs to get updated all the time.

Gurteen (1999) claims that the creation of knowledge sharing culture in a company is significant. One solution is to create this culture through additional team work within the company. Employees will have opportunities to communicate further with each other and share knowledge with the ERP – system. Every employee will have the possibility to use the information from the ERP - database and take part of the knowledge. And this is exactly what both companies are doing. SYSteam has as well project groups this makes it even easier to share knowledge and simultaneously use Jeeves. When using the ERP- system, as Jeeves, employees will understand when and how they need to perform their job. They will have accesses to the knowledge concerning their jobs and project works.

The main objectives of integration in the ERP – system is sharing knowledge, information, working more effectively and being innovative (Mohamed, & Fadlalla, 2005). Communication is extremely important, by communicating and cooperating with each other knowledge will be shared (Mohamed, & Fadlalla, 2005). As well when using the ERP – system, reading the information the employees will receive the knowledge they need regarding their work.
GARO AB as mentioned use the ERP – system Movex. This system is well suitable for companies like GARO AB. Movex is a system which is made for controlling businesses of manufacturing. For GARO AB it is mostly important to have an ERP – system which supports their production, because this company has their core stone in the production. Movex is a system which especially makes departments like sales, marketing and production more efficient. Movex improves needed functionalities for collaboration along the value chain and for GARO AB the most affected functionalities by the ERP – system are production and sale. Besides production and sale all business processes in the company are connected by their ERP – system. Illustration below shows how the different business processes can be connected with ERP – systems as in GARO AB.

The ERP-system GARO AB use has helped them greatly in the development of their business. Movex helps the company in higher levels then production; it facilitates for the managers to control the internal resources and budgets. While the managers of GARO AB need to focus on their internal forces, Movex makes it easy for the managers to be able to focus on their customers and their needs. This ERP – system makes it possible for the company to become stronger internal and on the market where the competition is. GARO AB finds this system good structured for a production company as they are. Movex has two important tools which are very effective.
These tools are resource and material planning controlling. The first tool is used for resource planning solutions and organizational solutions. The second tool is used for controlling requirements, the manager can effectively analyze and plan the most important business processes. Movex makes it easy to control the running production and focusing on the important business processes.

As well as it gives the possibility for the employees to help each other in different departments by communicating through the ERP – system and share knowledge.

5.1.3 ERP – system Jeeves in SYSteam

SYSteam is a company that sells different ERP – systems and knowledge concerning these; therefore it was easy for them to find an ERP – system that suits their business. Jeeves, the ERP – system they use is an integrated business system which is developed with the newest technology for improving business processes. The system is flexible; it can be implemented in parts depending on how much time and money you can spend on an ERP – system. As well as it depends on how many business processes you need to connect with the system in your company.

SYSteam decided to implement one part of Jeeves at time and take it slowly. To implement an ERP – system part by part and when the company affords it is a profitable solution for companies like SYSteam. These companies can plan the implementation for a longer period and the first part of Jeeves works fine without the rest of the system. SYTeam did know that they need to involve some of the employees when implementing the system. This is because every company needs to involve their own employees and resources when implementing a new ERP – system so the knowledge sharing will success.

SYSteam is a company which needs the latest technologies to stay strong on the market. Today when SYSteam has Jeeves, the ERP – systems allows the company to implement new parts of the system and use it together with old parts of Jeeves. This gives the company the opportunity to improve the old system with new parts without changing the whole ERP – system in the organization.

The ERP – system has helped SYSteam to connect all their business processes and to give a structured picture over all working parts of the company. One important advantage with the systems is that these systems help the companies to get an overview of their business. To implement the system the company needs a structured picture over all business processes and then decide where to integrate the ERP – system, in some departments or in the whole company. This depends on which processes the company wants to be able to work together. We believe that the ERP – system is a good part to invest money in and use in the whole company. As mentioned before the system will help the company to become more effective in time and information search. The system will make it able for the employees to understand the core businesses and how everything is connected through the company, the departments and process works.

5.2 Knowledge sharing with ERP – systems

In this part of our analysis we will explain the theories how to share knowledge with ERP – systems and how it is really done in practice by GARO AB and SYSteam.
“There is no magic in ERP software: It is in Preparation of the Process and People.” (Donovan, 1990). This quotation explains that it takes effort and accurate planning when deciding to implement an ERP-system.

5.2.1 The importance of knowledge sharing in GARO AB

GARO AB’s knowledge sharing has improved since they implemented Movex, the employees have now access to the information they need immediately. For example when a costumer calls and want to know when his/hers product will be ready, all the information concerning the product (for example: when the product will be ready for delivery, if the company have to reserve a part of the product etc) is available thanks to the ERP – system.

When GARO AB started to implement Movex, employees were included in the process because they will gain knowledge concerning the company’s ERP – system. Together with the consults who helped thenrought the process, the employees found the best way to carry out the implementation of the ERP – system and the knowledge where shared from the first step.

When GARO AB adapted the Movex the directly became aware of the advantage of sharing knowledge and the communication between employees improved thanks to the system’s functions. The ERP – system made the information easier to share and the stored information became knowledge for the rest of employees when using the knowledge for their own purpose.

Even if it took about six to nine months for the company to adjust to the new system, and the employees to accept the changes in the working environment; the knowledge sharing has improved by the ERP – system. By having this ERP - system the employees already in the beginning started to get a clearer picture of their business and improved knowledge. The employees created a new data base that included all the information employees have concerning products, customers, sale and suppliers. The new ERP – system contributed to new culture of learning in the company. The system is a tool for making this knowledge sharing process possible, and the employees became aware of the importance of sharing knowledge.

5.2.2 The importance of knowledge sharing in SYSteam

SYSteam’s employees use their ERP – system as a tool for knowledge sharing within the company. All the employees receive the information through the system and by receiving information the employees are able to accomplish the task.

The employees of SYSteam have already knowledge concerning ERP – systems and which advantages these systems provides. The management knew it will provide them more structure in the company that was only one of the reasons they implemented it.
Knowledge sharing is important for them, because they constantly need to work with customers who need professional knowledge concerning SYSteam's services and products. SYSteam’s management knew, by changing to the ERP – system, all the knowledge and information from employees will be gathered in one data base and the access to this information will be easier by using the ERP - system. Many employees find it difficult to accept changes which companies do, the employees and managers have to adapt to new systems and procedures. In both SYSteam and GARO AB the employees adapted quickly, they felt more effective and they did more profitable job after implementing the ERP – system, Jeeves.

The employees appreciate and value their options, and possibilities to work effectively and easy with Jeeves.

5.3 Successful ERP – system in companies

Here are some things medium size companies needs to think about and include when implementing an ERP – system. A good implementation is important as well as the follow up work, to maintain successful in knowledge sharing and as a company that has an ERP – system.

- Company’s structure
- Make a strategic plan for the implementation of ERP – system
- Costs for the ERP – system
- Involve company’s own employees in the process of implementation
- Educate the employees and managers concerning the ERP – system
- Choose suitable ERP – system for the companies structure
- Identify businesses core stone/stones
- Keep in touch with the supplier of the ERP – system to be able to improve it later on
- Make a good implementation, this will affect the future use of ERP – system
- Prepare employees for changes, convince them that this is the best for the company and them
- Inform the employees of benefits when having an ERP – system, how they can improve them selves by sharing their knowledge and receive from others

Employees should take advantage of the whole system and all resources that ERP – system contains. If the employees do not know how to use the system and have not been educated regarding how to use the system, the ERP – system would not be useful for the company and the employees. It would convey high and unnecessary costs for the company. The positive effect of the system will not be visible and knowledge sharing with the ERP –system will not be successful.
When the managers take the decision to implement an ERP- system or parts of the system in their company, they need to be aware of the consequences and the advantages. They should create a strategic plan for how the process should be performed and which of the company’s processes should be included in the ERP – system. The team or managers who decide to implement the system needs to know that the ERP – system will not create any benefits for the company without employee’s participation in the process.
6 Conclusion

Our purpose was to find out if ERP- systems help companies to share their knowledge within the company and how important it is for companies to share knowledge.

Different companies have different business system that helps them to be effective and compatible on the market. Companies we visited are both having ERP – systems and this has helped them to be more efficient in production, sale, customer service, marketing and organizational growth, and improvement. After adapting to two types of ERP – systems, Jeeves and Movex, the companies has immediately seen improvements in their information and knowledge sharing, as well as in their business processes. The employees became more professional in their departments. This is a benefit for the companies when customers are more informed and satisfied with the companies’ services and achievement.

By doing this research concerning knowledge sharing with the ERP-systems our purpose was confirmed and the result came out to be that the ERP-system definitely helps the company to share their knowledge. Meaning, if the employees are educated to use the system in the best way the ERP-system will increase company’s knowledge and information sharing.

Without new technology, business systems and fast development companies would not survive today’s pressure of being first on the market, having best quality and price on their products and services. ERP – systems are a part of new technology that makes it possible to share knowledge in companies. We have discovered by doing this research that knowledge sharing is a daily process in the companies. This affects company’s work and results in the end of the day. Knowledge sharing is important because it makes it possible to reach out to the customers and their needs, as well as increasing employee’s effectiveness. ERP – systems creates a place in the company where to store and share knowledge. The ERP – system makes it easy to share knowledge fast.

The ERP – systems role in the companies is to define processes, define employees roles, creates a clearer organizational structure and the information flow increase. This means that knowledge sharing is daily managed effectively by employees, when using the ERP – system.

Companies that have succeeded by implementing the ERP – systems and share their knowledge with the system are for example successful companies SYSteam and GARO AB.
7 Advices for GARO AB and SYSteam

The research of this study gave us knowledge concerning the ERP- systems and knowledge sharing. Now knowing more after doing this research, we would recommend the companies which plan and want to implement an ERP- system to choose the system that fits the company’s size, processes, services and structure. As well as be prepared to changes and to educate all employees concerning the system and knowledge sharing. It is important for the companies to use all possible resources of the implemented system and not be afraid to use it, take advantage of the possibilities that the ERP- system offer.

For the two companies that we interviewed we would advice them to continue to work with the ERP- systems they have, because they have chosen systems that fit their companies and structures. SYSteam has Jeeves and that is a system that can be improved as the company is developing and growing. SYSteam is creating the business systems and they are selling their knowledge, we believe they should continue to work as they do now and be innovative. As well as be aware of the fast developing and growing market and keep on with the good quality of work. They should take advantage of the good knowledge sharing they have and make it to a strong and important resource in their company.

GARO AB has the Movex system, it can not last for ever, and it has to be improved in the future. They are aware that the technology is constantly increasing and changing, they should be prepared to make new changes in about 7-10 years in their ERP – system and organizational structure. They have this system since 1999 and already today there is on the market a new version of the Movex. To keep on and be able to survive the competition, GARO AB’s management and employees have to be prepared to changes. And reconsider to change their working strategy sometimes in the future, because of the huge competition on the market. New ERP - systems are updated all the time with better functions and offer the user more advantages with the system.
8 Personal comments and thanks

Finally we want to thank the companies that helped us with our research by giving us necessary information and took their time to meet us. The companies we visited are GARO AB and SYSteam.

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References


Interview questions

- Which ERP-system does your company use?
- For what reason did you in the beginning implemented ERP – system?
- Who is using the system, the whole company or only some departments?
- What are you using the system for?
- How do you use the system?
- What is the main difference, before and after you started to use the system?
- Has it improved your business, what is positive when using ERP-system?
- Do you belief that information/knowledge is shared by ERP-system?
- Can you use the system as a tool for knowledge sharing?
- Have you seen directly some positive or negative effects on sharing your information/knowledge when using ERP-system?
- Is the data in the ERP – system changing often and is it often updated?
- And if it is, then can it be something as knowledge for you and your company?
- When you are updated within the company does it not makes your company more efficient and in that way you are then sharing knowledge?
- Did any new knowledge arise when implementing the system in your company?
- Did you have any education about the system (how to use it, about the functions of the system) for the employees?
- How long time did it took for your company to develop the system?
- When did you notice the improvement of the business, after implementing the system?