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Implementation of New IT-Systems After Company Buy-Outs - A Case Study

Information Systems Science

Master's thesis

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IMPLEMENTATION OF NEW IT-SYSTEMS AFTER COMPANY BUY-OUTS – A CASE STUDY

Objectives of the Study

This study focuses on the IT-integration process performed after company buy-outs. The aim is to find out how can the introduction of new IT-systems be facilitated after company buy-outs, and especially what can be done to facilitate the transition for the newly acquired employees. The study has three main objectives, which are approached through three research questions. First, how are new IT-systems implemented after company buy-outs. Second, which factors contribute to successful implementation of IT-systems, and third, how is the new IT-system and transition perceived by the employees.

Literature review and empirical data

It seems that IT-integration is not perceived as an important part of an M&A process. This study argues that IT-integration is a crucial part of the buy-out process and since it can add more value to the process it should not be overlooked. Previous literature on the subject is limited and models for the actual IT-integration do not seem to exist. Therefore this study presents theoretical framework for conducting successful IT-integration after a company buy-out. The research subject is studied through case-company analysis. Empirical data for the research was collected by interviewing people in charge of integrations and conducting a survey to integrated employees at the case company.

Findings and conclusions

The findings of this study prove that IT-integration plays an important role in the success of the whole buy-out process. Based on the findings, it seems that the case company does not put enough effort in the IT-integration process because the management does not see the value of it. Consequently, the management does not feel that they need to be involved in the process and the also leave some critical people out of the planning process. Processes required for successful IT-integration are lacking or not used at the case company and this leads to a situation where each IT-integration is done differently in an uncoordinated manner. Training process of the integrated employees is neglected and this leads to various problems such as decreased employee motivation, lowered productivity and increased costs.

Keywords

Merger, acquisition, buy-out, integration, IT-integration, IT-systems, database integration, employee motivation, training, organizational culture

UUSIEN IT- JÄRJESTELMIEN IMPLEMENTAATIO YRITYSOSTON JÄLKEEN – CASE-TUTKIMUS

Pro gradu -tutkielman tavoite

Tämä pro-gradu tutkielma tarkastelee yritysoston jälkeen toteutettavaa IT-järjestelmien integraatiota. Tarkoituksena oli selvittää miten IT-järjestelmät voidaan integroida mahdollisimman tehokkaasti ja miten IT-integraatio voidaan tehdä mahdollisimman helpoksi integroitaville työntekijöille. Tutkielmalla olo kolme tavoitetta, joita lähestyttiin seuraavan kolmen tutkimuskysyksen kautta. Miten IT-järjestelmät voidaan integroida yritysoston jälkeen, mitkä asiat vaikuttavat IT-integraation onnistumiseen ja miten yrityksen työntekijät kokevat uuden IT-järjestelmän ja IT-integraation.

Kirjallisuuskatsaus ja empiirinen osa

IT-järjestelmien integraatiota ei ilmeisesti pidetä yritysoston jälkeisen integraation tärkeänä osana. Tämä tutkimus väittää, että IT-integraatio on erittäin tärkeä osa yritysostoa, ja koska se voi lisätä koko integraatioprosessin arvoa, sitä ei pitäisi jättää huomioimatta. Aikaisempi kirjallisuus aiheesta on rajattua ja malleja varsinaiseen IT-integraatioon ei ole olemassa. Tämän vuoksi tämä tutkimus esittelee teoreettisen viitekehyksen yritysostojen jälkeisen IT-integraation onnistuneeseen suorittamiseen. Tutkimussihetta käsitellään case-yritys analyysin kautta. Empiirinen aineisto tutkimukseen kerättiin haastattelemalla case-yrityksen integraatioista päättävässä asemassa olevia henkilöitä sekä tekemällä internet-kysely integroiduille työntekijöille.

Tulokset ja yhteenveto

Tämän tutkimuksen tulokset todistavat, että IT-integraatio on erittäin tärkeässä roolissa yritysosto-prosessin onnistumisessa. Tutkimuksen löydösten perusteella voidaan päätellä, että case-yritys ei panosta tarpeeksi IT-integraatioihin, koska yrityksen johto ei näe siihen panostamisen arvoa. Tästä johtuen yritysjohto ei osallistu IT-integraatioon tarpeeksi ja jättää tärkeitä henkilöitä pois integraation suunnitteluprosessista. Onnistuneeseen IT-integraatioon tarvittavat prosessit puuttuvat case-yrityksestä tai ne eivät ole käytössä, ja tämä johtaa tilanteeseen, jossa kaikki IT-integraatiot tehdään eri tavalla ja koordinoimattomasti. Integroitujen työntekijöiden koulutusprosessi on käytännössä kokonaan jätetty huomiotta joka on johtanut erinäisiin ongelmiin, kuten alentuneeseen työmotivaatioon, heikontuneeseen tuottavuuteen ja lisääntyneisiin kustannuksiin.

Avainsanat

Fuusio, yritysosto, integraatio, IT-integraatio, IT-järjestelmä, tietokanta integraatio, työntekijämotivaatio, kouluttaminen, yrityskulttuuri

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1 INTRODUCTION

In today's technology oriented business world, information technology (IT) and information systems (IS) play bigger roles than ever. In fact, success of a company can depend heavily on the functionality of their IT-function. In addition, the amount of integrated IT-systems has grown during the past decades together with the increased amount of company buy-outs and acquisitions. Giacomazzi, Panella, Pernici and Sansoni (1997, p. 290) discuss the difference between mergers and acquisitions. They argue that no matter in which way the two companies combine their operations, integration of two information systems does not necessarily mean that after the integration a single system or software is chosen, but that exchange of data and organizational processes, are possible and efficient according to the merged organization needs. Important factor to notice is that all of these actions result in some sort of information systems integration and that is what matters from the perspective of this study. Due to this and because this research studies the integration of IT-systems, not various mergers or buy-outs, this study uses terms 'mergers', 'acquisitions' and 'buy-outs' interchangeably.

According to Mehta and Hirschheim (2007) mergers and acquisitions (M&A) have become increasingly popular in the past few decades, however large percentage of them fails to deliver synergies for the companies. One of the biggest reasons behind this is lack of attention toward IT-integration. Wijnhovena, Spila, Stegweea & Tjang, (2006 p. 6) agree that in a merger situation, IT-integration is often given insufficient priority, with management concentrating more on strategic and organizational fit of the two companies. However, at the same time, IT-departments are often expected to combine two IT-systems as fast as possible, with minimum disruption to the business. Generally it seems that IT-system integration is not perceived as an important part of the buy-out process, but rather as a necessity to which much time or

effort is not dedicated. Managers might not understand the importance of proper IT-system integration and its meaning to their business.

There are various types of M&A's and therefore the IT-integrations following the M&A's can also vary a lot. In the worst-case scenario, the buyer company absorbs the bought company completely and the integrated employees are then forced to use the IT-systems of the buyer company without proper training or instructions. Also, the databases of the bought company are integrated directly to the buyer company databases, without making any separation between where which database originated. In the best case the whole integration process is very well planned, starting from the point before the actual acquisition happens, ending with collection of employee opinions of the integration and making sure that everything works properly and everyone can do their work like they are supposed to. Of course there are many possible outcomes in between the described scenarios and therefore this study aims to find out the most efficient way to perform IT-integration after M&A. Obviously IT plays a very central role when company decides to integrate another IT-system into their own system, and this should be paid more attention to when discussing mergers and acquisitions. In fact, Mehta and Hirschheim (2007) argue that without an exception some kind of integration of IT-systems needs to be completed during or after company buy-outs.

Therefore, more attention should be paid to ensure successful integration of IT-systems during company buy-outs. However, looking at history of buy-outs in companies and previously written literature on the subject, it seems that neither companies nor academics seem to exactly understand how crucial role IT-systems integration actually plays in the success of a company buy-out. Alaranta (2005, p. 143) states that after studying as many as 567 M&A related articles, only one of them mentioned information systems in post-merger management. Even though some published material can be found, the material is sparse, anecdotal is nature, case specific and has usually appeared in the

practitioner's rather that academic journal. This makes the quality and the amount of available literature rather weak, especially from a scientific point of view (Alaranta, 2005, p. 143; Stylianou, Jeffries & Robbins, 1996, p. 204). According to Merali & McKiernan (1993, p. 107) most of the studies mainly concentrate on the issues of strategic, organization and cultural fit. Also, many of the previous studies made on the role of IT-systems integration during company buy-outs are rather old, and thus cannot directly be used in today's fast paced IT-world. Therefore this study aims to identify the factors that contribute to the success of IT-system integration during company buy-outs and to further examine how the integration could be implemented as smooth as possible for all the stakeholders.

Especially the employee side of the integration process seems to be completely omitted, even though these are the people who will have to work with the future IT-systems and are thus the most important factor in the process. During company buy-outs, both the buyer company and the bought company experience many significant changes. Many of these changes are related to the IT-systems, usually the IT-systems of the bought company to be more precise. In many cases, the employees of the bought company just start using the IT-systems of the buyer company and the change management during this time is nonexistent. This can cause stress to the integrated employees and directly affect their productivity, motivation level, and work satisfaction. Because of the lack of research in this area, this study aims to find out what is going on in the process of IT-system integration, who is responsible of the process and who is involved at which stage of the integration by examining a case company. Also, the employee perception is studied to form an understanding of how important it is to understand the role of employees in the integration process and how the process overall could be made more efficient.

1.1 Research questions

The aim of the research is to find out how the introduction of new IT-systems after company buy-outs can be done as effectively as possible, and what can be done to facilitate the transition to the new system for the newly acquired employees. Therefore the main research question of the thesis is: How can the introduction of new IT-systems be facilitated after company buy-outs? In order to answer this, the following three sub-questions are posed:

1. How are new IT-systems implemented after company buy-outs?
2. Which factors contribute to successful implementation of IT-systems?
3. How is the new IT-system and transition perceived by the employees?

1.2 Case Company

Case company is a subsidiary of an international corporation operating in the field of selling professional solutions for heating & refrigeration, plumbing, electricity, tools and machinery. The parent corporation is one of the leading companies in its field and the annual turnover of the group is several billion Euros. It employs thousands of employees and operates in several hundred locations globally.

The case company has grown rapidly in the past years and a big part of this growth has been achieved by company buy-outs. Case company currently employs around 400 employees, out of which over half are sales personnel operating at various branches of the company around the country.

Case company operates various IT-systems, such as ERP-system, logistics management software, MS Office programs and most importantly sales selling tool. The sales selling tool is used for customer database, product and pricing database, actual sales processes and various other aspects related to sales.

The software is tied to many other operations in the company also, such as credit control unit. Due to the heavy reliance on software, IT-systems and their integration plays a crucial role in the case company. Software is provided and updated by the parent company, but is installed and supported locally. All the training for the programs is done locally by the business support team and with the help of the IT-department. Technical support for all of the software is provided by an outsourced company.

1.3 Definitions and abbreviations

In this section some of the key definitions and abbreviations used in this Master's thesis are described.

Information Technology (IT)

According to Technology Association of America (ITAA), the term IT refers to the study, design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware (Webster online dictionary). According to Webster online dictionary, IT deals with the use of electronic computers and computer software to convert, store, protect process, transmit, and securely retrieve information.

Information Systems (IS)

Information Systems refer to the actual software applications that a company might have. However, in academic literature, IT and IS are sometimes used interchangeably, especially as the term IT was later discovered to describe information technology of a company in a more wider perspective.

IT-system

The term 'IT-system' can be used to refer to many different concepts. In this study however, the term IT-system is used to describe the various software systems that the company might use. (Wijnhoven et al. 2006, pp. 9-10)

Mergers & Acquisitions (M&A)

A merger or an acquisition is initiated when more than one organization, previously functioning as separate entities, agree to merge into a single organization in a gradual and interactive process. A merger can be achieved by full or partial absorption of a target company (Giacomazzi et al., 1997, p. 290; Wijnhoven et. al, 2006 pp. 5-6; Alaranta*,* 2005 p. *143*; Brown & Renwick, 1996, p. 26).

IT-integration

IT-integration is defined as a combination of two or more IT-systems or IT-environments. It is usually implemented after M&A process in order to streamline the IT-operations of a company. (Wijnhoven et al., 2006, p. 13; Mehta & Hirschheim, 2007)

1.4   Structure of the Thesis

The thesis is divided into six main chapters. First chapter introduced the background of the thesis, discussed the motivation behind it, and also presented the research questions of the thesis. Second chapter is divided into five sections and presents the literature review of the thesis. The first section discusses the company acquisitions and mergers. However, as later explained in more detail, in the context of this thesis the way that the two companies are merged does not matter significantly, the most important part is that the IT-systems of the two companies are combined. The second section discusses the

introduction of new IT-systems in companies, more specifically introduction of new IT-systems after company acquisitions. The third section expands on this and focuses on the actual implementation of IT-integrations, the possible challenges and how these challenges can be overcome to ensure successful IT-integration. The fourth section focuses on how employees perceive acquisitions and especially changes in IT-systems during and after acquisitions, and how to keep them motivated in the change situation. Finally, after presenting and discussing these four main sections, the fifth section will then present the theoretical framework of the thesis.

After reviewing previous literature on the subject of the thesis, third chapter presents the research data and the methodology of the thesis. Also the trustworthiness of the study is discussed. Fourth chapter reports the main findings of the study in three sections and each section is dedicated to one of the three research questions of the study. Fifth chapter discusses the findings in relation to the literature review presented in the chapter two. In this chapter, also recommendations are given on how the integration of IT-systems after company buy-outs could be done more effectively. Finally, sixth and last chapter concludes the thesis by discussing practical implications, limitations of the study, gives recommendations for the case company, and provides suggestions for further research.

2 LITERATURE REVIEW

This chapter introduces the relevant literature and previous research in the field of IT-integration during and after mergers and acquisitions. The literature review of this study will examine the existing theories and models in the area and examine how IT-integrations can be done in the most successful way possible. Related to the third research question, the study will also aim to find out how employees have perceived the IT changes and how the changes in IT-systems can be conducted in the most suitable manner for the employees. In order to do this, also literature related to employee satisfaction and productivity will be studied here to gain more insight on employee perceptions. Based on the literature review and the existing concepts, such theoretical framework will be created that will suit and support the case research in the most suitable way.

2.1 Company mergers and acquisitions (M&A)

This section discusses mergers and acquisitions (M&A) in general and introduces the role of IT in M&A. The section is further divided into three sub-sections. Sub-section 2.1.1 presents the different types of M&A's. Sub-section 2.1.2 focuses on the benefits of M&A's. And finally, sub-section 2.1.3 goes on to discuss the role of IT in M&A's.

A merger or an acquisition is initiated when more than one organization, previously functioning as separate entities, agree to merge into a single organization in a gradual and interactive process, in which the individuals from the organizations learn to co-operate in the transfer of strategic capabilities. A merger can be achieved by full or partial absorption of a target company. (Giacomazzi et al., 1997, p. 290; Wijnhoven et al. 2006 pp. 5-6; Alaranta, 2005 p. 143; Brown & Renwick, 1996, p. 26) According to Brown and Renwick (1996, p. 26) the difference between a merger and an acquisition is not clear and therefore it is sometimes quite complicated to make the distinction.

2.1.1 Different types of M&A

There are various types of mergers and acquisitions. Kay and Shelton (2000) present four types of M&A. First one is operational independence, where the integrated company continues as it is, but under new management. Second is a takeover of one company by another. In this situation it is assumed that the acquirer's management will stay the same except if there are clearly better managers in the acquired company. The third one is a merger of equals where "best of both" tactic is used. Here the employees of the both companies are considered for managerial positions. In the fourth type of M&A called transformational approach, the two merged companies become something different from what they currently are to form something stronger and better than what they individually were.

In addition to the four types on M&A presented by Kay and Shelton (2000), Wickramasinghe and Karunaratne (2009, p. 698) have categorized M&A's into three types. First type is extension mergers, which usually derive from non-value maximizing motives, such as buying a company for their product diversification. Second merger type is collaborative, where the two merging companies have products or services that are similar and they merge in order to receive benefit from the combination of their operations, exchange of technology or such. Third merger type is redesign merger, in which the biggest ambition behind the merger could be to gain control of another company management or board. These three different merger types will also have affect on the integrated employees and this is discussed in more depth in chapter 2.3.1.

2.1.2 Benefits gained from mergers and acquisitions

Mergers and acquisitions can provide various benefits for companies no matter which type of M&A is in question. They can be used to achieve numerous

goals, such as rapid growth in size and strength, increased market share, acquisition of new products, patents, technologies, talent and geographical territories. Most important objectives of mergers and acquisitions are usually profit maximization, increased market share or the need to establish a new position in a new market. Mergers and acquisitions can definitely help the economy of a company by adding efficiencies on a large scale and by increasing the economies of scale (Merali & McKiernan, 1993, p. 107; Stylianou, 1996 p. 204). In addition, Carrillo (1998, pp. 277-278) lists various reasons for Mergers and Acquisitions (M&A). Some of these reasons include: Creation of synergy, growth generation, increase of market share, diversification, asset accumulation and organization development. Also, M&A is a very good way for a company to grow without making as many mistakes.

Corporate mergers and acquisitions have established themselves during the last few decades as prominent tools for corporate strategy (Alaranta & Henningsson, 2008, p. 307). This is not surprising, as there are many benefits in expanding company through merger or acquisition. According to Weber and Pliskin (1996, p. 83) the primary reason for a company to engage in M&A is to achieve synergy through interrelationships between the two business units to increase the competitive advantage of the merged venture. This synergy occurs when two operating units, divisions, or business units together can be run more efficiently and/or more effectively and because of this, after the merger, the acquirer may be able to lower its average cost curve due to integration of functions and processes, and to gain competitive advantage over competing firms by reducing prices and thus capturing a greater market share.

However, even though the amount of mergers today exceeds the record number of mergers in the 1980's and M&A's are increasingly used as a way for a company to grow, companies still have big challenges in actually leveraging on the anticipated benefits and managing the post-merger integration of their operation, personnel, cultures and information systems (Alaranta &

Henningsson, 2008, p. 307). Furthermore, since information systems are of the utmost importance in the operation of big companies today, a merger or acquisition may not succeed if information systems' planning is inappropriate (Alaranta, 2005, p. 143). In the next section, the role of information systems and technology will thus be of focus.

2.1.3   Role of IT in mergers and acquisitions

As IT has been and is constantly becoming more important part of many companies and their operations, the role of IT in M&A cannot be neglected. Robbins and Stylianou (1999, pp. 210-211) argue that in an era of renewed M&A activity and with the role of IT in organizations increasing constantly, it is essential for companies to learn the ways of integrating IT-systems with the least disruption to business operations. They also advice companies to grasp how the IS area can take advantage of the integration in order to proper themselves to higher levels of achievement. Also Carrillo (1998, p. 278) emphasizes the importance of IT in M&A process and states that IT should not be neglected when considering potential integrations during or after M&A.

In their study Merali and McKiernan (1993, p. 117) found out that although over 90 percent of studied companies stated that IT played some role in supporting the business strategy of the merged company, less than half of the companies considered IT related issues prior the integration and less than 25 percent considered the requirements for IT during the and after the integration. This shows a clear discrepancy between the possibilities that IT could offer in the integration and the organizational reality. Robbins and Stylianou (1999, p. 210) go on to discuss the role of IT in today's modern companies. They state that the role of IT is a critical resource for almost any company, both in the role of supporting business operation and managerial decision-making or as a way to gain competitive advantage. In their opinion, especially latter one has been growing its role. Due to these reasons it is the best interest of any organization

to have high quality systems that are well integrated and operate in synergic way.

Many companies today rely very heavily on the support provided by IT. As a result, IT usually plays a crucial role in merger or acquisition integration. The role of IT can be characterized in many ways. McKiernan and Merali (1995, p. 55) have found two possible roles of IT in after-acquisition integration: reactive and proactive. The role of IT is reactive when IT needs to change to accommodate other operational considerations. The role is proactive when IT is the facilitator for other organizational change or when the acquisition of an organization's IS is the prime motivator behind the merger. Robbins and Stylianou (1999, p. 210) on the other hand suggest that the IT organization of the company could use the opportunities offered by a merger or acquisition to achieve the best possible impact on its capability to perform and contribute to the organizational objectives.

However, according to Weber and Pliskin (1996, p. 83) the role of IT can differ very heavily depending on the role of IT in the company. The more IT intensive the company is, the more it can benefit from the integration of IS. Integration can bring high economies of scale, not only in the IT department, but also in many other departments, functions and processes. Integration of IS can also reduce underproductive and even redundant capacity. Obviously, the less significant role IT plays in the company, the less significant is the role of IT in the integration. However, top managers need to understand the possible synergy that will come from the IS integration, no matter what the role of the IS and exploit this synergy, even if it is relatively small. McKiernan and Merali (1995, p. 61) add that top management also needs to involve key personnel in the IS integration planning, anticipate the needs for proper integration and align and communicate the objectives, especially over long term.

To summarize the Section 2.1 there are different types of mergers and acquisitions. No matter which type is chosen, M&A's can provide various benefits for companies. Most important objectives of mergers and acquisitions are usually profit maximization, increased market share or the need to establish a new position in a new market (Merali & McKiernan, 1993, p. 107; Stylianou, 1996 p. 204). Still, merger or acquisition may not succeed if IT-system planning is not done well, and thus the role of IT in M&A cannot be overlooked. IT can be in reactive or proactive role, but the role of IT can differ depending on the role of IT in the company. As this section introduced the role of IT in M&A's, the next section will focus on the IT-integration after mergers and acquisitions in more depth.

2.2 IT–integration after mergers and acquisitions

This section introduces the relevant previous research and studies made on IT-integration after M&A's. The section is further divided into two sub-sections. Sub-section 1.2.1 focuses on what the objectives of IT-integrations are and sub-section 1.2.2 builds on this and goes over the various benefits of successful IT-integration to the whole organization.

2.2.1 Objectives of IT-integration

Carrillo (1998, p. 279) discusses how the roles that IT takes affect the role of IT in the future of the company. Due to the high strategic independence in the absorption and symbiotic acquisitions, IT is usually highly affected, while in the preservation and holding types of acquisitions tend to have lower impact on IT due to low level of strategic independence.

Giga Information Group (1999), Johnston and Yetton (1996), and McCarty (2001) (as cited by Wijnhoven et al. 2006, pp. 9-10) state that there are three

IT-integration objectives. Actually, these three objectives could be understood as three different IT-integration ambition levels that are as follows:

1. Complete integration, which is the most ambitious objective in IS integration. In this type of integration, the two separate IT-systems are merged completely. This objective is usually preferred in smaller companies, as it usually is unfeasible in larger and decentralized companies.
2. Partial integration, in which integration priorities are established, based on the importance of certain process and system that is integrated. Most important ones are integrated and remaining processes and systems are left to be integrated at later stages. This approach is viable when synergies can be realized in some parts of the IS but not in all parts.
3. Co-existence is a state where the IS of two companies are kept unchanged and only links for the most important parts of data exchange and consolidation are created between the two companies. This model is usually not viable desirable in the long-term as there are high costs associated in keeping two separate systems and links between them.

The choice of correct IT-integration objective depends on the M&A integration ambition and M&A objectives. If the ambition is high and the objective is absorption of the systems, complete IT-integration is the correct choice (Wijnhoven et al. 2006, pp. 9-10). In the next sub-section the benefits of successful IT-integration will be reviewed.

2.2.2   Benefits of successful IT-Integration

Companies can benefit tremendously from putting effort to ensure the success of IT-integration. In fact, Johnston and Yetton (1996, p. 189) argue that effectively integrated IT-divisions in M&A's of large organizations can be critical to the overall merger success. Furthermore, Mehta and Hirschheim (2007) state

that many huge M&A during the past years, for example Sallie Mae's acquisition of USA Group and integration of Commonwealth Bank of Australia and State Bank of Victoria Systems, have succeeded due to successful post-merger IT-integration. This clearly suggests that IT-integration can contribute to overall merger success.

Weber and Pliskin (1996, p. 83) also discuss benefits of IS integration. They argue that IS integration is pursued to increase synergy in inventory control, order and other data processing. Through this, IS integration reduces fixed and variable costs of the merged company. Therefore, writers recommend that IS should be integrated completely as this leads to higher effectiveness that in situation of M&A where IS is integrated to lesser extent or is not integrated at all.

Robbins and Stylianou (1999, p. 206) list wide range of positive outcomes that can be achieved by successful IT-integration. They state that well carried out IS integration can enhance the competitive position of the organization. It can also help shape or enable critical business strategies. Furthermore, successful IT-integration can also contribute to the financial performance of the company, especially the return on investment and return on assets. Proper integration can also provide better quality, more accurate, useful, and more timely information and it can also help create systems that operate more efficiently by ensuring system availability, reliability and responsiveness. Successful integration can help company to find and identify new technology and it can also help recruit and maintain competent IS personnel. In addition to these, Robbins and Stylianou (1999, p. 206) argue that numerous other benefits can be achieved, such as integration of IS planning with organization planning and the ability to provide corporate wide information accessibility.

In their study, Robbins and Stylianou (1999, p. 210) found out that that the most important factors in achieving positive results in the integration of IS in M&A are

very well controllable and mostly managerial in nature. Successful integration requires high quality merger and IT-integration planning, support from executive management, high-quality communication to the end-users of the new integrated systems and high level of end-user involvement in strategic IS decision-making, already during the process of integration. Also, emphasis on IS standardization is a positive factor.

To recap the Section 2.2 the IT- integrations following M&A can vary a lot and there are numerous tactics to integrate the IT in the company after M&A. According to Giga Information Group (1999), Johnston and Yetton (1996), and McCarty (2001) (as cited by Wijnhoven et al. 2006, pp. 9-10) there are IT-integration objectives: complete integration, partial integration and co-existence. The choice of correct IT-integration objective depends on the M&A integration ambition and M&A objectives. There are many benefits of successful IT-integration, for example, enhanced competitive position, better financial performance, better quality, and improved operational efficiency (Robbins & Stylianou 1999, p. 206). Consequently, a lot of attention needs to be paid to IT-integration and ensuring its success. Therefore the next section will focus on the actual implementation of IT-integration after mergers and acquisitions. It will also discuss the challenges of IT-integration and aims to find out how these challenges could be overcome to ensure successful IT-integration.

2.3 Implementation of IT-integration

This section focuses on the actual implementation of new IT-systems during or after M&A's from the planning phase to actual implementation. The section is further divided into four sub-sections. The first sub-section 2.3.1 discusses the planning phase of the T-integration process. The second sub-section 2.3.2 focuses on how IT-integration is carried out in practice. The third sub-section 2.3.3 presents the various challenges that organizations face during

implementation of IT-integration, and the fourth and final sub-section 2.3.4 presents the various methods for successful IT-integration.

2.3.1   IT-Integration Planning

Maire and Collerette (2010) discuss the role of management in integration planning. They mention so called "integration manager" who should be assigned as a facilitator between the two merging companies and make sure that the processes and cultures are properly integrated. Integration manager should, among many other things, make sure that the employees are properly trained, their activities are properly combined and that the integration targets are met. Wijnhoven et al. (2006, p. 6) discuss how to decide how to integrate IT in a merger situation. Various business characteristics, such as strategic, organizational and IT characteristics have to be taken into account. More interestingly they argue that at the moment, there is no scientific guideline for the process of selecting a proper IT-integration strategy. Consequently, this makes the planning of IT-integrations a bit more challenging.

Johnson and Yetton (1996) present their adaptation of MIT'90s schema (Figure 1) originally presented by Scott Morton in 1991 where they present various aspects that lead to management processes, which in the researchers opinion can also be applied to the IT-integration related management decision making. In the schema, four aspects that affect management processes are strategy, structure, technology and individual roles and skills. All four aspects need to be taken into account when management is planning an after merger IT-integration.
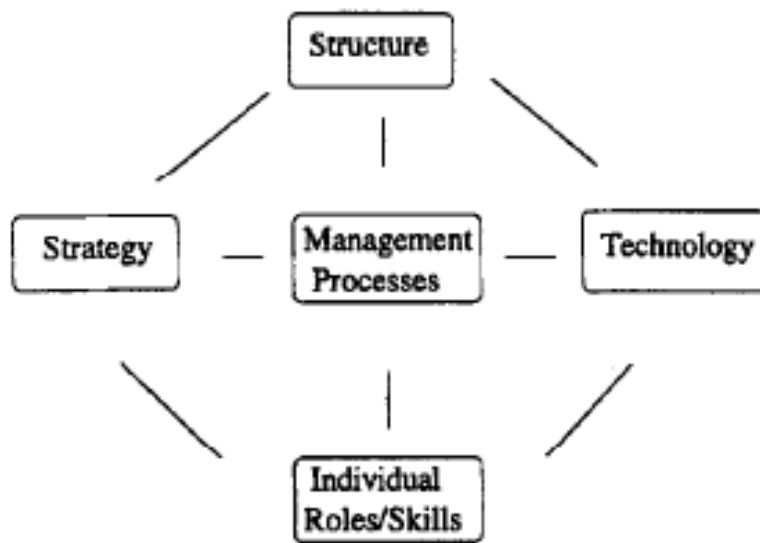
Figure 1. MIT'90s schema (Johnson and Yetton, 1996)

There are many factors that need to be considered when planning IT-integrations. Wijnhoven et al. (2006, p. 13) found the following four aspects that need to be taken into account when planning implementation of IT-integration:

- Mergers must be realized in the shortest possible time. If the merger is delayed, it might result in the loss of motivation and resources during the project.
- The capacities, resources and talents that are essential to the merger must be retained.
- There are usually technical and operating logic incompatibilities when integrating two different IT-systems. Especially the operating logic might be complicated as different business processes reflect different operating philosophies, which might be really hard to just change and combine
- The different levels in the management and the use of IT in the two merging companies might be an obstacle that needs to be overcome before the integration is done or even possible.

According to Merali and McKiernan (1993, p. 110) the level of integration between the two information systems depends on the required degree of

independence between the two organizations. Because of this, the definition of the acquisition objectives and the post-acquisitive integration seems to be an important part of any pre-merger preparation. This stage of integration process seems to focus towards the cost saving attributes of the operation consolidation.

Furthermore, Segars, Grover and Teng (1998, pp. 307-310) discuss information system planning and they list six dimensions that they find important in the process of IS planning. First dimension is comprehensiveness, which is listed as basic feature of strategic planning, refers to being comprehensive in making and integrating decisions. Companies must balance the benefits of consistency and integration associated with thorough decision analysis with the costs of inaction, managerial time, and financial resources. Second dimension is formalization, which refers to the existence of structures, techniques, written procedures, and policies the guide the planning process. Having highly formalized planning system makes the process of constructing strategic plans much more rationalized. The third dimension is focus, which refers to the balance between creativity and control orientations inherent within the strategic planning system. These dimensions helps the planners look for opportunities and threats in the environment and they generate innovative solutions to overcome issues.

The fourth dimension, flow, refers to the locus of authority or devolution of responsibilities for strategic planning. Flow can be either "top-down", where top management assumes responsibility for strategic decisions and planning or "bottom-up" where the planning is done by functional or operational managers, and top management only reconciles the proposals into overall plans. The fifth dimension is participation, which captures the breath of involvement in strategic planning. Narrow participation might lead to isolated approach to issues, such as slow examination of alternatives, which in turn leads to slow decision

speeds. On the other hand, wider participation emphasizes the use of many participants from various business functions. (Segars et al. 1998, pp. 307-310)

Finally, the sixth and last dimension that Segars et al. (1998, pp. 307-310) mention is consistency, which is related to the frequency of planning activities and the frequency of evaluation or revision of strategic choices. In some companies, where the planning activities are infrequent, the time frame of strategic plans is usually long and planning usually happens on yearly basis instead of ongoing process. If the company's level of consistency is high, company is able to better adapt to unexpected changes in external and internal issues.

Now, after going through the planning phase of IT-integration after M&A situation, the next sub-section will focus on actual implementation phase of the IT-integration.

2.3.2   IT-integration in practice

Integration of IT-systems has been discussed in the literature already since the 1980's. Solotruk and Kristofic (1980, p. 210) state that information systems integration does not take place by chance. According to them, it is a process, which occurs through several stages in which the IS are making contact through the structure of people in the company. Writers provide three such stages. In the first stage, the IS of the company is mutually studied and analyzed, involving efforts to identify identical or complementary properties of elements. In the second stage, some elements are unilaterally or bilaterally transferred. This transfer of elements, especially data, may be temporary or permanent. In the third and last stage, when the exchange of elements is formalized, interlinking normality occurs.

Actual IT-integrations can be carried out in various ways. Wijnhoven et al (2006, pp. 10-11) present four different ways of how the IT-integration can be realized. In the first model, which is called the renewal model, completely new IT-systems are created in the merged company. As the funds and time are usually insufficient and the decision on the new IT-systems may cause problems in the managerial department this model is not very useful. However, if neither of the IT-systems of the merged companies is suitable for the new company, this model can be used. In the second, the takeover model, IT-systems of one of the merging parties are used in the new company. With this model, fast integration is possible but no new processes or models are created. In this model, the problems might arise from the insufficiency of the chosen IT-system to perform tasks required in the new company. It might also lead to high resistance from the other merging partner, but this model can bring significant cost savings in the merger of IT. This model is usually used, when one of the merging partners is superior to other. In the third, standardization model, which is also called common systems approach, only similar IT-functions are integrated while other functions remain operational at their current level. Finally, the fourth model which the writers call synchronization preserves original IT of both organization and creates bridges between the two systems to consolidate data or somehow otherwise synchronizes the two different systems. This model does not abolish any old IT, nor create any new ones.

2.3.3   Challenges of IT-integration

At this point it is clear that it is very important to involve IT in the integration process after an acquisition or a merger. However, there are many challenges that organization can phase during IT-integration. How much IT is involved, varies heavily. McKiernan and Merali (1995, p. 56) argue that in half of the companies that they studied, where due diligence does not include the evaluation of IS, it might be that the company only lists the existing hardware, software and communication capabilities of the target organization of the

acquisition. No attention was paid to the quality of the effectiveness of the future system. They also continue by stating that the evaluation of the IS development culture, the IS skills possessed by the company, the positioning of the IS function and the IS skills possessed by the company and training infrastructure of the target is often overlooked. Stylianou et al. (1996, p. 204) argue that if the IS integration, especially if the systems are non-compatible cannot happen overnight. Furthermore, corporate expectations related to IS integration in the merger process are often unrealistic. Also, expectations set by the management towards the integration should be realistic.

Robbins and Stylianou (1999 p. 206) also discuss the importance of involving IT in the integration process. They state that when trying to integrate IS, the usual benefits of integration, such as the dynamic and synergic opportunity it creates, do not come automatically and the process of IS integration can be extremely disruptive if not managed properly. As corporations usually depend heavily on their IS to provide accurate, reliable and up-to-date information, they need to make sure that this continues during and after the merger. In order to minimize the disruptive nature of integrating IS, the IS architecture of acquirer and the target company needs to assessed already before the acquisition is made. As the process of integration, especially such that is done in a hurry is extremely complex process, IS professionals of the acquiring company need to be involved in this process from the start, including in the pre-merger discussion so that the integration problems could be identified at early stage and so that the IS integration is not delayed. The benefits expected from the merger are often not achieved due to unrealistic expectations related to the IS integration.

Stylianou et al. (1996, p. 204) discuss the difficulties related to IT-integration. Corporate planning usually does not include IS personnel in the integration planning process and in many cases, IS integration related planning typically happens only after the merger is completed and this usually causes problems and delays to the integration process. Another difficulty is the problem with

allocation of resources. After the merger, among many other things, the new corporate structure must cope with the cultural differences, work force issues, varying technical skills, workload and morale. The new IS policies and procedures must get their share of the resource allocation. Third problem is related to the lack of planning results in shifting priorities relative to the development of application projects and the fourth problem is about the technology issues related to compatibility and redundancy of hardware and software. The problem is that the integration of IT-systems, especially non-compatible systems is time consuming and cannot occur overnight if implemented properly. Additionally expectations from management are usually too high and unrealistic on this matter. All of these factors can impede the successful integration of IS after the merger, create information shortages and processing problems and just generally disrupt the normal flow of business. However, IS personnel are expected to reconcile systems incompatibilities and fix the problems without delay so that the information flow returns to the normal level as quickly as possible.

McKiernan and Merali (1995, p. 54) also discuss the role of IT in after M&A integration. They state that all of the empirical research on M&A performance has produced at least one common factor; ex-post performance does not usually live up to the ex-ante expectations. This is in line with the findings of Stylianou et al. (1996, p. 204) who discuss the unrealistic expectations posed on the IS personnel during and after merger related integration. According to McKiernan and Merali (1995, p. 54) the reasons behind this are usually related to opportunism, failure to give enough consideration to strategic fit and objectives and also the too shortsighted vision. The research however has focused on fit whereas anecdotal evidence on the subject has pointed to other causes of failure such as the definition of new corporate IS and reluctance to define IS and IT-systems early enough.

In their research Weber and Pliskin (1996, p. 90) found systematic evidence for two important concerns of the IS literature. The first evidence is that they found link between integration of IS during M&A and merger performance. More specifically they conclude that when levels of cultural differences between the two management teams engaged in M&A are held constant, companies that engaged in high level of IS integration during merger outperformed companies that avoided such integration. Second evidence that they found indicates that organizational culture plays an important role in the effective IS integration. Specifically, high culture difference between the two companies involved in M&A results in negative merger performance.

According to Merali & McKiernan (1993, p. 107) the anecdotal evidence, however, from executives and management consultants suggest that there have been other, more significant reasons for bad post-acquisitive performance. They go on to state that it is conjectured that one of the most difficult components to deal with after the acquisition has been the definition of the new corporate IS infrastructure requirements and the incumbent integration and development of the new IS structures. In addition, Robbins and Stylianou (1999, pp. 210-211) state that mergers and acquisitions and the resulting task of integrating diverse systems in the entities involved, have the potential to disrupt and throw out of alignment the smooth operation of even the best managed systems. Also, in many cases there has been a huge capital cost of integrating IT-systems and in many others a huge void in defining the types of information systems that are necessary to facilitate business and organizational integration (Merali & McKiernan 1993, p. 107).

After reviewing these challenges that organizations face during and after IT-integration, the next sub-section will, in turn, discuss the methods for overcoming them and ensuring successful IT-integration.

2.3.4   Methods for successful IT-integration

In what follows Weber and Pliskin (1996, p. 82) discuss the reasons why companies invest in IT, and this study assumes that these are the same reasons that contribute to the successful IT-integration after an acquisition. In most cases, companies invest in IT presuming that the investment could improve their performance and increase their competitive advantage by lowering costs, enhancing differentiation or increasing organizational effectiveness and efficiency through inter-organizational and intra-organizational interactions. Companies hope that IT would allow them to coordinate and integrate strategic resources in similar or complementary activities and to generally increase the company efficiency. The IT is also expected to exploit scale and scope economies of a company, especially if the strategic resources are common to several markets or industries in which the company operates.

For their study, Stylianou et al. (1996, p. 209) conducted a questionnaire among 1000 CIO's of companies which had undergone a merger recently. For the questionnaire, the writers discovered five important factors that help achieving success in IT-integration. The first one is the amount of previous mergers and thus the experience on the subject. The second factor is the degree of IT-personnel participating in IS integration. The third factor is the quality of the merger planning. The fourth factor is the criteria used for setting IS integration priorities. The fifth factor is related to the level of data sharing across application and thus the compability of the IT-systems. After conducting the questionnaire, Stylianou et al. (1996) concluded that quality of merger planning is the most important factor when evaluating after merger IT-integration success, because it contributes to the abilities to exploit merger opportunities to the fullest and at the same time it helps avoiding problems in the integration process. IT-personnel participation was perceived important also as it contributes to success the IT-integration process and also helps exploiting opportunities and

avoiding issues during the integration. Writers also mention that improvement in planning could be achieved by involving IT-personnel already in the pre-merger planning phase.

Maire and Collerette (2010, p. 14) found the following success factors for management in order to successfully integrate after M&A:

1. Consider the many dimensions at stake, allocate resources, set priorities and stay focused.
2. Employ a rigorous method, use a set of tools, conduct regular progress reviews and adapt the action plan consequently.
3. Apply sufficient pressure, imprint and sustain pace, allocate time, build trust and rapport.
4. Communicate abundantly, provide training, motivate people and listen to people's concerns and complaints.
5. Identify and resolve socio-cultural differences, explain customs and processes.
6. Detect signs of resistance to change and manage that resistance

Applying these six practices enables company to grasp and harness the complexity of the integration project and also to manage the business and social aspects of it.

Furthermore, Maire and Collerette (2010, p. 14) argue that the single most important factor in successful post-merger integration is the speed of the integration. Fast integration leads to the project meeting the deadlines and provides competitive edge, and most importantly it fosters trust among the employees. This is the part that should be most important to the integration manager role discussed in the chapter 2.2.4 as this person should be the one who makes sure that the timing of the integration is correct. Slow integration leads to various issues, such as rejection or rebellion towards the integration

from the employees and this in turn leads to lowered motivation.

Wijnhoven et al. (2006, p. 13) found that the following conditions are needed in successful IT-integration:

- The company must properly specify the business strategy, structure and work procedures related to IT before the actual integration process.
- The organization must be kept operational during the integration process and company must avoid insecurity and uncertainty among their employees and customers. In order for this to be fulfilled, the mission critical and strategic systems must be integrated first
- IT-projects that aren't necessary to the integration must be working properly before the integration
- The company must establish proper budget, time frame and IT policy for the integration
- The existing capacities and capabilities must be compatible with the desired working procedure and the operations of the integration

In order to summarize Section 2.3, IT-Integration planning needs to be done well to ensure successful IT-integration and there are various factors to consider already in the planning phase. Once the IT-Integration is in the implementation phase there are four models used in implementation: the renewal model, takeover model, standardization model, and synchronization (Wijnhoven et al. 2006, pp. 10-11). Even with good planning and implementation, there are many challenges that organization can phase in IT-integration. Therefore some ways how IT-integration can be done successfully were introduced. As this section went through the implementation of IT-integration but deliberately left out the employee aspect of IT-integrations after M&A's, the next section will focus solely on employee perceptions.

2.4 Employee perception

As none of the three previous sections have not discussed the role that the employees of the integrated companies play in M&A's, this section discusses how they perceive the merger situation, the organization they are integrated to and the integration of the IT-systems. The section is further divided into three sub-sections. Sub-section 2.4.1 focuses on the organizational culture that affects the integrated employees and their attitudes toward the organization they were integrated to. Sub-section 2.4.2 on the other hand explains how M&A situations can be made easy for the employees. Finally, sub-section 2.4.3 discusses how then integrated employees are trained and integrated into the new organization and their IT-systems in particular.

2.4.1 Organizational Culture

Motwani et al. (2005, p. 536) argue that organizational culture affects employee's learning by influencing individuals' ability to learn, share knowledge and decision making skills. Stylianou et al. (1996, p. 204) discuss the problems that big changes in IT policies and procedures have on the employees of the company. Decreases in salaries and the changes in benefits of the IT-personnel usually lead to decline in the IS morale and this in turn reduces the chances of successful IS integration. Decline in the IT-personnel morale and decrease in the amount of workforce also reduces the ability of the IS function of the company to avoid merger problems. The integration of IS in merging organizations can be a very good opportunity for a new company to gain competitive edge and look into the future. However, merging companies should be sensitive to the various problems related to the integration of IS.

According to Weber and Pliskin (1996, p. 84) the synergy potential of IS integration during M&A is widely recognized, however, the attempts to exploit this synergy are often unsuccessful. One of the most important aspects during

IS integration is organizational culture and this has also been mentioned as a critical success factor in IS implementation. Furthermore, Stylianou et al. (1996, p. 204) state that the new corporate structure after the merger or acquisition must handle the cultural differences. These might include work force issues related to various salary structures, varying technical skills, work load differences, morale issues, problems with retention and attrition and the changes in IS policies and procedures.

Weber and Pliskin (1996, p. 84) also argue that because organizational culture acts as a filter through which members grasp the realities inside and outside the organization, organizational culture affects almost every aspect of the way that people in a group interact with each other. They also add that this culture is not easily modified, but that the full potential of organizational culture can be realized the two different cultures are brought into contact with each other, which usually happens during company mergers of acquisitions.

Creasy, Stull and Peck (2009 pp. 33-35) discuss the aspects that affect the employee satisfaction in M&A process. They state that one very important factor is the level of support employees feel from the organization during the change as this is a critical factor affecting the way how they feel about their work. Another factor they bring up is that the procedure and processes that signal support for the employees can significantly affect the job satisfaction of the employees. Also, very important factor to consider is how closely the new employees identify with the new organization and this is very highly affected by how the organization treats its employees. The writers argue that even though there might be cultural differences or similarities between the two companies, the matter in which the integrated employees are treated during the M&A may be more powerful tool to signal company's intentions towards the employees.
The different types of mergers that were discussed in chapter 2.1.1 also affect the employees of the merging companies. Wickramasinghe and Karunaratne (2009, p. 698) state that in extension type of merger, the effects of the

employees are usually pretty low since the two companies are unrelated in products or services and there will be relatively low amount of changes internally. However, in the collaborative merger type, where the merging companies share similar products or services, there might be some consolidation for the company to become more cost-effective or to avoid duplicate work to be done. Employees might be concerned in such situation as this usually leads to downsizing or lay-offs and, thus this needs to be taken into account when planning the integration process. Kay and Shelton (2000) also discuss the problems related to different M&A types mentioned in chapter 2.1.1. They state that biggest employee related issues appear in the "merger of equals" and transformational approach. In both types, the company must combine the employees of the merged companies to form something better or more effective. These issues cannot be solved overnight and this leaves the employees uncertain of their situation. The next sub-section will thus focus on how to take care of the employees and their insecurities during M&A's.

2.4.2   Taking care of employees during M&A's

Wickramasinghe and Karunaratne (2009, p. 705) have studied the HRM aspect of M&A's and found that employees often feel threatened by the level of talent in the merged organization and might start to look for employment opportunities outside the organization. Furthermore, integrated employees might suffer from stress and job insecurity during M&A's. Creasy, Stull and Peck (2009, p. 36) propose various managerial action points for management in order to successfully integrate new employees after M&A. They state that the new employees should be reminder from the start that the company has performed integrations before and that they have been successful. Management should make sure that all of the decisions are fair to everyone, that they are communicated overtly and honestly. Open door policies should be implemented for employees to discuss stressful periods and flexibility on various schedules should be offered to add the feeling of support. Writers even go on to

recommend creating tangible evidence of a merger, such as shirts or mugs as these could help new employees to associate with their new company.

Kay and Shelton (2000, p. 28) argue that human resources management and change management during M&A's is the real key to maximizing the value of a merger. Unmanaged problems with the employees can cause failed mergers, and thus it must be ensured that most of the employees are still employed by the same organization at the end of the integration period. People often tend to seek for employment outside an organization that is in a M&A situation. Wickramasinghe and Karunaratne (2009, p. 712) agree that M&A's increase the uncertainty experienced by the employees as they are concerned by the possible changes and how those changes are handled. Therefore, both the integrated and existing employees need to be prepared for the merger.

Communication with the integrated employees is very crucial and the power of effective communication should not be overlooked in M&A situation. Wickramasinghe & Karunaratne (2009 p. 705) state that the employees need to be informed about various aspects of the integration as during the integration process there are usually a lot of rumors regarding the integration going around. And people always try to find information one way or another, even through grapevine. However, relying on rumors leads to high level of uncertainty among the integrated employees, which in turn causes, more problems than actual changes associated with the integration. In accordance to this, Kay and Shelton (2000) state that by communicating efficiently and fast, organizations can keep the employee turnover to minimum, keep the best talents, and thus ensure the success of the integration process. Also Carrillo (1998, p. 282) discusses the importance of communication with the employees in an IT-integration process:

> *"To make changes, it is important to communicate effectively with all staff, particularly at such a sensitive time, to make them aware of what is happening. Therefore, communication is a key element at this time."*

Maire and Collerette (2010, p. 12) found the following practices that have contributed to resolving issues with integration of employees in a merger situation: open communication, explanation of practices, systems, organizational structure and technical jargon, discussion of upcoming projects and agreeing on the objectives, listening and addressing people's frustrations, fears, reservations and reactions.

Furthermore, Maire and Collerette (2010 p. 2) argue that human factors are especially important during integrations and due to this, in order for the merger integration to be successful, company needs to make sure that the employees are motivated. Motivation level of the employees on the other hand depends on various factors, such as speed of integration, cultural tolerance of the acquiring company and quality of communication in the integration process. According to writers, this means that the management of the acquiring company should seriously consider concentrating on social matters of the employees in addition to technical and structural aspects of the training. Training of the integrated employees will be of focus in the next sub-section.

2.4.3   Training of the integrated employees

The way integrated employees are trained after a company buy-out varies from organization to organization. Nelson (1991, p. 516) defines training as learning how to do the same things always in the same manner, which is the "right way" defined by the organization. Merali and McKiernan (1993, p. 111) state that training infrastructure is most often overlooked when evaluating the acquired organization. Over all, it seems that not enough attention is paid to training of the integrated employees. To demonstrate, Motwani, Subramanian and Gopalakrishna (2005) argue that usually if ERP software fails not enough time or other resources are dedicated to training. Marler Liang, and Dulebohn (2006, p. 723) point out that even though technology adoption is required, the employee's decision to use the new IT-system after the formal training but

before mandatory use is still voluntary. As companies expect fast and efficient training to facilitate the transfer to new technology, positive employee attitudes towards the training are crucial. Therefore employees should get to know the new IT-system by themselves after the formal training before they are required to start using it. This can reduce training decay and employees will remember better the training thus the overall training process will be more successful.

Frazis, Gittleman, Horrigan and Joyce (1998, p. 4) have defined two different types of trainings, formal and informal. Formal training has structured format, is planned in advance and has defined curriculum. Informal training on the other hand is the opposite, unplanned, unstructured, but it can be easily adapted to individuals and situations. Nelson (1991, p. 515-516) argues that the appropriate training need, level and individual skills need to be determined before training. For example, knowledge of existing IT applications is a prerequisite for training of new information systems. Marler et al. (2006, p. 722) argue that training is important when facilitating the learning of new technology, managing employee perceptions and improve attitudes toward new technology. Training has two objectives; first, to facilitate learning the use of technology to be able to perform their work at a same level as with the old technology. Second objective is to positively shape employee attitudes towards the new technology in order to reduce change resistance. Furthermore, this will increase the overall implementation effectiveness.

Marler et al. (2006, p. 723-724) formed a training model (Figure 2) that has five main aspects. First one is training reactions. If an employee has positive reactions towards the new technology, he/she is more motivated to learn. And of course, if the employee has negative reactions, this will make the training and learning more difficult. Second factor is the ease of use, i.e. how the employee perceives the usability of the new technology. Third is the perceived usefulness of new technology. The more the employee thinks that the new technology will facilitate his/her work, the more he/she intends to use it. Fourth

factor is perceived employee resources which refer to the personal and organizational resources required to use technology that the employee thinks he/she has. And finally, the fifth factor employee's intention to use the new technology is dependent on general computer self-efficacy, computer anxiety, objectives to use the new technology, job description, level of education and employee's age.
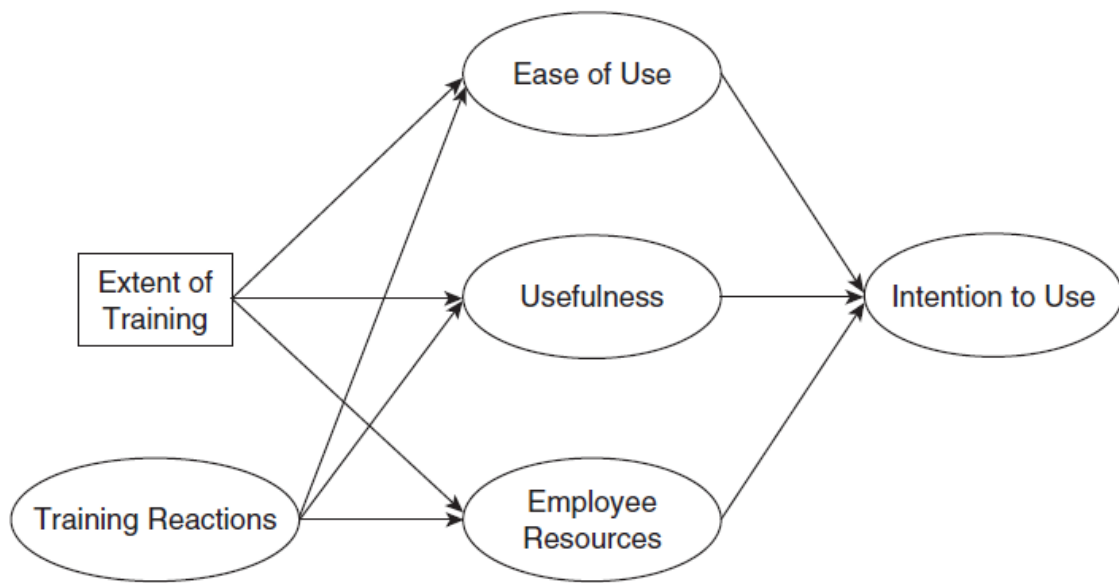
Figure 2. Training model (Marler at el. 2006)

Marler et al. (2006, pp. 725-729) argue that once the new IT-system is in place, immediate training is required to ensure successful transfer from the old system to the new one. Employees need to have the chance to use the new software before and after formal training, but before they have to start using it. Therefore trainers should get the trained employees to use their new learned skills as soon as possible. Technology related training requires both extensive theoretical and practical training. In fact, training is often the first situation where the employee gets acquainted with the new system. Thus, this experience affects greatly the employee's perception of the ease of use. In addition to training employees, technical assistance when needed and providing time for

employees to experiment with new system are crucial for successful implementation.

Furthermore, Marler et al. (2006, pp. 738-739) make a difference between voluntary and involuntary use of technology. In voluntary context ease of use and usefulness are directly related to the intention to use the new technology, but in involuntary context the relation is not as strong. This is due to the fact that in mandatory adoption of new technology the employees have to use the new technology whether they like it or not. Also, in voluntary context employee resources affect the intention to use new technology. But in involuntary context, however, employee resources affect more on the intention to use new technology than the perceived ease of use and usefulness.

Nelson (1991, pp. 504-506) argues that organizations need to see their personnel as an asset whose value and productivity can be increased through education and training. Training is often in an important role in creating the optimal match between people and hardware, and facilitating technological change. Marler et al. (2006, p. 739) conclude that training is not just about learning new skills required to perform at work, it can also be used to manage employee perceptions in order to ensure successful IT-integration.

To recap section 2.4, it can be concluded that organizational culture affects the integrated employees and their attitudes toward the organization they are integrated to. The employees often face problems when there are changes in the IT-systems and therefore adequate training should be offered. Many issues also arise from decreased work morale and insecurity of job stability during M&A's, but organization can increase their motivation with their actions and communication. The integrated employees are trained and integrated into the new organization and particularly their IT-systems. A lot of attention needs to be paid to training, whether it is formal or informal, voluntary or involuntary.

2.5   Theoretical Framework

Now, after reviewing the relevant literature for the purposes of this study, the theoretical framework of this thesis will be presented. The framework is created by the author, and is based on the literature review of this thesis as well as the author's own hypotheses. The visual representation of the theoretical framework is presented in Figure 1.

The theoretical framework presents the various factors that contribute to IT-integration success in the post-merger situation. In this framework, there are two main aspects that lead to IT-integration success. First aspect is integration ambition, which is discussed in the section 2.3 and its sub-sections, and the second aspect is employee commitment, which is discussed and presented in section 2.4 and its sub-sections. These two aspects are affected by various factors that affect and help these two thrive.

Integration ambitions are the goals and ambitions set for the buy-out and the following IT-integration by the corporation management. Integration ambition is the willingness of the company to succeed in post-merger IT-integration and is affected by four factors. First is management commitment, which is discussed in section 2.1 and subsection 2.3.1 is the most important part as in order for the other parts of the framework to work properly, huge commitment is required from the management. Commitment might be shown in various forms, such as resource allocation and physical or mental support towards the integration process.

Second important factor affecting the integration ambitions is the IT-integration timetable, which is discussed in sub-sections 2.3.1 and 2.3.2. IT-integration must be carried out as fast as possible, however taking enough time to make sure that everything is done correctly and everyone is properly trained and satisfied with the integration. Third factor is the IT-integration planning, which is

also related to the management commitment. IT-integration planning is discussed in more detail in sub-section 2.3.1. For the IT-integration to be successful, it needs to be planned properly. IT-department needs to be involved at early stage and together with the management they need to discuss and plan the IT-integration already before the actual buy-out is finalized. This is discussed in detail in sub-sections 2.1.3 and 2.3.1. The integration plan needs to be done as fast as possible to avoid problems related to timetables and poor planning. Fourth factor is physical limitations, which refers to the various limitations that the integration might have, such as bad software or hardware, improper premises and such. These are discussed in sub-section 2.3.3. These four factors of integration ambitions need to be taken care of or at least taken into account in the IT-integration planning phase.

Another main aspect leading to the success of IT-integration is the employee commitment. The employees need to be ready, well trained and motivated when they start working in their new IT-environment. Consequently employee commitment is affected by six factors. First one is employee training which is the most important factor and is discussed in sub-section 2.4.3. Employees need to be properly trained for the new environment that they will be working in. This means that proper training needs to be arranged, not only on the actual software, but also regarding their new workplace. Cultural and social aspects need to be taken into account. In needs to be understood that the employees might come from completely different environment and they are might also be stressed due to the buy-out, the following IT-integration and the overall unstable situation during the merger process.

Second factor is employee motivation, which is discussed in sub-sections 2.4.1 and 2.4.2. Although this is highly affected by the employees' own opinions and the company might think that there is nothing to be done to improve employee motivation, there is a lot that can be done. Employees need to be motivated during the IT-integration process and they need to feel like they belong to the

new company and that are taken care of. Third factor leading to the employee commitment is the organization culture, which is discussed in more details in sub-section 2.4.1. Organizational culture is the cultural and similar understanding of the employees and the surrounding culture that the company possesses. The management may affect these factors in various ways, and as presented in the section 2.4.1 organization culture plays very important role in how the integrated employees perceive the new company. Fourth factor affecting the employee commitment are the physical limitations that need to be taken into account. Fifth one is IT-integration planning, where the employees need to be part of and taken into account. Finally, the sixth factor is IT-integration timetable, where the employees also need to be taken into account so that the timetable is realistic and suitable for them as well.

All of the previously mentioned factors affect the two main aspects in the theoretical framework. It is worthwhile to notice that IT-integration timetable and physical limitations are factors that affect both integration ambitions and employee commitment. If the smaller factors are all taken care of, the employee commitment will be maximized and the integration ambitions will be as high as possible. With these two combined, company will succeed in the IT-integration and this will have positive impact on the whole buy-out process.
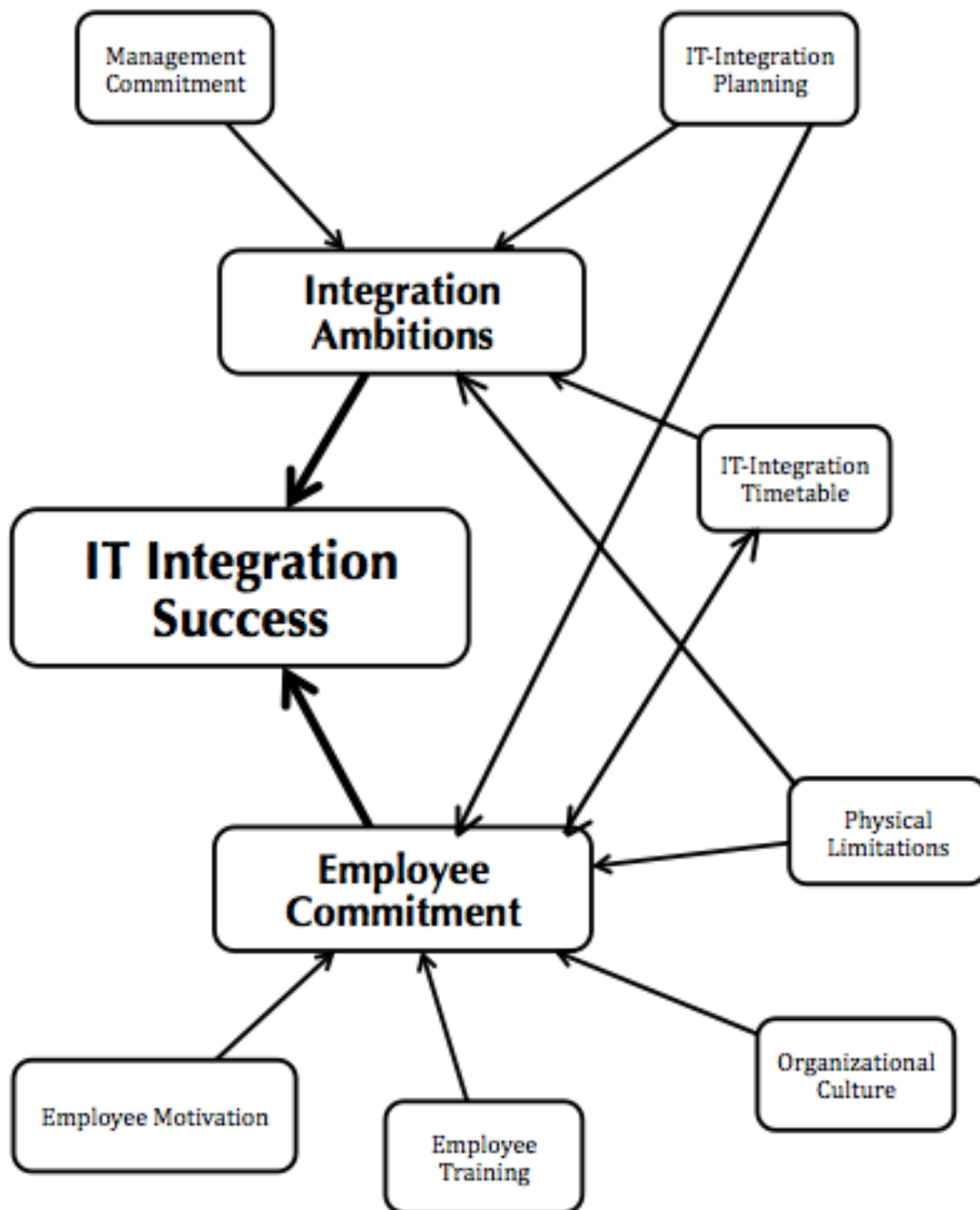
Figure 3. Theoretical Framework

3   RESEARCH DATA AND METHODS

In this chapter, the methodology of this study will be introduced. This chapter will present the various methods used for collecting data for the research, describe that data and will also explain how the case study was conducted. Bryman and Bell (2003, p. 279) define qualitative research as a research strategy that usually emphasizes written material over quantification when collecting data. This research used existing literature, theme interviews and an online survey as its main data collection methods and thus the research can be categorized as qualitative. However, at some level the study is also quantitative as the online survey resulted in a lot of numerical data. Also, as Bryman and Bell (2003, p. 282) point out, theory should be a result of the study in qualitative research, not the other way around and in this study, the theoretical framework presented in section 2.5 was formed based on the literature review. According to Bryman and Bell (2003, p. 11-12) in the inductive approach the theory is generated on the basis of data, as is done in this thesis.

The theory generated from the existing literature formed the base to address the research questions of the study. This was done through the creation of theoretical framework in section 2.5, based on the existing academic literature and models. After the research questions are addressed through the theoretical framework, they will be answered based on the conducted case study and the theoretical framework. With the described methods this study will answer the research questions by giving really valuable insights, not only from academic point of view, but it will also help the case company describing the main issues related to their current state of information system integration processes and how these issues could be avoided in the future.

As this study is empirical in nature, a case research method is used. This study is a single case study as it studied the phenomenon in one organization. According to Yin (2009), case research is the preferred method when studying

contemporary events, but when the relevant behavior cannot be manipulated. Biggest strength of a case study according to Yin (2009) is its ability to deal with variety of different evidence, such as documents, interviews and observations. The case in this research consists of case company analysis, theme interviews of the key people associated with IT-system integrations, such as the company CEO and IT manager, and an online survey for the employees of the case company that have gone through a merger. The following sections will discuss each of these three data collection methods.

3.1 Case Company Analysis

The case company was already briefly introduced in section 1.2. The company has a long history of mergers & acquisitions, and they have around 170 employees who have gone through a company buy-out when integrated to the company. Therefore these past buy-outs will be studied and the ways of integrating information systems were examined. Based on this and the theoretical framework of the thesis, the initial problems associated with information system integration after company buy-outs were recognized and then a base for the theme interviews was created.

During the case company analysis, the target group for the online survey was recognized. Information on company buy-outs was gathered from HR function and IT manager. As the study also concentrates on how the employees have perceived the changes in IT-systems, the company analysis aimed to identify the key people for the theme interviews.

3.2 Theme interviews

The main goal of the interviews was to find out how the people responsible for organizing the IT-system change had organized the change and how they perceived it. Also, the goal was to find out which factors contributed to the

successful integration of IT-systems in their opinion.

The interviewees were selected based on the role they play in IT-integrations during and after mergers. Altogether five theme interviews were conducted within the case company (see Appendix 1). First, the IT-director of the case company was interviewed to obtain technical information on the actual integrations and understand how IT-department is taken into account when going through integration. Also, one point of interest was what is the role of IT-department and IT-director in mergers in general, and in the actual integration phase. Second, the CEO of the case company was interviewed to find out how integration of IT-systems is supposed to go in an ideal situation and whether upper management has realistic view of the process. Also it was interesting to reveal the views of the upper management on the employee integration. These views were also used in the survey to see the differences in views of the management and the actual employees that undergo the integration. Third, one of the sales directors of the company was interviewed. He was chosen due to his role in the latest integration that had happened at the company. He was responsible for that integration and due to this had also a lot of interesting views on the current integration process. He had also been employed to the case company through a buy-out, so that added a lot of depth in the interview also. Fourth interviewee was the logistics director of the company who had been responsible for most of the integrations in the past three years. He is also a board member in the company, and thus the interest in interviewing him rose from similar reasons as the interview of the CEO. Finally, the fifth interviewee was a regular employee of the case company, who had been employed to the case company through integration three years ago and had since acted as a support person for the new, integrated employees and had been part of the training.

Table 1 shows the position of the interviewee, years of employment, as well as the date and duration of the interview.

Position of the interviewee	Years of employment	Date and time of interview	Duration of interview
CEO	4	11.8.2010, 9.02	20 min 48 sec
IT-director	3	20.8.2010, 13.37	50 min 31 sec
Sales person who has acted as a trainer	3	24.8.2010, 8.02	38 min 48 sec
Logistics director	5	30.8.2010, 14.12	23 min 02 sec
Sales director	2	18.8.2010, 16.00	28 min 40 sec

Table 1. Interviewee data

As can be seen from Table 1, all the interviews were conducted in August 2010. The duration of the interviews ranged from 21 minutes to 50 minutes. Also, there was quite a lot of variance in the years of employment, ranging from two years to five years. It can be noted that none of the interviewees had been employed in the case company for a really long period of time, and therefore the interviewees had knowledge of the current state of integration procedures.

All of the interviews followed the same basic framework that can be seen in Appendix 1, but as the interviewees were in various positions in the company and they had all acted in different roles during integrations and as the purpose of the interviews was to gather different aspects from different interviewees, all of the interviews ended up being different. The interviews were pretty open, meaning that the interviewees were allowed to tell freely around the chosen themes and some follow-up questions were formed based on the answers received. However, despite of this, all of the interviews seemed to follow the same path more or less, with all of them giving bit different view on the provided subjects.

The interviews provided very valuable information on how the management perceives the implementation of new IT-systems and what they expect the

outcomes to be, if anything other than just the mere implementation of the new IT-system. Overall, the main objective of the interviews was to understand how the management of the case company perceives the changes in IT-systems and the need of training. When this knowledge is then combined with the data from the online survey, the gap between the views and opinions of the management and the employees was revealed.

3.3 Online survey

The online survey was constructed based on the literature review and the theoretical framework of the study in such a way that it would answer the research questions of the study. Whereas the theme interviews targeted the management of the case company, the online survey was targeted to the employees of the case company who had gone through implementation of new IT-system after a buy-out. As the study aims to find how the IT-systems are integrated after company buy-outs, how this can be done in the most effective way, and how the changes are perceived by the employees, the online survey gave a lot of relevant information.

The online survey was created by using software from Digium (www.digium.fi). The survey (see Appendix 2) had only few open questions since it was absolutely necessary to keep the respondents motivated. All in all, the survey was kept pretty simple in order to get good, relevant results and to encourage respondents to fill out the entire survey. The questions were divided into six categories: background information, perception of the new IT-system, training, working in the new company, IT support and integration process.

The link to the survey was sent on 13th of August 2010. A reminder was sent on 20th of August, which resulted in more responses. The survey was sent to all the 136 employees who had experienced a company buy-out during the last two years and have thus been forced to change the IT-systems they previously

used. As 99 responded, the response rate was 73 percent which can be considered really good. 86% of the respondents were male and 73 percent of the respondents were not in supervisor position. 70 percent of the respondents had been employed for over two years and 39 percent had been working for over three years. Only 20 percent had been working for a year or less.

3.4 Trustworthiness of the study

Collis and Hussey (2003) discuss reliability of a study and state that the best way to analyze the reliability of a study is by replication method. If this study would be repeated, it would yield very similar results and thus this study can be considered reliable. Collis and Hussey (2003) also define validity of a study, which is the extent to which the research findings accurately represent what is really happening. As the researcher of this study has gained nearly full access to the knowledge and meaning of those involved in the study object, according to Collis and Hussey (2003) it can be stated that the validity of this study is high.

According to Collis and Hussey (2003) generalizability is the extent to which the researcher can come to conclusions about general opinion based on a sample. As the response rate of the online survey was extremely high (73 %) and as the patterns, concepts and theories applied to this study are general, according to Collis and Hussey (2003) it can be argued that the generalizability of the findings is good.

4 FINDINGS

In this chapter the main findings of the research are presented by combining the data collected from the five theme interviews and the online survey. The findings presented here will answer the main research question of the thesis: How can the introduction of new IT-systems be facilitated after company buy-outs? The answer to this question can be found by first answering the three sub research questions of the thesis:

1. How are new IT-systems implemented after company buy-outs?
2. Which factors contribute to successful implementation of IT-systems?
3. How is the new IT-system and transition perceived by the employees?

Accordingly, this chapter is divided into three sections. Section 4.1 will report on how new IT-systems are implemented after mergers at the case company. Section 4.2 will describe the factors that contribute to successful implementation of IT–systems. And finally, section 4.3 focuses on how the new IT-system and transition is perceived by the integrated employees of the case company.

4.1 Implementation of new IT-systems after company buy-outs

This section discusses the ways how IT-systems have been integrated at the case company in the past and also today. The first sub-section concentrates on the buy-outs and the following integration process more on general level describing how the integration has been followed out. The second sub-section then describes the integration in more depth, and discusses the steering committees that are formed to guarantee smooth and timely integration. This section also focuses on the role of IT in integration process.

4.1.1 Buy-outs and the integrations

The case company has been growing rapidly during the past four years and much of this growth has been achieved by acquiring other companies. Acquired companies have been both very small companies, which have employed only few people and larger companies employing tens of employees. The case company has also acquired companies that sell completely different products, this way expanding their product offering.

As the case company is a subsidiary of a big corporation, all of the decisions and buy-outs are to be approved by the corporate management. However, the buy-outs are planned and fulfilled locally in the case company by their own board of directors. The CEO explained the process related to buy-outs and the following integrations in the following quotation[1]:

> *"There is a 200 hundred page document completely describing the integration process, all of its parts and how everything should be done. There is around 100 different points that need to be taken into account and around 70 percent of this document is related to IT. This document is however highly classified and there exists only one printed copy in the case company, which can be accessed by only few people in the company and cannot be seen by anyone else, nor be copied even partly."*

According to the CEO, the whole process of company buy-out is very well defined in the case company, and the CEO seems to be under the impression that this process is also followed. This same process document is used throughout the whole corporation and the document also includes timing of the project, the CEO describes the integration timeframe as follows:

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[1] As the interviews and the survey responses were not originally in English, all of the quotations in this research were translated into English by the researcher. Therefore, the researcher is responsible for any possible inaccuracies or mistakes in the translations.

"The timeframe for any integration is that the integration should be completed in 100 days after the company has been bought. The end-point of integration is defined as the point when we consider that the IT-systems are completely integrated. Sometimes we meet the timeframe, sometimes we don't."

Most of the other interviewees did not seem to agree that integrations are well planned and prepared. When discussing the problems related to integration process, interviewees provided the following reasons for poor planning:

"Clearly the biggest problem with the integrations has been that we don't seem to have any order of what needs to be done and in which way. We don't have one common way of doing things."

"I think it's mostly because we don't have separate training unit. Corporate has special training unit, but we only have few regular employees who act as trainers. We just name someone and he/she then goes and trains the integrated employees."

Based on the interviews conducted, the integration process at the case company includes the following ten steps:

1. The company that will be integrated is bought and together with the IT director preliminary plans for the integration process are created
2. Board of directors chooses steering committee that will lead the integration process and will make sure that the processes are followed and that the timeframe is successful or realistic
3. Steering committee together with the IT-director create plan for the database integration and also plan how the employees will be integrated
4. Database integrations are started
5. Preliminary training of the employees

6. Database integration is finalized

7. Final training of the employees

8. Actual integration and the employees move to the new IT-systems and new databases

9. Project group reports to the board of director on the success of the integration process

10. More experienced employees are sent to local branches to help the new employees or the current employees at the branch provide support for the integrated employees

The integration process described above before has varied a lot depending on the type of integration. Furthermore, the process of integrating employees was perceived a bit differently in the eyes of the interviewees. The CEO stated that:

"Roughly saying we have around 100 days for the integration. 30-40 days before the employees move to the new system, they start the training that lasts for about a month. We also give the employees around a month timeframe after the transition where we continue training and it can be said that the training is a never-ending process."

However, according to the other interviewees, the training process is such that around a month before the transition to the new system, the integrated employees are given preliminary one day training in which they briefly go through important company information and also they are given a brief training on the new IT-systems. After this, a few days before the actual transition, the integrated employees are given another brief training on the IT-systems. In addition after the transition to the new system is implemented, there is usually an onsite person available for one day, whose role is to answer questions and help the employees to get started. This process has not been perceived as the best possible and many of the interviewees have noted problems with this. Trainer described the rather strict training timelines in the following quotation:

"The training is a pretty tight package, there is a lot to learn and this is done in one or two days. Also, there is a person helping with the systems after the integration for one day. These timeframes are clearly too small in my opinion and the systems are so wide that you can't learn everything in few days and there might be a lot of issues that arise only weeks after the integration."

The practice of sending someone onsite to provide support and answer questions has been found very useful by all of the interviewees, and thus this model has been used in most of the integrations. However, in some cases it is complicated to differentiate if the support person is just another employee from whom the integrated employees ask for advice or if he/she is actually nominated to be there to provide support. Another aspect is that this person usually has not been trained in providing training, but is usually just another employee who is asked to provide help when needed. The sales director elaborated on the matter:

"In the latest integration we had three branches where we had a pretty good situation. One sales guy, who is pretty good with computers, was the best support for the new employees. Because he was working on similar things as the new employees, he really helped them. After that we didn't need him onsite, people just called him whenever they needed help. I think this is the best model, because professional trainer can just give theoretical support, but colleague knows what the people need to know and can concentrate on teaching those things."

It is clear that the 100-day plan is not always met, especially in bigger integrations. The integration does not always go according to the plans and the timetables are changed many times. The sales director told that in the latest integration, the timetables were changed five times and the start of the integration process was delayed multiple times.

One of the biggest issues with the timetables is related to database integrations. Logistics director explained that if the product offering in the bought company is similar, then the actual integration is pretty simple. In most cases however, especially if the acquired company operates in different field or the product database is badly managed, just the database integration might take months. Logistics director also mentioned that the employees at the acquired company might have different opinion on what needs to be integrated and which products need to be chosen to be offered.

4.1.2   Steering committees and the role of IT

As described in step three of the integration process of the case company, steering committees are formed to lead the integration process. Two of the interviewees, the logistics director and the sales director of the company had both been leading these steering committees in the past integrations. Logistics director has been leading many of the integrations during the past years and has been acting in the steering committees. The sales director led the latest and one of the biggest integrations at the case company in the spring of 2010.

An important step in the IT-system integration process of the case company is the creation of steering committees. The role of the steering committees in the integrations is mainly to lead the integration, make sure that the timetables are met and everything is done as planned. Sales director who was part of a steering committee explained the role of steering committee as follows:

> *"I wasn't doing or leading any technical stuff, our steering committee was just stating the frames for the integration, making sure that everything goes along the plans."*

The logistics manager who also had been a part of a steering committee seemed to have a similar approach on the managing role of steering committees. He described his role in a steering committee as follows:

> *"Mainly I have been concentrating on the product catalog, thinking of which products are the same and which are not. Also, together with the IT-director, we have been planning the actual product database integration."*

All of the interviewees seemed to agree that company management plays a big part in the integration process and that there is a lot of planning going on before and after the actual integration. According to the interviewees it also seems that the IT department is very well participating in the whole process of IT-system integration, starting from the planning of the buy-out. However, IT is not involved in the process right from the start, as can be seen from the following quotations:

> *"IT-department is involved in the integration process already before the buy-out is made public. IT-director participates in the planning from the start, mainly in order to make sure that the integration is finished in the planned timeframe."*

> *"IT department is not planning the integration together with the board of directors at early stages. But starting from the forming of the steering committees IT is very much involved when the actual project starts."*

Logistics director also discussed about involving IT in the whole process and constantly updating them on possible changes:

> *"IT is participating from the start, they know what we buy and we try to keep them updated on every possible change. From the beginning they*

analyze the bought company, what kind of infrastructure they have, can we use anything or do we have to change all the equipment and these types of things. However, they have sometimes said that they get the info too late, especially when we are building IT connections, because those might take a lot of time."

From the employee point of view, the IT-systems at the case company are not technically integrated. One day, the integrated employees just start using the new IT-systems at the company and the old system is supposed to be abolished. CEO elaborates:

"All of the integrated employees fully become employees of the case company. All of the old IT-systems are completely abolished and all of the employees start using only the IT-systems of the new company."

However, all of the other interviewees seemed to disagree to some degree. In fact, the sales director, who had himself been integrated to the company few years ago, mentioned about using the old system after moving to the new one:

"After we started using the new IT-systems, the old systems were in use for nearly two years, until the old server was shut down. Even though we used the new system for the actual selling, we used the old one for everything else, because it was much faster and had much more information in it, such as much longer customer history."

Other interviewees, excluding the CEO, seemed to agree on the matter of how much history is transferred to the new system from the old one. IT-director explained the situation of using old IT-systems in parallel with the new ones as follows:

"The employees are not allowed to use their old IT-systems for any new processes, such as selling, but in some cases we have arranged connection to old systems, if the employees need to check old prices or something. This type of information is never transferred to the new systems; this is limited and prohibited by the corporate management."

The insufficiency of data history has caused a lot of problems among the employees and this has clearly been a problem for many years. As the IT-director mentioned, this has also lead to a situation where employees are allowed to keep and use the old IT-systems alongside the new ones, because the old ones are either easier to use or there is more information available. The sales director compared his integration with the latest integration as follows:

"After I was integrated, we had the old system, in which we had all the company history from the past seven years, all the sales transactions, all the products and all the customer information. The new systems didn't have any history and thus selling was more complicated. However, when I was leading the latest integration, the employees didn't have their old systems available after the transition and this made their work really hard and they actually couldn't do certain things at all."

Even though the IT-integration process is supposed to be very well defined, the different integrations have been done in different ways. The previously described integration methods have been used many times in many of the integrations, but it seemed that in some integrations, company used different methods. In the latest integration, where a relatively big company was bought and integrated, the integration was done completely differently. The sales director explained how the latest integration differed from the usual procedures:

"The latest integration was pretty different from the previous ones. Integrated employees transferred to our branch immediately on the

integration day and because everything happened so fast, we didn't arrange any actual training. We just trusted that other employees will help when needed and this went surprisingly well. Afterwards, when the employees knew the systems, we provided them with little bit of training."

To conclude, as can be seen from the previous quotation and from excerpts of the other interviews, the case company seems to trust that the employees will learn most of the things needed in their work by themselves and by doing their regular work. In addition to this, a lot of trust is put onto the help from current employees.

4.2 Factors contributing to successful implementation of IT-systems

In this section, the factors that contribute to the successful implementation of IT-systems are discovered. As there have been many integrations in the history of the case company, there are both bad and good examples of how integrations have been implemented. Some factors such as the quality or amount of training have affected the integration negatively in most of the integrations. However, there are also various factors that are done well and contribute to the implementation positively. When discussing the various factors that contribute to the successful implementation of IT-systems, all of the interviewees had a lot of contributing factors on their mind. The section is further divided into five sub-sections, each of them focusing on one main factor that contributes to the success of IT-systems integration.

4.2.1   Training process

Single most important factor that stood out when discussing the successful implementation of IT-systems was the level of training of the employees. All of the interviewees seemed to agree that the current level of training is not sufficient. Following are the five training types that are supposed to be arranged

during and after integrations. However, it has to be noted that trainings and the amount of them have varied very much depending on the integration:

1. Preliminary training arranged around month before the transfer to the new IT-systems
2. Actual IT-system training held a day or two prior to the migration
3. More experienced colleague helping and answering questions for a day or two after the migration. This can happen at the local branch face-to-face or over the phone or such
4. Advanced or a refresh training held month or two after the transfer to the new IT-systems
5. Refresh or update trainings at a constant rate at later stages

The training plan described above is the optimal plan, as described by the CEO of the case company. However, as mentioned before, the actual trainings that have been arranged in the past integrations have varied a lot. In worst case scenario, new employees have not gotten any actual training, and in the best case they have had few training sessions and also a support person to help them also after the migration. Also, even though some of the integrated employees have not even used computers in their previous company, they still have not received any special IT-training. However, nearly all of the interviewees agreed on the fact that training for the integrated employees needs to be improved. This can also be seen from the following excerpt from the interview of the logistics director:

"We definitely need to concentrate on the training. The training has been neglected in the past, and due to the huge amount of integrations the training that is supposed to happen at later stages when the employees are integrated has been completely left out. There are people who have used completely different systems before working for us and there are even cases where there have not been any IT-systems in the previous

company and the employees have used pen and paper type of approaches. As these people are trained within few days, it is clear that the amount of training is not enough."

Actual training has varied very much depending on the trainer. Case company has not nominated actual trainers, but there has been one IT-support person and one sales person who have organized trainings. There are also no defined processes for the actual training, or at least they are not used. The trainers decide the best training approach based on the trainees and their past experience. The sales person who has been training integrated employees described the planning of the trainings as follows:

"Company provides me with the basic material on what needs to be taught and I have myself decided on what methods I will use and how. It has depended very much on the group, what people know previously and what they are capable of. Other trainers just go through all the training material and that's it. I have taken into account what people can and want to learn and adjusted the trainings to that."

In addition, the logistics director mentioned another interesting point related to training. He noted that as there is a lot of negative feelings associated with the integration itself, some of these negative feelings are also associated with the IT-system integration Due to this, integrated employees might have negative feelings towards the new IT-systems even before they have even actually used or seen it. According to the logistics director, this issue can be tackled by giving the employees enough time to get used to the IT-system:

"Very important part of the integration is to allow the integrated employees to get to know their new IT-systems well enough. Because the integrated employees always start to use our IT-systems, it is good to give them at least the impression that they are not forced to use the new

systems. We need to have our own employee telling the integrated employees that the systems are good and actually usable and in this way reduce their negative attitude towards the new systems."

Furthermore the interviewees discussed the possible reasons behind improper training. The trainings are perceived as poorly prepared and not enough time and other resources are put into training. The interviewees seem to be unhappy with the current training process, as can be seen from the following quotations:

"We have bought so many companies in the past years that we have completely neglected the need for the training after the integration period. Some employees come from completely different environment and learning our way in few days is impossible. Of course there is someone helping for few days after the integration is done, but the additional training that should be provided has been left out due to missing resources."

"I have the feeling that the integrations are not planned that well. Training is planned little bit, but it seems that before the training period no-one knows what kind of company is integrated, how and what is done there currently and what is needed in the training process."

To conclude, all of the interviewees seemed to agree that there have been some training related problems in the past IT-integrations. Especially the training that is supposed to happen after the integrated employees have already started working has been almost completely ignored. Furthermore, all of the interviewees seemed to recognize the need for the continuous training and had noticed various problems originating from the lack of it. Once these problems are overcome, the IT-integration can be considered successful.

4.2.2 Timing of the integration and length of the training period

Another success factor that was pointed out by few of the interviewees is the ideal timing of the integration. The IT-system integration should be done as soon as possible after the merger, as the CEO of the case company stated:

"The single most important factor in the success of the integration is the timing, if we are going to have some problems, it is better to have them sooner or later."

In addition, most of the interviewees were of the opinion that the length of the training period is the single most important factor in the training process Most seemed to agree that there is not enough time allocated for the training of the integrated employees and this leads to many issues, such as lowered productivity, employees not utilizing the IT-systems properly and reduced work motivation. This can be seen from the following excerptions of the interviews of the IT-director and the sales person acting as a trainer:

"I think that integrated employees should be able to work at the same level as before being integrated within one month. However, in our case, this usually takes two to three months and in the worst case even up to six months. I think that this is directly caused by improper training which is usually due to too little time given for the trainings."

"My opinion is that it takes at least half a year and even after a year people still find new things or things that they can't do properly or at all."

Logistics director also discussed how the case company does not provide any additional training after the integration period and how this also leads to the improper training of the integrated employees:

"Employees start using the IT-systems properly after few weeks, but the problem is that we don't provide any training after this. They can perform the basic tasks, but they can't take advantage of any special functions that we can provide."

To summarize, length of the training period and the timing of training are clearly crucial when planning or actually implementing IT-integration. When and for how long are the employees trained can play very huge role in the IT-integration success.

4.2.3   Integration of databases

Third important factor that contributes to successful integration is related to the database integration. There are various different databases that might need to be integrated and getting all of them integrated properly is absolutely critical in the integration. At the case company the biggest databases that are usually integrated are customer databases and product databases. The IT-director of the case company explained the importance of proper database integrations to the whole process in the following quotation:

"If there is a lot of products that need to be integrated, the can be a huge issue. There can be tens of thousands product lines that we need to go through manually and check and in the worst case scenario this can take up to six months. However, in the best case, when the products are similar and we can do the matching automatically the process is much faster. The actual integration of databases can be done in few weeks, but the preparation can take up to six months."

The IT-director also discussed the actual process of integrating databases at the case company and the possible problems that can occur:

"Obviously we don't transfer the database right away, but we form two files from which we compare the products or clients of our and the integrated companies. This is where the problems usually start, especially on the product side. Combining the two databases is usually really complicated, but is more related to time issues. Person combining the products hasn't had time to properly check the products and in the end we have a situation where two similar, but completely different products are combined into one. This is usually recognized when this product is sold to a customer."

Some of the biggest problems in IT-integrations are related to database integrations. Integration of databases is in a central role at the case company and is significant contributor to the success of the whole IT-integration when done properly. Yet, database integrations are often complicated especially if the data is presented differently, as can be seen from the following quotations:

"Biggest problems are related to databases, the issues can be really small, such as decimal errors in pricing, or there can be bigger issues, like the products of integrated company not matching ours. All of these issues cause problems."

"The database related issues have varied a lot depending on the company. If we have integrated company that sells the same stuff as we, usually the database integration has gone smoothly. However, in some cases, the databases have been really dysfunctional from our perspective, product weights or selling units can be completely different and combining these can take a lot of time. And if we integrate ten to twenty thousand products, it can be really complicated and time consuming. "

4.2.4   The Role of Management

Fourth, the role of management in integrations is very important and most of the interviewees seemed to be satisfied with the level of management involvement in the integration process. CEO explained about the steering committees that are created in order to control the integration and ensure that management is on top of things all the time. Most of the interviewees seemed to share the views of the CEO and seemed to agree on the level of management involvement. The role of management is captured well in the following excerpts from the interviews:

> *"Part of this process is that the management takes part in the steering committees. Of course we don't do the actual integration work, but we do control and make sure that everything gets done properly and within assigned time."*

> *"Management is very intensively participating in the integration process. CEO and the person responsible for the integration are participating in the integration process at some level nearly daily. "*

> *"The role of management is more related to controlling the timetables and taking care of proper use of assets when the costs of various parts of integration, such as use of various premises are resolved.*

Although the role of management in IT-integrations seems to be clearly defined, some of the interviewees do not experience that the management is truly being involved. One interviewee was not satisfied with the management support for the integrations and described the situation as follows:

"The management has just taken care that the project timing is met. There have been some instructions from the management, but I definitely feel that they could have been involved more."

4.2.5 Employee Dedication

Finally, the fifth identified factor contributing to success of integrations is employee dedication to the integration process. Dedication to the integration process seems to be an issue at all levels at the case company. The attitude and dedication of the integrated employees has a huge effect on the outcome of the integration.

All employees related to the integration process seem to do their regular work at the same time while doing their integration related tasks. This concerns everyone from the integration leaders to the trainers. As the employees are not dedicated to the process, the IT-integration is left without proper attention. One of the interviewees pointed out that dedication of people to the integration process has been single most important factor in integration during the past years. He described his own dedication when he was integrated as follows:

"When I'm participating in integration, around 90 percent of my time is spent on the integration. My actual work needs to be arranged in some way and that usually means overtime work. Some people don't dedicate themselves to the integration so well, but instead concentrate more on their actual work. This leads to a situation where some things are postponed due to someone not doing their part. Company management needs to realize this and allocate resources to help people cope with their actual work so they could concentrate on the integration process properly."

4.3   New IT-systems and transition from employee perspective

In order to answer the third research question, an online survey was conducted among the integrated employees of the case company. According to most of the interviewees, integration process at the case company is pretty well handled and the employees are trained properly. However, the results from the online survey spoke a different language. The findings are presented here in six sub-sections.

4.3.1   Perception of the new IT-systems and databases

As many of the interviewees mentioned, there have been a lot of issues related to the integration of databases during the integration. This has also been observed within the integrated employees as 82 percent of the respondents reported that they have found information from databases worse than in their previous company. 13 percent said that they have found information as well as before, and only 5 percent have found it better than before. As 97 percent of the respondents indicated that they had at some point used the product databases in their work and 83 percent had used customer databases, database integration can be considered as a very important part of the IT-integration.

Integrated employees have clearly faced many issues with the integration of databases. Mentioned problems included having trouble finding data in the system, which was perceived as an issue by 84 percent of the respondents, and problems related to data being presented in different form, which was seen problematic by 64 percent. Trouble finding data can to some extend be seen as a result of data being presented in different form. Making changes to databases and missing data was perceived as a problem by 58 percent and 60 percent respectively. 43 percent of the respondents found incorrect information in the databases after the integration. Interestingly, only 4 percent of the respondents did not find any database-related issues or problems in the new systems. 17

percent of the respondents also chose to specify other answers than the given options and the database related problems described here varied a lot:

> *"Most of my time goes to finding things from databases and entering orders into the system and I don't have any time to actually sell anything."*

> *"History is missing from the databases, currently we only see about 400 days of history, which I don't even consider as history, but as current data."*

Generally it can be noted that there are many issues with integrated databases and that most employees seem to experience issues with them. Some of the issues are purely database related issues, but some might be more related to attitude or opinion of the system. However, the questionnaire responses clearly indicate that something is not done correctly.

4.3.2   Training period

The ideal training process at the case company described by the CEO was discussed in the section 4.1.1. However, as already mentioned, the training process has not usually followed the ideal training plan set by the corporate. The results of the online survey seem to confirm this assumption. 71 percent of the respondents had been participating in real, onsite training with an instructor. In addition to this, 20 percent of the respondents had received some sort of virtual training. Nearly 60 percent of the respondents had also trained themselves, either with some material provided by the trainers or through some other form. 47 percent of the respondents had a support person helping them in some way when support was needed, and 22 percent had received actual training from the support person. Few respondents reported they were not

trained at all. The open-ended questions resulted in few interesting answers that confirm that trainings do not always follow the training plan:

"Two days of training with a really angry trainer."

"There was clearly not enough training if you take into account the amount of things to learn in the new IT-systems."

"I had only one course, which lasted for few hours."

The trainings have been arranged in different forms. There has been different training groups as 70 percent of the respondents had participated in-group training, 11 percent in personal training and 19 percent had taken part in both. When discussing the length of training period before actually using the new IT-systems, 47 percent of the respondents said that their training lasted for one day. 49 percent chose to answer two to five days, which clearly correlates to the training among estimates provided by the interviewees. Out of the respondents, 71 percent stated that the training period was too short but only three percent said that the length was too long.

The CEO of the company mentioned that according to the training process, the training is an ongoing process and after the employees are trained and integrated, the process continues and the employees are trained constantly also after the integration. However, 64 percent of the respondents said that they have not received additional training after the initial one. There seems to be a lot of dissatisfaction with the training process as 47 percent of the respondents said that they are somewhat dissatisfied with the provided training and 17 percent said that they are extremely dissatisfied, while only a few people were extremely satisfied.

The training process is clearly really important part of the integration as nearly every respondent indicated that they felt that the training was needed. People who were dissatisfied with the training reported reasons related to few different areas. One big are of problems was time related and the following quotes represent this:

"Too much info during one training, I couldn't remember everything."

"We had 15 minutes of training."

"Training was too fast and short and if you missed something, you had to learn it yourself at later stages."

"There was no time to actually learn anything, but on the second day after the training we had to work on the new systems and ask questions from the old employees."

Another big problem area was clearly related to the trainers. Lack of expertise, dedication and time were reported as issues with the trainers. Also inconsistency in the training methods and use of jargon were mentioned. The following quotations from the survey answers represent these issues well:

"Trainers didn't know what they were teaching; we had to stop many times for the trainer to find out something."

"Training was constantly interrupted by the phone of the trainer, the trainer was doing her/his normal work at the same time."

"Terminology used in the training was the one used at the case company and we didn't understand a lot of things that were trained."

"To one IT-system we were trained by our future colleagues, and they did it while doing their regular work. Everyone taught things a bit differently and some people just clearly didn't know how to explain anything. To other system we received actual training, but the hardware wasn't working at the training, so we were just left with bunch of paper."

There were also many issues with trainings, such as too difficult IT-system and lack of follow-up. Integrated employees get easily frustrated when facing these challenges as can be seen from the following excerpts:

"Really complicated program and we had to understand so much immediately that I was really stressed."

"After the initial training, there was no follow up."

"Even now, few years after my integration, I still find new features from the systems that can be done in simpler ways or at least differently."

4.3.3 Problems faced by the integrated employees

When asked about which issues and problems faced during and after the integration process, it seemed that the respondents had various issues. In Table 2 below all of the response choices for challenges faced during the integration are listed along with the percentage of respondents who chose that option.

1.	The abilities of the new IT-systems were very different from my old ones	80%
2.	New IT-systems were much more complicated to use than the old ones	69%
3.	Too little time for training	62%
4.	I did not receive enough information	42%
5.	Too fast transition to the new IT-systems after merger	41%
6.	I didn't find necessary info from the databases of the new systems	37%
7.	I was not satisfied with the trainers	30%
8.	The transition schedules were a challenge	24%
9.	I was not satisfied with the training materials	21%
10.	Other, please specify	18%
11.	Time between training and actual move to the new systems was too long	15%
12.	IT hardware was worse than the old one	4%
13.	I was pressured during training or the integration process by my manager	4%
14.	I was pressured by my co-workers	1%
15.	I did not have any difficulties	1%

Table 2. Challenges faced during the integration

As can be seen from the Table 2, only one percent of the respondents did not experience any issues or problems during their integration. It is worthwhile to note that two of the biggest problems were related to IT-systems. 80 percent of the respondents reported that the new IT-systems were different in usability functions then the old ones. Furthermore, 69 percent said that the new IT-systems were much more complicated to use. The third most common problem experienced was that there is not enough time to train for the new systems as 62 percent of the respondents chose this option. Out of the respondents 42 percent reported that they did not get enough information during the integration

process and 41 percent said that the move to the new systems was too fast after the merger. In addition, there were also 37 percent of the respondents who experienced issues with databases, as they could not find the date they needed.

Many of the integrated employees were not satisfied with the training itself during integration. In fact, 30 percent were not satisfied with the trainers, 24 percent of the respondents found the transition schedules challenging, and 21 percent were not satisfied with the training materials. Furthermore, 15 percent of the respondents were of the opinion that the time between training and actual move to the new systems was too long. Surprisingly, IT hardware related problems or issues were reported by only four percent of the respondents. It seems that the integrated employees did not experience peer pressure, as the respondents were not pressured by their managers or co-workers.

In additions to the challenges that were listed in Table 2, 18 percent of the respondents had experienced problems or issues that were not opted as an answer. The integrated employees had faced many difficulties, such as inadequate training as can be seen from the following quotations:

"There was not enough history in the new systems."

"Support person didn't have enough knowledge on the programs."

"Programs didn't work during the training."

"New IT-systems are really stiff."

"After the training I was left alone."

When asked about how the training could have been done better for the employees, many issues were brought up. It seems that employees need more time for training, want to focus on one thing at a time and would like the opportunity to train in practice. Also additional training and some sort of written guidelines and instructions would be appreciated. The improvements suggestions can be seem from the following excerpts from the online survey targeted to integrated employees:

"More practical training."

"Divide training to many days and less things to learn at once."

"Professional trainer who understand our needs and also more training."

"Training as it is, but to arrange another training after we have already started working, because there were a lot of questions after we started working."

"Proper manual for every employee with all the important information."

"Training was one month before the actual integration and it was hard to remember what worked and how when we actually started working."

4.3.4   Working in the new IT environment

In order to find out how integrated employees perform after being integrated to the new IT-environment, the online survey contained questions about working in the new environment after the integration. As many as 46 percent of the respondents stated that they have not been able to do their work as well as before the integration, and 33 percent said that they can do their work as well as before. Only 10 percent argued that they have been able to do their work

better than before after moving to the new IT-system. However, there have also been some successful transitions to the new IT environment as can be seen from the following quotes:

"New IT-systems are clearly designed for this type of big company and they suit us well."

"There are clear practices in the new company on how to work, so everything goes smoothly."

"It's good that I have time to actually sell and not bother myself with the IT-related issues."

"There clearly are many IT-systems that can be used, but we just need more training on which suits to which needs."

In the online survey, the respondents were also asked how fast they were able to perform their work compared to when working with the old IT-systems. As could be expected none of the respondents were able to work at their old level immediately after the transition. Only three percent were able to do this within a week from the integration. 24 percent were able to perform at their previous level in less than a month, but after at least one week. For 35 percent of the respondents it took over a month to be able to perform at the same level as before the integration. However, 37 percent answered that they still cannot operate at their old level even after months from the integration.

The CEO of the company mentioned that the integrated employees fully move to the new IT-systems and after the integration they are not supposed to use their old IT-systems anymore. However, a few other interviewees did not agree on this. Furthermore, 67 percent of the survey respondents reported that they have used their old and new IT-systems in parallel after their integration. The

reasons for this included missing history information, problems with database, and ability to find information faster and better in the old systems. This can be seen the following quotations:

"All of the needed info cannot be found in the new database, or it's hidden somewhere."

"Old information wasn't transferred to the new database, we had the customer numbers, but data behind them was missing."
"History was much longer in the old database and it was much more convenient to use."

"I can find the needed info in the old database in less than a minute while it takes much longer in the new database, if I even can find what I'm looking for."

4.3.5   Level of IT-Support

IT-support process at the case company received relatively good reviews from the integrated employees according to the online questionnaire. As many as 86 percent of the respondents reported that they had received IT-support whenever they had needed it during the integration process. However, the channels through which the employees had received IT-support were surprising, as 94 percent of the respondents said that they have received IT-support from colleagues and 20 percent had received it from their manager. 45 percent had received IT-support from IT-department and help desk. The six percent of integrated employees who had not received IT-support reported, for example, the following reasons:

"There are no manuals or continuous training, we just learn from each other and some of the people still don't know anything but the basics."

"Most of the changes or add-ons in the systems are communicated to us through email and then we have to learn them ourselves, this is clearly not the most efficient way."

"It was really hard to call the trainer as he/she was always angry and especially in the beginning I didn't know any of my colleagues so it was really hard to ask for advice."

4.3.6   Overall Integration Process

In the final part of the survey, the respondents were asked about the success of the overall integration process at the case company. It seems that the interviewees who were part of the management did not see any real issues with the integration and the importance of training the integrated employees. The CEO of the company described the possible issues related to the training of the integrated employees in the following ways:

"I don't believe that they are real issues, it's just that our IT-systems work differently than their old systems and for some people this might be a big issue. I don't think there are any issues with the IT-systems, they are just differences."

"At some point we noticed that our training process isn't that good, so we changed it to such that we don't even try to train everything. We just teach the employees the most important parts and after a while we go into details. If we train them completely immediately, they don't learn anything."

There is very limited data available in the case company related to integrations. Interviewees mentioned that there are no official plans for collecting data from the integrations and even finding out the amount of integrated employees was

complicated. There is no proper data about who was integrated, or from where and when. CEO explained that there is constant discussion with the personnel about the various issues and problems, but there has not been any systematic data collection about the success of the integration or employee satisfaction. However, the IT-director conducts a yearly IT satisfaction survey, but does not specifically discuss integrations or target certain employee segments. The online survey conducted for this research provided very interesting views on various subject of IT-integration, especially from the employee point of view. Some of these views differed significantly from those of the management team.

When asked about the factors contributing to the successful implementation of IT-systems, 76 percent of the respondents said that it was their own willingness that contributed. And 70 percent said that it was the desire to succeed at own work. Only 42 percent mentioned that it was the training that was provided by the case company. Other reasons mentioned were, that there were no other options than to learn, and that the support of colleagues made the integrations easier.

The integrated employees clearly do not adopt the new systems as fast as the company management and most of the interviewees seem to think. The IT-director mentioned that it takes maximum of few weeks for the integrated employees to work properly on the new systems and other interviewees seemed to have similar opinion. However, in the survey 19 percent of the integrated employees said that it took them a month and 38 percent said that it took them over a month to adopt the new IT-system. 24 percent of the respondents argued that it took them two weeks or less, but only four percent argued it took them less than a week.

There seems to be a lot of dissatisfaction on how the overall integration process has been handled by the case company as 43 percent of the integrated employees indicated that they were dissatisfied with how the integration was

handled on their behalf, and 27 percent said that they were very dissatisfied. In total, as many as 70 percent are unhappy with the way integrations are handled. The remaining 26 percent of the respondents were satisfied and only four percent indicated that they were very satisfied. Last multiple-choice question in the survey was very simple. "Do you feel that the case company puts enough effort to the integration process and to training of the integrated employees in to the new systems?" Only 27 percent of the respondents chose to answer yes, which left 73 percent of the respondents answering no. This gives very good overview of the general opinion on how the integrations are handled from the viewpoint of the employees.

When asked how the integration process could be improved, many of the suggestions related to trainers and timetables. The employees suggested that there should be more support people, so that they would not need to bother their colleagues all the time. Also, training should be planned better and be more coordinated. However, there were also some previously unmentioned improvement propositions as can be seen from the following quotes:

"More help from the support person with learning the routines. Also, as there are many different systems, which I weren't used to using and I had to call many different people to get answers for different systems or tasks."

"Company needs to spend more time on training and make sure that all of the databases are integrated correctly."

"More support and follow up on how people are learning and working in the new environment."

"When we moved to the new system, the databases were empty and we could not do anything. The systems should be tested before integration."

"I felt that the whole integration was done in a hurry and if I wouldn't have asked for training I wouldn't have received any."

To summarize this section, it seems that there are many issues with the IT-integrations at the case company and as many as 70 percent of the integrated employees seem to be dissatisfied with how the integrations have been implemented on their behalf. Also, there seems to be a clear gap between what the company management and the employees perceive as a successful IT-integration. Next chapter will discuss these issues in more detail.

5 DISCUSSION

This chapter discusses the main findings of the study in relation to the theoretical framework presented in section 2.5. During the case study, many IT-integration related issues were recognized. Even though the CEO and the management of the company seem to be under the impression that the IT-integrations usually go very smoothly, according to the plans and that everybody involved in the process is more or less satisfied, this has clearly not been the case. When asked if the case company puts enough effort into the IT-integration, 73 percent of the respondents of the online survey chose to answer no, which clearly indicates that something has been done incorrectly.

In the theoretical framework presented in section 2.5, there are two main aspects that lead to the IT-integration success. However, it seems that the case company is not utilizing these two to their full potential during the after-merger IT-integration. This leads to lowered employee performance, which in turn leads to overall decrease in productivity at the company level. Currently, the after-merger IT-integration is seen as a necessity, which has to be done and there is no real ambition in the company to benefit from successful IT-integration. As can be seen in the sub-section 2.2.2 the company could benefit substantially from better IT-integration as it brings many other benefits to the whole company besides successful after-merger integration.

All of the four factors; management commitment, IT-integration timetable, IT-integration planning and physical limitation, that create the merger ambition in the theoretical framework presented in section 2.5 are clearly taken into account at the case company. However, some of the factors are not addressed as well as they could be. As presented in the sub-section 2.3.1 management commitment is crucial in order for the IT-integration to succeed. As the findings presented in sub-section 4.2.4 showed, management of the case company is very much involved in the IT-integration. In fact management, including the CEO, is planning the mergers and the following integrations pretty well and

through the steering committees presented in sub-section 4.1.2, management also participates in the integration process during the actual process. However, the issue is that the management seems to be involved mostly in the high level planning, usually related to costs and timing. Also, the management does not seem to care how the database integration or the employee training is carried out in practice after the actual merger, and whether there are any issues.

The CEO mentioned that the case company has a very strict and detailed integration handbook that they are supposed to follow during the integration. However, it seems that either this handbook completely lacks the part about training of the integrated employees and integration of databases, or these aspects are just left without any attention on purpose. The CEO noted that the handbook is only accessible to a few people but it seems that these few people still do not utilize what is mentioned in the book. One good example is the complete move to the new IT-system. Winjnhoven et al. (2006, p. 9-10) state that if integration ambition is high and objective of the integration is to absorb the IT-systems, like in the case company, complete IT-integration is the only solution. However, the case company allows the integrated employees to use the old IT-systems after the transfer to the new system is done.

Proper IT-integration planning is crucial as was discussed in detail in the sub-section 2.3.1. In fact, according to Stylianou et al. (1996) quality of merger planning is the single most important factor affecting the IT-integration success, because it contributes to the abilities to exploit merger opportunities to the fullest, and at the same time diminishes possible issues related to the integration process. The IT-integration planning at the case company usually begins at quite late stages, at least if looked from the angle of the timing when the IT-department is involved in the process. IT-department should be involved in earlier stages of IT-integration, preferably already in the merger planning phase. Many of the problems presented in section four were caused by poor or inadequate planning. The management seems to be under the impression that

everything is well planned beforehand and IT-department is involved early enough, however this is usually not the case. The planning of the IT-integration and the training related to the IT-integration seem to be lacking and this leads to numerous issues such as those mentioned in sub-sections 4.2.1 and 4.2.3. Planning is essential in any type of project, but especially if there are complicated IT-systems and new employees involved, proper planning should be emphasized. Financial issues or operational ineffectiveness can always be improved at later stages, but the opinions of the employees and their way of doing things can be impossible to change afterwards.

Even though many things in the planning process could be improved, there are still some things that are handled rather well. Case company uses so called steering committees mentioned in sub-section 4.1.2 to properly plan and execute the IT-integration and the employee training. This is very similar to the integration manager concept discussed in sub-section 2.3.1 and is pretty well utilized in the case company. The practice of choosing one person or a group of people to be responsible for the integration process is a very good idea. However, this group or person must not be only left with the responsibility of taking care of the timing issues or the financial issues, but also everything else related to the IT-integration process. This person or group responsible could thus act as a facilitator and make sure that everything goes according to plans.

IT-integration timetables, as discussed in sub-section 2.3.1, are another crucial part of the IT-integration. According to the findings of this study the IT-integration schedule at the case company is very strict and the whole IT-integration process is supposed to be carried out within 100 days. However, the timetables are not very well planned or even executed. This is heavily related to the integration planning discussed before, and the IT-integrations in general, nor time related issues are not very well planned. In order for the integration to be carried out properly, timing is of essence. IT-department needs to receive all the relevant information before certain deadline in order to successfully

integrate all of the databases. The situation now is that the IT-department gets the information too late and thus have to do the integration in a hurry with insufficient information. The training of the integrated employees needs to be properly planned in order for it to be properly executed. Also, for the company to be able to continue its operations normally or to achieve the wanted synergies or other advantages from the integration, the integration needs to be carried out within a defined time period. Extended deadlines and passing due dates will also cause financial issues and uncertainty in both the current and the integrated employees.

As pointed out in sub-section 4.3.4, it takes approximately two months before the integrated employees are able to perform at the same level as in their previous organization. In some case this has even taken a year or longer. During this time, the employees waste a lot of company resources by not being able to be as productive as they can since they simply do not know how to perform their work properly. This in turn affects other employees, as the employee who is not able to perform at a proper level and does not know how to use the IT-systems, is constantly trying to learn more by asking his colleagues. As a result, more experienced employees are interrupted constantly, the new ones are frustrated by their own incompetence, and naturally this wastes company resources. Therefore, it can be argued that uncoordinated and insufficient training causes additional and unnecessary costs that could be avoided with effective training process.

Looking at the theoretical framework in section 2.5, another important aspect affecting IT-integration success is the employee commitment, which in turn is affected by five factors. Organizational culture is one very important factor as can be seen from the sub-section 2.4.1 of the literature review. Among many other things, organization culture can affect how the employees perceive the company and how the employees interact with each other. In the case company, the understanding of organizational culture has been somewhat

neglected and this has led to a situation where the integrated employees do not have respect for the buyer company and especially its management. This in turn has led to decreased employee motivation and lowered morale in the workplace. Very good example of this are the signatures used in emails, as some of the integrated employees still use the logo of their old employer in their email signature. This clearly shows their lack of dedication towards the new employer and their inadequate cultural integration. Organizational culture definitely needs to be taken into account when dealing with the company employees in any situation, but especially with situations that involve change, such as IT-integrations. This concerns not only integrated employees, but also the current ones. All of the employees need to feel like they belong to the case company and all of them should feel as being part of something bigger.

Training of the employees is a crucial part of IT-integration success and unfortunately this part is the most neglected aspect in the case company. As discussed in sub-section 2.4.3, proper, coordinated, well-planned training is essential. The training of the integrated employees at the case company is not planned at a management level at all, even though the literature stresses that training of the integrated employees needs to be taken into account right from the beginning of the integration process. For example, Nelson (1991, pp. 515-516) argues that the appropriate training need, level and individual skills need to be determined before training. However, no assessment of the integrated employees is done at the case company and all of the employees are integrated in a same way, even though there might be people who have not even used a computer program before. There is also no effort put into choosing the trainers, IT-department just chooses someone who is willing to train the integrated employees. This person does not necessarily have training in actually teaching anyone, nor any previous teaching experience. The trainers have to be chosen with thought, they must want to train, and they must have the skill and knowledge to train others. If these requirements are not met, the training will not be successful, or could even fail completely.

The two training types that Frazis et. Al. (1998, p. 4) defined, formal and informal, are both utilized in the case company. However, the case company does not recognize the difference between them, and thus do not take full advantage of them. The trainings arranged at the case company represent formal training, however there clearly are not enough of them and they are not arranged in such amounts or intensity that they would need to in order to be successful. The informal training on the other hand is at a pretty good state at a case company. The support people chosen to help the integrated employees after the IT- integration have been perceived very well and are helpful. However this system also has its downsides as described in section 4.3. Any company that integrates IT-systems and also trains the integrated employees after this need to find a good balance between using formal and informal training. However, even more important than the type of training provided is the planning, quality and the amount of training.

Employee motivation plays a big part in employee commitment. As presented in sub-section 2.4.2, employee motivation can make or break the training, and thus plays a big role in the general wellbeing of the employees. Although employer cannot fully affect the employee motivation, there are many things that can be done. At the case company, it could be clearly seen that the employees are lacking motivation to learn new and to use their full potential. A lot of this is due to the perceived lack of management commitment and the low quality of training. As the employees do not feel that the management cares about them, they do not become motivated employees and can even demonstrate change resistance. These employees already have lowered motivation due to the changes that are going on with the integration, and the changes in the work environment, the management and the new company does not make them feel any more motivated. The lowered motivation level of the employees affects any company in any situation. If the employees are motivated, they also handle stress and changes better and consequently perform better at their work. In the case company, this will lead to increased

effectiveness in learning and adaptation to the new environment and thus increases the success of the IT-integration also.

How the employees see themselves in the company affects hugely on employee motivation. Creasy et al. (2009, p. 36) state that in IT-integration the employees need to be reminded that IT-integrations have been done before, and the company has a lot of experience in company buy-outs. Management should also make sure that both the existing and integrated employees are treated fairly and equally, and that everything is communicated overtly and honestly. In the case company, most of the integrated employees do not feel like they belong to the company, they fear that they will not learn fast enough, and overall the employees feel that they are the ones responsible for the IT-integration success. Over half of the respondents of the survey stated that it was their own ambition and willingness to learn that made their integration successful. This is not how it is supposed to be, but the company must train and motivate the employees, so that they will feel that the company and management care about their wellbeing and has their best interest in mind.

Physical limitations are also extremely important, both from the employee commitment and integration ambition point of view. Physical limitations and other issues that have been discussed in sub-section 2.3.3 need to be taken into account when planning IT-integration. As Stylianou et al. (1996, p. 204) point out, the compability of two IT-systems needs to be checked before the integration can happen, as the incompatibility will also affect IT-integration. As the case company IT-director said, it is really important for the IT department to assess the two integrated systems before the actual integration in order to understand what can be transferred and how. At the case company, there had been many issues with databases and this can be considered as a direct physical limitation. Issues with databases can often lead to a situation where the employees cannot perform at their work properly. This is a typical situation where physical limitations have not been taken into consideration.

Physical limitations also directly relate to hardware, what computers and other IT-equipment the integrated employees use, and which of the old hardware can be moved to the new environment and at what cost. As can be seen from the survey made to the integrated employees, IT-hardware had also caused many issues, such as hardware failing at training events. Luckily, in the new environment, only few respondents had issues with hardware. Still, IT-environment assessment needs to be done before any IT-integration and time needs to be allocated to properly analyze what kind of data and hardware is transferred. Neglecting this leads to various unpredictable problems at later stages, such as employees not being able to perform at their normal level or in the worst case at all.

To conclude, the case company does not know how to implement integration of IT-systems after M&A, and thus the IT-integration is not done as well as it could. Many aspects that contribute to the successful implementation of IT-integration after company buy-outs are neglected. Especially, the employee perspective is not paid enough attention to, as the management is under the impression that there are no issues related to IT-integrations. Proper, well-defined processes for the whole M&A process, and especially for training of the integrated employees could help the company to make the most of the integrated employees and their know-how. But as long as the management does not recognize the problems they have regarding IT-integration, and blindly believe that the high-level process they have defined is in use, not much can be done.

6 CONCLUSIONS

This chapter concludes the thesis and sums up the research aims, methods and findings. The chapter is divided into five sections. Section 6.1 summarizes the purpose, methods and theory of the research. Section 6.2 summarizes the findings of the study. Section 6.3 presents the practical implications of the study. Section 6.4 focuses on giving improvement recommendations for the case company. Section 6.5 presents the limitations of the study. Finally, section 6.6 suggests approaches for further research.

6.1 Research summary

The purpose of this thesis was to study IT-integrations after M&A's and it aimed to identify the factors that contribute to the success of IT-system integration, and to further examine how the integration could be implemented as smooth as possible for all the stakeholders. This study claimed that since IT plays such a crucial role in M&A's it cannot be overlooked. Looking at previously written literature on the subject, it seems that neither companies nor academics seem to exactly understand how crucial role IT-systems integration actually plays in the success of a company buy-out. Especially the employee side of the integration process seems to be completely omitted, even though these are the people who will have to work with the future IT-systems.

The literature review of the thesis introduced the relevant literature and previous research in the field of IT-integration during and after M&A's. The first section discussed the company acquisitions and mergers, and introduced the role of IT in M&A's. There are various types of mergers and acquisitions. No matter which type is chosen, they can provide various benefits for companies such as rapid growth in size and strength, increased market share, acquisition of new products, patents, technologies, talent and geographical territories. The second section discussed introduction of new IT-systems after company acquisitions.

IT-integrations following M&A can vary a lot and there are numerous tactics to integrate the IT in the company after M&A. The choice of correct IT-integration objective depends on the M&A integration ambition and M&A objectives. The third section focused on the actual implementation of IT-integrations from the planning phase to actual implementation, the possible challenges and how these challenges can be overcome to ensure successful IT-integration. The fourth section focused on how employees perceive acquisitions and especially changes in IT-systems during and after acquisitions. Organizational culture, employee motivation, and training of the integrated employees were discussed here.

The theoretical framework of the thesis was presented in section 2.5. It was created by the author, and was based on the previous literature as well as the author's own hypotheses. To recap, the theoretical framework presented the various aspects that contribute to IT-integration success in the post-merger situation. There are two main aspects that lead to IT-integration success; integration ambitions and employee commitment. Integration ambitions are affected by four aspects; management commitment, IT-integration timetable, IT-integration planning, and physical limitations. These four aspects of integration ambitions need to be taken care of or at least taken into account in the IT-integration planning phase. Employee commitment on the other hand is affected by six factors; employee training, employee motivation, organization culture, physical limitations, IT-integration planning, and IT-integration timetable. All of the previously mentioned factors affect the two main aspects in the theoretical framework. It is worthwhile to notice that IT-integration timetable and physical limitations are factors that affect both integration ambitions and employee commitment.

This research used existing literature, theme interviews and an online survey as its main data collection methods and thus the research can be categorized as qualitative. The five interviewees were selected based on the role they play in

IT-integrations during and after mergers. The online survey was targeted to the employees of the case company who had gone through implementation of new IT-system after a buy-out. The survey was sent to all the 136 employees who had experienced a company buy-out during the last two years. As 99 of them responded, the response rate was 73 percent which can be considered really good. As the theoretical framework presented in section 2.5 was formed based on the literature review, the study is inductive in nature.

The study is a single case study as it studied the phenomenon in one organization. The case company has grown rapidly in the past years and a big part of this growth has been achieved by company buy-outs. Case company operates various IT-systems, and due to its heavy reliance on software, IT-systems and their integration plays a crucial role in the case company. The case study consisted of case company analysis, theme interviews of the key people associated with IT-system integrations, such as the company CEO and IT-manager, and an online survey for the employees of the case company that have gone through a merger. The study can be considered reliable as it would yield very similar results if repeated. As the response rate of the online survey was extremely high (73 %) and as the patterns, concepts and theories applied to this study are general, it can be argued that the generalizability of the findings is good.

6.2   Main Findings

In this section the main findings presented in Chapter four are paraphrased by answering the research questions of the thesis. The main research question of the thesis was: How can the introduction of new IT-systems be facilitated after company buy-outs? In order to answer this, the following three sub-questions were posed:

1. How are new IT-systems implemented after company buy-outs?

2. Which factors contribute to successful implementation of IT-systems?

3. How is the new IT-system and transition perceived by the employees?

To answer the first research question, new IT-systems in the case company after company buy-outs are implemented in an uncoordinated way. According to the CEO, the whole process of company buy-out is very well defined and also followed. However, most of the other interviewees did not seem to agree that integrations are well planned and prepared. The integration does not always go according to the plans and the timetables are changed many times. The interviewees seemed to agree that company management is pretty well involved in the integration process and also the IT-department is participating in the of IT-system integration, but is involved too late in the process. According to the process, the IT-integration should be complete and the new employees should start using only the new IT-systems after the transition. However, this is usually not the case. The insufficiency of data history has caused many problems, such as missing or incorrect data, and this has lead to a situation where employees are allowed to keep and use the old IT-systems alongside the new ones. Issues with databases are acknowledged even on managerial level and even though there are ways to improve the database integrations, they are still left without attention.

The training process is such that around a month before the transition to the new system, the integrated employees are given preliminary one day training in which they briefly go through important company information and also they are given a brief training on the new IT-systems. After this, a few days before the actual transition, the integrated employees are given another brief training on the IT-systems. In addition after the transition to the new system is implemented, there is usually an onsite person available for one day, whose role is to answer questions and help the employees to get started. This person usually has not trained in providing training, but is just another employee who

helps when needed. This process has not been perceived as the best possible and many of the interviewees noted problems with this.

To answer the second research question, there are five main factors that contribute to the successful implementation of IT-systems. First one is a well-defined training process. In the case company there is a training plan, but in reality actual trainings have varied a lot. Almost all of the interviewees agreed that training for the integrated employees needs to be improved. Second success factor is the timing and length of the training. The IT-system integration should be done as soon as possible after the merger. Most interviewees argued that there is not enough time allocated for the training of the integrated employees and this leads to many issues, such as lowered productivity, employees not utilizing the IT-systems properly and reduced work motivation. Third success factor is the proper integration of databases. Some of the biggest problems in IT-integrations are related to database integrations, for example the data might be incorrect or presented differently. Fourth one is the role of management in IT-integration. Most of the interviewees seemed to be satisfied with the level of management involvement in the integration process. Management is involved via steering committees, and controls timetables, budget and other high-level steering activities. The fifth success factor is employee dedication. The dedication of the integrated employees, trainers and other people involved in the integration has a huge effect on the outcome of the integration.

The third research question was answered by conducting an online survey for the integrated employees to find out how the new IT-system and transition is perceived by the employees. When analyzing the IT-integration from the point of view of the integrated employees, many issues stood out. The training of the integrated employees is not very well planned, the training period is too short and the trainers are not qualified to do the training. Also, there is no additional training after the initial training, and the integrated employees are more or less

left alone after the integration process. All in all, there is a lot of dissatisfaction on how the integration processes have been handled at the case company as 70 percent of the integrated employees are unhappy with the way integrations are handled. When asked if the employees feel that the case company puts enough effort to the integration process and to training of the integrated employees in to the new systems, as many as 73 percent answered no. Still, employees were satisfied with IT-support as 86 percent of them reported that they had received IT-support whenever they had needed it during the integration process.

The management seems to be under the impression that the training does not matter that much and that the employees will learn eventually while doing their work. Furthermore, the management believes that the integrated employees adopt really fast and work well in the new environment. This is clearly not the case, but as the employees only learn the basics from the training, they learn everything else later, everyone differently, if at all. Nearly half of the integrated employees have not been able to do their work at the same level as before the integration. This is a clear sign that something is done wrong in the IT-integration process.

6.3   Practical Implications

There are numerous practical implications that can be derived from this study. This study showed the importance of planning and creating processes for IT-integration. In order for the IT-integration to be successful, and done in the same, proper manner every time, the management must have processes and clear plans on how everything should be done.

The importance of management commitment in IT-integrations was clearly seen in the findings of this study. Even though the management does not actually need to do anything during the actual integration, their role is crucial when

planning the IT-integration. Also, they can steer the integration process throughout the implementation phase. They also must be very visible to the employees to create positive atmosphere and for the employees to feel like they belong to something and that the management cares of them.

The IT-department needs to be involved in the IT-integration process right from the start. IT-department has insight knowledge on what needs to be integrated and how. IT-department can also gain some significant advantage by knowing integration related facts before the integration process and this might save time in the IT-integration process. The people working in the IT-department are the real experts in issues related to IT-integration and thus can provide valuable insights. Many of the issues can be avoided beforehand if all the knowledge is at hand.

Also, timetables are crucial in the IT-integration process and they need to be planned properly from the beginning. However, if the timetables are planned meticulously but are not kept, they do not provide any value. If the timetables are not kept, this will only cause uncertainty among the employees, diminish the credibility of the integration and also generate additional costs.

All in all, companies should pay attention to training of the integrated employees. The training needs to be very well planned and organized. It is good to have at least one or few dedicated trainers, if it is not possible to create a whole training unit. The trainers need to have proper knowledge of the subjects and also they need to know how to train the employees and how to react to different backgrounds of the employees. Additional trainings need to be arranged after the integrated employees have been working for a while and support for the employees has to be provided meanwhile, when they need it. The learning process of the employees needs to be monitored and additional trainings should be arranged when needed. The findings of this study clearly

show that there can never be too much training, but it is easy to underestimate the training needs of the integrated employees.

6.4 Recommendations for the case company

In this section recommendations are given on how the implementation of new IT-systems could be done more effectively in the case company and how the after merger IT-integration process could be improved. As the findings of this study have shown, there are numerous issues with IT-integration at the case company which cause problems such as employee dissatisfaction, ineffective working environment, misuse of IT-systems and increased costs related to management of these issues. It is worthwhile to note that the recommendations given in this section can be fully applied to any new employees at the case company, not just the ones who join the company after IT-integration.

The case company should improve the IT-integration planning process and include IT-department to the process already before the actual integration starts. This would increase the effectiveness of the planning and actual IT-integration. Management should also be more involved in the IT-integration process and not only concentrate on budgets and timeframes. This does not necessarily mean that management should actually do anything more than what they are doing now, but they need to be more visible to the employees and they must make the employees feel that the management and thus the company cares about their well-being.

Employee motivation needs to be improved and the case company must do everything possible for the integrated employees to feel like they really belong to their new company, and that the management cares about them and their wellbeing. They should organize get-together events for the integrated employees and the management should be more visible to the integrated employees. This will increase their motivation level and also facilitate their

learning and adaptation to the new IT-systems. As a result, employee dedication will also be significantly increased.

Employee integration and training should be emphasized more in the planning process. The case company needs to create instructions and processes for the employee integration and training, as currently every integration is done differently. Consequently all of the integrated employees receive different level of training, and nobody is fully and properly trained. Therefore the management of the case company should consider creating training department or at least train and nominate a few people to do the trainings. Currently the trainers do not have any training skills or proper material, and they do the training alongside their daily work. They just teach the new employees how they do their work, but best practices are not utilized. As a result different trainers teach different things or teach the same things differently. The trainers also need to be doing their trainings on full-day bases and not worry about their own work during the time of trainings.

Furthermore, the amount of trainings needs to be drastically increased in order to facilitate after merger IT-integrations. Also, practical trainings need to be arranged besides theoretical trainings as currently the employees might see the actual IT-systems for the first time on their first workday after the IT-integration. This leads to trial and error type of model and every integrated employee learns things differently. Also in many cases, the trainers only teach the basics about the IT-systems and do not go into any details. This leads to a situation where the new employees need to learn the complicated things themselves and also they do not understand the systems fully and thus cannot utilize all of the functions and possibilities that the IT-systems provide. This also leads to the employees not being able to perform at high level in their work. I addition, integrated employees might get frustrated thinking that something cannot be done with the new IT-system even though in reality they just do not know how to do it.

The current model of providing support personnel to help the employees after the IT-integration has been perceived really well by the employees, but there is still room for improvement. The support personnel should be fully committed to their support tasks for the time being and they should be released from the normal work during the time of providing support. Currently, the new employees do not receive enough information or do not receive it when they need it. Consequently the work of the support person also suffers due to the fact of him being constantly interrupted by questions.

6.5   Limitations of the study

This section presents the limitations of this study that should be kept in mind when analyzing the results of this study. However these limitations do not diminish the trustworthiness of this study. As this study is a single case study, there are some limitations to its generalizability outside the case company. Multiple case study could have brought more generalizability to the study, however, single case study method allowed the researcher to go into much more details and thus providing in-depth results.

As the case company operates in a specific field and around 70 percent of the employees are sales personnel, the results of the study are little bit biased towards the specific industry and towards sales personnel. Additionally, as the respondents for the survey were those left after the merger process, the respondents might be bit biased.

Case company size might also be seen as a limitation as the case company is relatively small in size and might thus be lacking the general processes and operating models that a larger company might have. Even though the corporation is relatively large and there are processes that are set at corporate level, no proper processes are defined or in place in the subsidiary that is the case company.

6.6   Suggestions for further research

This section will present the suggestion for further research on the subject of this study. As the subject of IT-integration after company buy-outs is rather unstudied and due to the limitations mentioned in the previous section, there are still many aspects of this subject that could be studied in the future.

One point of interest would be to study the differences in after merger IT-integration in companies operating in various fields and compare the results between various fields of operation by doing multiple case studies. The case company operates in the field of retail of physical goods and nature of their business is quite different from what is could be in the business of selling immaterial services. This might affect the strategies chosen for the IT-integration process and especially the employee perception of the IT-integration.

Even though IT-systems are crucial in the case company, they are not business critical and partly because of this, IT-integration is not paid so much attention to in the case company. In another company, where IT plays a much bigger role or the core business is somehow dependent on the IT, the importance and effects of IT-integration process might be quite different. Thus, choosing a case company for which IT is much more important could yield interesting results. Comparing these results with the results in this study might also be very relevant.

This study could also be expanded to cover the effects that the IT-integration has on the overall performance of the company. This study only studied the IT-integration from the point of view of its perceived success and from the point of view of employee satisfaction. The effect that the IT-integration has on overall company performance, from the financial point of view, could be studied.

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APPENDICES

Appendix 1 – Theme interview framework

Integrations after company boy-outs

1. Is there a process for integrations after company buy-outs?
2. Does the upper management have some standard procedures regarding integrations?
3. Are there any written guidelines for implementing new IT-systems?
4. How is the management involved in integration?
5. How many mergers/buy-outs have you witnessed?

Successful integration

6. What ensures a successful integration of the integrated employees?
7. How long does the integration process take normally?
8. How big of a part is IT playing in integrations?
9. What challenges have you encountered in integrations?

Integration of IT-systems

10. How is the integration of new IT-systems handled after mergers?
11. How are the different databases integrated?
12. Has the IT department been involved in the integration fro the beginning?

IT training of the integrated employees

13. How are the integrated employees trained to use the IT-systems?
14. Do the integrated employees get IT support?
15. How long is the training period?
16. What kind of feedback have you received?

Perceptions of the integrated employees

17. How have the integrated employees perceived the integration?
18. Is there feedback collected on the success of integration?
19. Do you collect data from the integrations (bought companies, amount of integrated personnel)?

Appendix 2 – Online survey questions

BACKGROUND INFORMATION

1. Have you been employed by the company through buy-out?
a.)Yes
b.) No

2. Sex
a.) Male
b.) Female

3. Title: open
4. Are you a manager?
A.) Yes
b.) No

5. Years of service:
a.) less than a year
b.) 1-2 years
c.) 2-3 years
d.) over 3 years

6. Which IT-systems do you use currently?
a.) Sales software
b.) ERP
c.) Logistics software
d.) CRM
e.) Other

7. Which IT-system related databases do you use in your work?
a.) Customer databases
b.) Product databases
c.) Some other databases, specify

PERCEPTION OF THE NEW IT-SYSTEM

8. How did you find needed information from the databases after transferring to the company?
a.) Worse than before
b.) Better than before
c.) As well as before

9. What kind of database related issues have your encountered?
a.) Data is missing

b.) Data is incorrect
c.) Data is difficult to find
d.) Data is described differently than before
e.) Making changes in databases is complicated
f.) I have not encountered any problems
g.) Other, please specify

TRAINING

10. How were you trained to new IT-systems when you arrived to the new company? (can choose many)
a.) Real training (same physical place with the trainer)
b.) Virtual training (phone etc.)
c.) Self-study
d.) Support person or similar trained
e.) Support person or similar helped when needed
f.) I wasn't trained
g.) Other, please specify

11. Did you participate in the training alone or in groups?
a.) Individual
b.) Group
c.) Combination of both

12. For how long did the training last before you had to use the new IT-systems in your actual work?
a.) 1 workday
b.) 2-5 workdays
c.) 5-20 workdays
d.) 20-30 workdays
e.) 30-40 workdays
f.) Over 40 workdays

13. In your opinion, was the training period:
a.) Suitable
b.) Too long
c.) Too short

14. Did the training continue after you started using the new systems?
a.) Yes
b.) No

15. Which of the following you perceived difficult in your training? (can choose many)
a.) I did not receive enough information
b.) Too little time for training

c.) Too fast transition to the new systems
d.) Time between training and actual move to the new systems was too long
e.) I was not satisfied with the trainers
f.) I was not satisfied with the training materials
g.) I didn't find necessary info from the databases of the new systems
h.) New abilities of the new IT-systems were very different from my old ones
i.) IT hardware was worse than the old ones
j.) The transition schedules were a challenge
k.) New IT-systems were much more complicate to use than the old ones
l.) I was pressured during training or the integration process by my manager
m.) I was pressured during training or the integration process by my co-workers
n.) I did not have any difficulties
o.) Other, please specify

16. Were you satisfied with the training you received?
a.) Very satisfied
b.) Satisfied
c.) Somewhat unsatisfied
d.) Very unsatisfied

17. Did you feel the training was necessary?
a.) Yes
b.) No

WORKING IN THE NEW ENVIRONMENT

18. I have been able to do my job normally after implementation of the new IT-system:
a.) I can perform as well as before
b.) I perform worse than before
c.) I perform better than before
d.) N/A

19. How long did it take after the new IT-system was taken into use that you could perform as fast and as well as when using the old IT-system?
a.) Immediately
b.) Less than a week
c.) One week to one month
d.) Over a month
e.) I still cannot

20. Did you at some point use the old and the new IT-systems at the same time?
a.) Yes
b.) No

IT SUPPORT

21. Have you received IT support when need after transferring to the new systems?
a.) Yes
b.) No
c.) I have not needed support

22. From where have you received IT support?
a.) Help desk
b.) IT department
c.) Colleagues
d.) Manager
e.) Other

INTEGRATION PROCESS

23. Which of the following contributed the most to your successful implementation of the IT-systems at the new company? (can choose many)
a.) Training provided by the company
b.) Own willingness
c.) Pressure from coworkers
d.) Pressure from manager
e.) Desire to succeed at work
f.) Other

24. How long did it take for you to use the new IT-systems well starting from the moment you started using the new IT-systems in your work?
a.) Less than a week
b.) 1 week
c.) 2 weeks
d.) 3 weeks
e.) Month
f.) Over a month
g.) Other

25. How satisfied are you on the IT-integration process on your behalf?
a.) Very satisfied
b.) Satisfied
c.) A little unsatisfied
d.) Unsatisfied

26. Do you feel that the case company puts enough effort to the integration process and to training of the integrated employees in to the new systems?
a.) Yes
b.) No