



# Preparing to overcome the barriers of implementing a quality management system:

- A case study of EDB Card Services AS

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# Abstract

The purpose of this study is to see how an organization can prepare themselves to overcome the barriers when implementing a quality management system. When introducing a new management system regardless of its intentions, there are several obstacles, or rather barriers, which an organization will face and ultimately have to deal with in order to assure a successful implementation of a QMS. Not knowing beforehand what problems may arise from adopting a new management system may alter the process of introducing the new management system and add costs, resources, and time to the introduction phase. Although there are general barriers and problems with implementing a quality management system, there are also specific barriers for each and every organization. It is of significant importance that organizations become aware of those areas of which they need to pay the most attention to when implementing a QMS. There will be forces for and against the change process of a QMS and the latter needs to be anticipated and dealt with for a successful implementation of a QMS.

By using a case organization and the managers within, we were able to assess the pre-conditions at the organization and identify which barriers that were specific for them. As managers are the ones implementing the new system as well as controlling, maintaining and continuously improving it, it was necessary for us to acquire their opinions and ideas. A qualitative research approach was taken and semi-structured interviews were held at the case organization EDB Card Services AS in Mo i Rana, Norway, which included 6 managers ranging from administrative level to operations level.

We found that the biggest barrier for the case organization was the fact that departments were not as inter-dependent, but rather independent from each other which is not compatible with a quality management system. It was evident that the departments could learn from each other and that spreading knowledge and proper documentation had to be improved. At the case organization one of their specific barriers were the sharing and handling of documents, this barrier could be eliminated by educating staff and managers of how to make proper documents with a clear purpose, and distribute documents to the right person at the right time. The managers were motivated and willing to spend time assuring that the quality requirements of the QMS is maintained however stressed the fact that more resources would be needed in order to achieve this.

Our findings lead us to believe that general guidelines for how to implement a QMS are insufficient to successfully handle the inherent problems and barriers when changing from “what is”, to “what could be”. The specific barriers which arise when organization take a look at themselves and identify these are probably more likely to affect the implementation process more than those that are general. We came to the conclusion that EDB Card Services AS needs to deal with the barriers that we identified as forces against a QMS, namely: departmental barriers, documentation of processes and procedures, leadership, resources, and information sharing and documentation. To effectively prepare the organization for the implementation of a QMS these barriers needs to be dealt with. Furthermore, we recommend that the organization educate and train those responsible for the introduction of a QMS and that an independent steering group/committee is established.

# Acknowledgements

First and foremost we would like to thank our friends and families for supporting and helping us throughout the process of writing this thesis. A special thanks goes to our supervisor and personal counselor Karl Johan Bonnedahl who has provided valuable insights, support and feedback, and who questioned our every word and argument in order for us to see the greater picture.

Our deepest gratitude goes to EDB Card Services AS and its employees who provided us with the material for this report and who shared invaluable experience and information in order for us to understand the business environment in which they are in, and their organization as a whole.

# Disposition

## **Introduction**

Chapter one provides the reader with an introduction to the area of our research. The chapter describes the problem background of our thesis and is followed by a problem discussion and the purpose of the paper. It also includes the limitations of our study.

## **Theoretical Research Methodology**

In chapter two we begin by explaining and motivating our theoretical methods and the choices of subject and case. We will also introduce our case organization and the transferability of our study. This will be followed by our pre-understandings and our theoretical approach and methods to the study.

## **Theoretical Framework**

In chapter three, we introduce the structure of our theoretical framework and present the theories that are related to our research question which make up the foundation of our thesis. The theories presented herein have also been used to develop the framework for our interview guide. This chapter covers the topics of organizational change and change management and continues with quality management systems and the barriers to the implementation of a quality management system.

## **Practical Research Methodology**

Chapter four outlines the practical ways of how we intend to carry out our research and specifically which methods we have chosen. We will present our chosen respondents, how we carry out the interviews, access and criticism of primary sources.

## **Empirical Findings**

In chapter five we present the data collected from our semi-structured interviews at the case organization. The empirical data from all interviews are presented in a range of different categories that includes the answers from each respondent. In each category, we explain what was asked by the respondents and summarize the answers at the end.

## **Analysis**

Chapter six contains the analysis of our empirical findings in connection with our theoretical framework. We will apply theories to our findings to examine whether or not the case organization with the interviewed managers has the opportunities to overcome the barriers inherent with a new QMS. We will also highlight and utilize some of the models from the theoretical chapter in order to determine what the success factors and key enablers of a successfully introducing a QMS. The analysis will be the foundation of our conclusions and recommendations.

## **Conclusions & recommendations**

Chapter seven includes answering our research question and a discussion of our results and the analysis. We also present our recommendations for organizations in general and for our case organization based on our theoretical framework and empirical findings. We conclude this chapter by suggesting approaches for further research with regard to our subject.

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# 1 Introduction

*The aim of this chapter is to give the reader an introduction to the area of our research. The chapter describes the problem background of our thesis and is followed by a problem discussion and the purpose of the paper. It also includes the limitations and disposition of the study.*

## 1.1 Background

Organizational systems developed for quality improvements were in the beginning of the 21st century one of the highest ranked priorities for management (Ravichandran & Rai, 2000, p. 381). In general a system can be defined as “a specific methodology for organizing activities in order to achieve a purpose” (McDonald *et al.*, 2007, p. 108). This involves directing flows of work, information, money, people, materials and equipment (McDonald *et al.*, 2007, p. 108). A quality management system (QMS) can be defined as “a set of interrelated or interacting elements to establish policy and objectives and to achieve those objectives to direct and control an organization with regard to quality” (Wilkinson & Dale, 2002, p. 289).

The most common and most recognized QMS is the one created by the International Organization for Standards (ISO) and its framework of ISO 9001:2000 (Gutiérrez *et al.*, 2010, p. 579). ISO 9001 is the world’s most used tool regarding organizational change and norms, and ISO claims that they reached their one million mark of certificates in December 2009, spread across 178 countries and economies ([www.iso.org](http://www.iso.org)). Other quality systems developed and/or adapted by different companies include Kaizen, LEAN, the Six Sigma methodology, the Malcolm Baldrige model, and the EFQM model (Maguad, 2006; Gutiérrez *et al.*, 2010). The Six Sigma methodology is a way to measure quality and is an optional addition to the ISO standards or any other type of quality program (Lupan & Bacivarof, 2005, p. 719). The Six Sigma approach is a data-driven disciplined way of trying to eliminating defects, and its aim is to make processes produce no more than 3.4 defects per one million opportunities (Lupan & Bacivarof, 2005, p. 719). The EFQM model, or rather the European Foundation for Quality Management model, stresses the importance of business excellence and introduces the criteria for the European Prize for Quality (Gutiérrez *et al.*, 2010, p. 580).

The different QMSs aim to improve quality and organizational efficiency whether it is through cost reductions, eliminating defects or waste, improving processes and procedures, changing the organizational culture, or adding quality control as a top priority (Dale *et al.*, 2007, p. 16-23). The different methodologies can be combined and intertwined in order to facilitate the strive for total quality management, or they can be used as stand-alone tools in order to improve specific processes and procedures (Gutiérrez *et al.*, 2010, pp. 579-580). Implementing a QMS is not dependent on the specific size of the organization but is argued to be applicable to organizations regardless of size, however smaller companies are more likely to have problems implementing quality systems due to a lack of time and resources required (McTeer & Dale, 1996, p. 2381).

When quality management systems first arrived it was intended for production and manufacturing industries but has over time developed further, and is today suitable for other industries such as the service industry (Feigenbaum, 1983, p. 7). QMSs are today more about creating quality thinking within the whole organization and across business channels rather than just eliminating defects or unsatisfactory quality levels in products (Gutiérrez *et al.*, 2010, p. 592). Hence it can be said that QMSs are no longer specific to any industry or sector but can be applied to all organizations.

The escalating demand for management systems stems from organizations experiencing low quality, dissatisfied customers, high costs, and production or delivery delays and the wish to address them (Ravichandran & Rai, 2000; McTeer & Dale, 1996). More specifically, Juran (1995) explained the forces behind the demand for quality systems to be “(a) greater complexity and precision of products, (b) threats to human society and health, and to the environment, (c) government regulation of quality, (d) the rise of the consumerism movement, and (e) intensified international competition in quality” (Juran 1995, p. 630). Other forces triggering the start of quality systems were the competitive threats from the Far East, as competitively priced and close substitute products and services coming from low labor cost countries threatened the organizations in the Western World (Dale *et al.*, 2007). Also, the demands for a quality management system stem from internal motivation to portray their organization as a certified entity and enhance the marketing perception of the organization (McTeer & Dale, 1996, p. 2380). The strive for improved quality in businesses can be traced back to the 1950’s and the researcher Armand V. Feigenbaum (Feigenbaum, 1956). Feigenbaum did extensive research on quality and has still today been one of the world’s mentors when discussing quality. The author recognized total quality management as one of the greatest influences on organizational performance and success by saying:

*Total quality is a major factor in the business quality revolution that has proven itself to be one of the 20th century’s most powerful creators of sales and revenue growth, genuinely good new jobs, and soundly based and sustainable business expansion*  
(Feigenbaum & Feigenbaum, 1999, p. 27).

QMSs are argued to bring great benefits to organizations in terms of revenue growth (McTeer & Dale, 1996), increased customer satisfaction (Casadesús & De Castro, 2005), higher profit margins, greater return on assets, improved control of business processes and procedures (Dale *et al.*, 2007; Beckford, 1998), higher quality of products and services, increased productivity and efficiency (Gutiérrez *et al.*, 2010; Carlsson & Carlsson, 1994), and better teamwork and leadership (Van der Wiele *et al.*, 2005). Dale *et al.* (2007) presented authors such as Atkin (1987), Brown (1993), Dale & Oakland (1994) and Munro-Favre *et al.* (1993) and they suggested that an organization can improve its internal efficiency, ensure better use of time and resources, improve product and service consistency, eradicate the need for re-working and bring about cost savings. In essence, quality management systems boils down to making processes and procedures more standardized, resulting in better co-ordination, transmitting of information and added consistency to the organization (Brunsson & Jacobsson, 2000, pp. 169-170; Dale *et al.*, 2007). If employees and managers were to work towards the same goals and objectives, the

organization would run smoother with less uncertainty and better visualized activities (Brunsson & Jacobsson, 2000).

However, standardizing routines and processes may not always have a positive effect (Brunsson & Jacobsson, 2000). Standardization is also a separate practice and not just an element in quality systems, which are used in organizations with the aim of contributing to the business results and to the effectiveness and efficiency of the organization (Brunsson & Jacobsson; de Vries, 2001). Although this is good, it can be questioned whether standardization is the best practice of achieving and realizing these results and whether there are better ways of achieving these results. Like rules and regulations, standards and standardization are not always welcome, they can be seen as "...unnecessary and harmful intrusion into a world of free, distinct individuals and organizations who are wise enough to decide for themselves..." (Brunsson, 2000, in Brunsson & Jacobsson, 2000, p. 171). By standardizing organizational procedures and processes, the actors and conditions are being shaped to function in a uniform manner (Brunsson, 2000, in Brunsson & Jacobsson, 2000), which may cause a state of fixed, or frozen processes with a low level of flexibility (Beckford, 1998, p. 21). Flexibility in processes may be needed in some cases when customers or clients ask for tailor-made services and/or products. If organizations standardize processes and procedures it may result in a low level of flexibility resulting in customers taking their businesses elsewhere because the company does not meet the needs (Beckford, 1998, p. 21). It may also harm the processes of becoming too strict that the process-owners have problems of integrating new activities within the process (Beckford, 1998, p. 22).

Most of the time, quality systems are procured and used in order to achieve a certain quality certification. Striving for a quality system certification is argued to be a good way to work towards an increase in quality of products and services in an organization. However, as Hoyle (1994) argues about the value of ISO 9000 certification: "ISO 9000 certification is only the beginning; it provides a mechanism with which to bring about systematic improvement but it does not improve performance itself." (Hoyle, 1994, in Terziovski *et al.*, 1997, p. 2).

The step towards getting certified with ISO or any other quality certification or award is for most organizations a path towards total quality management (TQM) (Maguad, 2006, p. 192). In the TQM approach, QMSs are considered to be a tool for achieving TQM which can be defined as "the mutual co-operation of everyone in an organization and associated business processes to produce value-for-money products and services which meet and, hopefully, exceed the needs and expectations of customers" (Dale *et al.*, 2007, p. 30). In other words TQM is considered a long-term process of continuously improve existing quality system and ultimately achieve a high level of customer satisfaction (Maguad, 2006, p. 192).

The choice of what quality system organizations should adopt is essentially dependent on the objectives of the organization and the existing structure of the organization (Maguad, 2006, p. 193). The selected system for quality management should be adapted to the specific requirements of the organization because there is no model that provides a solution that fits every organization (Maguad, 2006, p. 193). Models for quality management are

argued to provide a basis or a suggested guideline of how organization can work towards quality (Maguad, 2006; Dale *et al.*, 2007). Implementation models for a QMS usually describe a step-by-step approach, with incremental changes to ease the transition from 'old' management system to the 'new' quality management system (Dale *et al.*, 2007, p. 89). However some authors maintain that successfully implementing systems towards TQM requires total change (Dobyns & Crawford-Mason, 1991), or radical change, that is "a change in the basic philosophy of everyone in the company" (Munroe-Faure & Munroe Faure, 1992, pp. 8-10, in Reger *et al.*, 1994, p. 556). The framework of ISO 9001:2000 suggests that the QMS should be implemented step-by-step in order to identify potential problems which require adjustments and adaptations for the system to function (BS EN ISO 9001:2000).

Adopting a QMS implies the introduction of new organizational reforms, such as the change of the organizational structure which includes a new organizational design, a new business culture, new processes and procedures, and new management perspectives (Maguad, 2006). These elements are significant parts of the implementation of a quality management system, and since it requires change there may be employee and manager resistance, issues of adaptation, new roles and tasks and much more that will affect the introduction (Maguad, 2006). Adopting a management system often results in recurrent problems such as poor system quality, long development time, user and employee dissatisfaction and high costs (Ravichandran & Rai, 2000). Some other factors that are likely to act against change are the group norms, fear, uncertainty, ingrained behavior, and member complacency (Carlsson & Carlsson, 1994).

If the implementation is not successful the consequences will be, as with any failure to implement organizational change, costly on many levels. A failure would have minor to major consequences for stakeholders associated with the organization and on the survival of the organization. The energy and resources necessary to undergo moderate to major change are often high. The costs include financial expenditures; lost productivity; lost time in training and retraining workers; confusion, fatigue, and resentment for workers, clients, customers, suppliers and other key stakeholders; damage to brand; disruption in workflow; and loss of high value stakeholders including workers, supporters, clients/customers, among others. (Lewis, 2011, p. 25)

A Swedish study made by Carlsson & Carlsson (1994) examined 114 Swedish organizations which had been ISO certified and the authors were interested in the companies' perception of quality management system, reasons behind the certification and the results of the implementation. The authors found that the companies had similar difficulties with implementing ISO 9001 but also a number of unique issues as well. Carlsson & Carlsson (1994) found that the implementation of a quality management system is a change process and those responsible for the quality strategies experienced greater effects than other personnel in the company (Carlsson & Carlsson, 1994, p. 36). In the study the companies reported to have an average total expenditure of SEK 300,000 in the implementation process before they received their ISO certification (Carlsson & Carlsson, 1994, p. 41). The minimum expenditure for the companies in the study was SEK 100,000 and the maximum was SEK 4 million (Carlsson & Carlsson, 1994, p. 41). The companies also spent between three months and six years implementing and working with ISO 9001

and the time spent had an average of 1.5 years (Carlsson & Carlsson, 1994, p. 41). This shows that quality management systems are not a quick and easy fix but a system dependent on a high level of organizational commitment. ISO 9001 is considered to be an extensive quality system and often affects the entire organization (Carlsson & Carlsson, 1994, p. 41).

The author Cachadinha (2009) also examined the implementation process of ISO 9001, but the study examined Portuguese construction companies in which the author identified some major obstacles and barriers that the companies encountered. Cachadinha (2009) found that the barriers to implementing ISO 9001 in the companies were; (1) the systemization and structuring of the processes and procedures, (2) strict document control procedures caused organizational resistance, (3) defining and maintaining procedures of ISO 9001, (4) achieving client satisfaction, (5) the interaction between the quality- and the production department, (6) costs and allocation of human resources (Cachadinha, 2009, pp. 34-35). Other barriers presented by Beckford (1998), a professor at the University of Hull and an independent consultant on organizational effectiveness, included: (1) the systems and procedures inhibiting the pursuit of quality, (2) the organizational culture preventing quality and the change, (3) the design of the organization inhibiting the strive for quality, (4) the managerial and employee recognition of the importance of quality and attitudes towards it, and (5) costs of quality resulting from not maintaining a certain quality level (Beckford, 1998, p. 34). What most of the researchers on quality systems have in common is that the most critical factor for achieving quality is the full commitment from management and without it the program is likely to fail (Beckford, 1998; Cachadinha, 2009; Dale *et al.*, 2007; Maguad, 2006; Wilkinson & Dale, 2002; Ho *et al.*, 2006).

## 1.2 Problem Discussion

The main focus within quality management systems research has been on how organizations can implement a QMS, to the best abilities, and what results they can expect. However we believe that there is a gap regarding the problems and barriers inherent with an implementation of a QMS and specifically how organizations can prepare themselves for them. Few researchers have studied the problems and barriers in implementing a QMS, prior to the implementation, and only focused on the identifying the problems after the organizations had started working with a QMS. The research made by Carlsson & Carlsson (1994), and Cachadinha (2009) showed that companies had specific problems when implementing a QMS, however not how these problems were managed. According to these studies, problems are likely to occur when implementing a QMS, however the magnitude and impact of these seems to differ depending on the specific capabilities and circumstances of the company. Although the problems are specific to each company we see that there is a common problem among the companies which is acting proactively. If companies can plan and evaluate themselves prior to the implementation of a QMS we believe that it is possible to anticipate and avoid problems/barriers that are likely to occur.

The problem with the studies made by Carlsson & Carlsson (1994), and Cachadinha (2009) is that they do not further address the problems experienced by the companies. Consequently, companies cannot learn much from these practical examples as the researchers do not go any further and examine the specific and common problems and how to deal with them. If companies were able to evaluate practical studies that focus on how

problems and barriers associated with the implementation process of a QMS can be avoided or dealt with, they are more likely to prepare for them and in the end overcome them. Of course, one cannot foresee everything that may go wrong in an implementation process but it is possible to evaluate which ones that is most likely to have a negative impact on the implementation process. As an example, if the employees have been resistant to change in the past we can assume that the upcoming changes may not be perceived very positively either. Also, if there is a lack of leadership in change processes we can expect that leaders may not lead as well as they should and would need more training or information. Finally, if the communication and collaboration between employees and managers, or between departments, are not working properly, we can expect it to be a problem when implementing a QMS. These are examples of situations, which may have been an issue in an organization's past, and if the issues seem to be apparent today, we could highlight the importance of handling these issues prior to a QMS implementation.

We believe that prior to the implementation of a QMS, an organization needs to assess how capable it is to meet its requirements and successfully adopt it. In other words, an organization should carefully plan for the implementation process prior to the actual implementation of the QMS. By early identifying and establishing a plan of action of how to overcome problems/barriers when implementing a QMS, organizations can better allocate time, money, and resources prior to the implementation process. Organizations can also set up proper documentation, procedures, guidelines and manuals for the everyday quality work and thus consistently improve themselves and their business operations. If organizations do not consider the problems likely to occur when implementing a QMS and how to deal with them at an early stage, they may face high costs in tracing the problems and ultimately fixing them.

In this study we will use the ISO 9001 framework as an example of a QMS to highlight the barriers and problems it may bring. In our opinion ISO 9001 is the foundation of which other types of quality tools and methods rely upon, such as the LEAN and Six Sigma approaches. They imply strict documentation, employee and management commitment, quality thinking and creating a quality culture within the organization (Lupan & Bacivarof, 2005). Using the fundamentals of ISO 9001 will help us approach our research problem and identify the factors that are most important to examine when preparing an organization for the implementation of a QMS. Looking at the different elements of the implementation process of ISO 9001 will give us the background for where the biggest changes are needed and ultimately where most problems are likely to arise. Combining the theories of ISO, EFQM, change management, and barriers to quality, with the practical observations of our case organization we can pre-assess the situation and the likelihood of which barriers and problems to arise in their future process of implementing a QMS. From this pre-assessment organizations can effectively prepare themselves for the implementation of a QMS.

The guidelines for implementing a quality management system such as the ISO 9001 suggests that, organizations usually have to change their business culture, processes and procedures, organizational structure, design and hierarchy, leadership styles, roles and responsibilities, and organizational attitudes (BS EN ISO 9001, 2000; Cachadinha, 2009; Carlsson & Carlsson, 2004). It is our opinion that the problems these changes imply require management attention and a plan of action.

By looking at the internal factors of the organization, that is, the hierarchy, the culture, the managers and employees, the decision-making, the processes and procedures, and the communication will enable us to determine how organizations can identify and overcome the obstacles and barriers related to the implementation process. The external factors of the organization, such as the macro-environment and its social, political, economical, and environmental forces are merely possible causes to the choice of implementing a QMS and not significant influences of the implementation process (Lewis, 2011). The changes implied in adopting a QMS will first and foremost affect the internal environment of an organization, which is why we will focus on analyzing the internal factors and how organizations can prepare themselves to overcome or avoid barriers when implementing a QMS.

Our research questions, therefore, is:

*- How can organizations prepare themselves in overcoming barriers and problems when implementing a quality management system?*

### **1.3 Purpose**

The purpose of this study is to identify how organizations can prepare themselves to overcome the barriers when implementing a quality management system. When implementing a QMS the requirements are the same for any organization, but the ability to meet those requirements differs for each organization. Consequently the barriers that an organization encounters differ. Previous studies have shown that organizations are likely to encounter barriers when implementing QMSs and that these barriers are specific to each organization (Carlsson & Carlsson, 2004). However, these studies did not identify how organizations could have prepared for these barriers and only examined the experiences of organizations' implementation processes and the recommendations given afterwards can be recognized as inadequate since they are given in the wrong period of time. The purpose of our study is not to identify what barriers that will occur when implementing QMSs, but to identify how organizations can prepare themselves so that they can overcome or avoid their specific barriers. If organizations know beforehand which barriers or difficulties they are likely to encounter when implementing a QMS, they can take proper measures and decisions before implementing the system.

### **1.4 Limitations**

Using a Scandinavian company located within close vicinity to our University allows us to visit them and perform our empirical research on location, rather than having to travel far or carrying out our interviews through telephone and email correspondence. As we became aware that our case organization was determined to start working more towards quality than they had before, we chose to only use them for our empirical research rather than spending a lot of time finding companies in similar situations. By limiting ourselves to one case organization, we could quickly start the collaboration process and communicate the purpose and reasons behind our study and how the case organization would be included in our study. In our thesis we decided to use ISO9001 as an example of a QMS. This was an

intentional limitation that we made since examining several QMSs would be very time consuming. Another limitation to this study is that we have taken a management perspective. When collecting empirical data, we chose to interview individuals working at a managerial level and not the individuals working within the departments. This decision was made partly because of the qualitative nature of this study but also as we considered it to be very time consuming to compose and analyse empirical data gathered from i.e. questionnaires.

## **2 Theoretical Research Methodologies**

*In this chapter we begin by explaining and motivating our theoretical methods and the choices of subject and case. We will also introduce our case organization and the transferability of our study. This will be followed by our pre-understandings and our theoretical approach and methods to the study.*

### **2.1 Choice of subject**

Prior to this thesis, our studies have primarily focused on business management and organizational strategies and cultures and from these experiences we developed an interest in management systems. Gaining the knowledge of how organizations can improve their overall operations and results is in our opinion invaluable. To further deepen our knowledge and understanding of management systems we decided to focus on management systems in our thesis.

We started off by searching for different management systems available to organizations and which had been mostly discussed in academic journals and articles. We then found the management system with regard to quality, namely ISO 9001 which in the mid 1990's gained a large amount of interest by international organizations and also by researchers and acclaimed authors. Seemingly, regardless of which quality management system a company chooses to implement, the fundamental elements are all included in ISO 9001. In this study the theories of ISO 9001 will only be presented as an example of a quality management system which is why we have excluded other quality management systems. The topic of management systems with regard to quality appeared to us to be a very important and widely discussed phenomenon in today's business environment. We are convinced that quality management systems are not just a trend but a product and a tool for organizations to achieve greater quality and performance and that it is here to stay. This is a great opportunity for us to gain knowledge of a subject that is likely to pervade most or international organizations in the near future. By focusing on this subject we can gain the experience and knowledge needed in becoming future consultants and perhaps focused on quality management. Understanding how quality management systems will affect organizations and most importantly, how organizations can successfully adopt it is to us a significant trait in today's business environment. Providing a new angle to the research previously made on quality management systems will contribute to the discussion and continuous research of the subject.

### **2.2 Choice of case**

For this thesis we have chosen to study a single case. The idea with this thesis is to create an understanding and determine how organizations can prepare themselves to overcome the barriers when implementing a QMS and we believe that the best way to achieve this is through the study of a single organization. If we were to include more than one organization in this study the results would probably be more generalizable and transferable to other organizations but lack depth and details important to accurately describe the process of preparing organizations to overcome barriers when implementing a QMS. Also,

the amount of information needed to be scrutinized would be too overwhelming considering the time-frame of our study and hence reduce the accuracy of the results. By focusing on a single case we can perform an in-depth analysis of an organization and yield more and better insights than other research methods. According to Merriam-Webster's dictionary (merriam-webster.com, 2011) a case study is defined as: "an intensive analysis of an individual unit (as a person or community) stressing developmental factors in relation to environment." (<http://www.merriam-webster.com/dictionary/case%20study>, 2011).

This study aims to find out how an organization can prepare for the implementation of a QMS, and how they may assess their potential to succeed with it. With a case organization we can collect real empirical data to determine whether or not it is possible to identify potential barriers and how organizations should go about to find these and manage them prior to the implementation of the QMS. The case represents a practical example of how to prepare an organization prior to the implementation of a QMS. The purpose of the case organization is to show how this specific organization prepared to overcome the barriers when implementing a QMS and hopefully arrive with a common solution to prepare organizations.

For our study it was necessary that the case organization was about to change and had not been subject to the changes of a QMS. Consequently, the situation of the case organization was more important than i.e. the size or location, although the latter came to play an important role for us, as explained in chapter 1.4 and further down in this chapter. Finding a case organization that was in this desired situation would allow us to identify potential problem areas and provide a plan for how to avoid these problems.

Notable is that we could have looked at companies which have already implemented a QMS and experienced problems with it to make recommendations based on these already identified problems. If this choice was made we could include several organizations and see if their problems are similar and whether or not the ways of addressing the problems could be generalized. Even though this might have been a good thought, we consider it to be difficult to get organizations to participate, as they would have to admit to errors already made and costs of the failed changes.

One way of finding common problems and barriers with the implementation process of a QMS could be to include several organizations in the same, or similar situations. Another way could be by using an organization with the same motives for working towards quality, or has a focus on a common industry or market. However, we chose to examine one organization in order for us to gain as complete understanding possible of that organization and its conditions. If we had focused on several organizations we would have had to perform more interviews, dig deeper into the past of each organization, and establish several understandings of their individual organizational cultures. This would have been very time-consuming and we would not be able to fully understand each company and give suitable recommendations for each organization. However, we acknowledge that it would have been a great opportunity to study more than one organization and identify if they had similar problems and issues.

When we first started looking for a specific case to examine we looked for potential companies in our vicinity, either through our contacts or close friends and family, who had a genuine interest in quality management systems. We wanted to find a company that was situated near the city of Umeå to be able to visit and initially discuss our thesis topic and later carry out our empirical research on location through face-to-face interviews. We also thought it would be interesting to examine an organization where there had been some smaller change initiatives in the past and greater change initiatives to come. We wanted to examine an organization with a high level of growth as it implies a necessity of increased control and standards in a near future. For organizations in which there is an internal motivation for change would hopefully ease introduction of a management system. The choice of selecting an organization in the Scandinavian market is primarily based on the fact that Scandinavian organizations are easier for us to relate to and their business culture is often quite similar.

As Marcus is currently a seasonal-employee at EDB Card Services and had established contacts within the organization, he suggested it as a possible candidate for our study and after a number of meetings and discussions with the CEO and the management department we concluded that a mutual co-operation would be beneficial to both the organization and the researchers. The case organization met the requirements, which the researchers had prior to the study, and therefore the choice of EDB Card Services as our case organization was determined.

## **2.3 Introduction to case organization**

*The facts and figures about the case organization were obtained in the beginning of our project, through email and phone correspondence with Bjørg Rodahl Kristensen – HR Manager of EDB Card Services AS.*

EDB Card Services AS, formerly known as TAG Systems, is situated in Mo i Rana, Norway and also has an office in Solna, Sweden. EDB Card Services in Mo i Rana has three different departments; (1) Service & Support, (2) Card Personalization & Production, and (3) Fraud Prevention. EDB Card Services deliver products and services to banks and card administrators in Norway, Sweden, Finland, Denmark and the United Kingdom. Some of EDB Card Services' main customers include DnB Nor, Europay, Nordea Bank Norway and Postbanken Norway. In 2010 EDB Card Services reported revenue of NOK 238 million. Today they have 160 employees spread across the three departments including the administrative department, also located in Mo i Rana, Norway.

EDB Card Services AS & AB is part of the corporation EDB Business Partner that recently merged with ErgoGroup (SYSteam in Sweden). This formed EDB ErgoGroup ASA (OSE:EDBASA) which today is the Nordic leader in IT solutions generating over 16 billion SEK in annual revenue along with its 10,000 employees worldwide. EDB Card Services is primarily located within the industry of Banking and Financial Solutions, and part of EDB ErgoGroup's Solution services.

As EDB Card Services has to maintain a high level of security and confidentiality they have adopted other standards specifically related to their operations and industry. Being a

card provider for banks it is important to assure their customers that sensitive information is being handled correctly and securely. The standards are called the “Payment Card Industry Data Security Standards” (PCI DSS) which was developed to “encourage and enhance cardholder data security and facilitate the broad adoption of consistent data security measures globally” (PCI Security Standards Council, 2008). The PCI DSS has 12 requirements which EDB Card Services should apply to all system components, such as networks, databases or components withholding sensitive cardholder information/data.

Another program which EDB Card Services has implemented is the Card Quality Management (CQM) program, developed by MasterCard International and serves as a framework to assess and assure the card quality of MasterCard’s clients, one of them being EDB Card Services.

This organization has been chosen on the basis that they have an internal motivation to start working towards quality improvements. Currently the case organization is working towards improving their overall quality through improved processes and procedures based on obligations put on them by their business clients MasterCard and Visa International. Without gaining the certification from these organizations they may lose their overall business as they produce, distribute and support the debit- and credit cards of these agencies. As a result from working to become CQM and PCI certified, EDB Card Services has realized that there is a need to assure the quality of their business operations, not only in production but in the whole organization. EDB Card Services has looked at the ISO 9001 as another tool for achieving higher quality and maintain it on a long-term basis. However, the final decision of how to achieve better quality assurances and standards is yet to be made. The possible implementation of a QMS will definitely bring about certain changes in the organization as certain requirements need to be met in order to achieve additional quality certifications.

## **2.4 Pretension**

We set out for this study to contribute and fill the knowledge gap that exists within the realm of management systems. More specifically we intend for this research to add knowledge and information regarding how organizations can plan for and prepare themselves for the implementation of management systems. The issues and barriers to quality and QMSs are presented by the researchers Beckford (1998), Carlsson & Carlsson, (1994), Cachadinha (2009), and Dale *et al.* (2007). These authors have contributed to the knowledge of quality and QMS as they have identified issues which need recognition as obstacles to implementing and working with a QMS. However, they lack in identifying ways for organizations to overcome these obstacles, which is something we intend to do with this study - identifying ways to overcome the barriers. By identifying how an organization can prepare themselves prior to the implementation of a management system and how barriers and issues can be avoided at an early stage, we can complement the existing theories with our findings.

For our research we will mainly use and discuss literature within the subjects of change management and quality management systems in order to create a foundation for our empirical results and analysis. By basing our empirical study on these subjects we are able

to give a descriptive analysis of our research problem and recommendations, which hopefully can be transmitted to future research problems. Our intention with our empirical findings and analysis is to gain an understanding of the preconditions of an organization's abilities to best prepare themselves for implementing a quality management system. More specifically, we want to know how they can best prepare themselves in avoiding and overcoming the issues, which a quality management system implies.

### **2.4.1 Generalization abilities**

Given that our purpose with this study is to identify how organizations can prepare themselves in overcoming the barriers inherent to the introduction of a QMS, we aim to achieve a wider knowledge and understanding of this topic through our empirical findings. We believe that there is a common solution for organizational specific problems. Thus we believe that this study can be useful for any organization. Although an organization may encounter barriers that are specific to them, we believe that it is possible to show, through the study of a specific case how an organization can prepare themselves to manage or avoid these barriers prior and during to the implementation of the QMS. Consequently, we do not believe that this study is limited to organizations with the same conditions but generalizable to organizations in the same situation. With organizations in the same situation we mean that they are about to implement a QMS, more specifically ISO 9001. From previous studies such as the one by Carlsson & Carlsson (1994) we know that organizations are likely to encounter barriers when implementing a QMS. We also know that these barriers are specific to each organization and therefore a common solution cannot be created to manage that specific barrier. It is, however possible to provide a common solution on how to prepare organizations so that they can avoid or manage those barriers that are specific to them. Having said this we need to clarify that a common solution can only be provided given that the organization using this study is determined to implement ISO 9001. The conclusions and recommendations given in this study are based on ISO 9001 as the QMS being implemented. If an organization wants to implement a QMS different from ISO 9001, such as LEAN or Six Sigma this study can not be generalized in its fullest as it has been formed by ISO 9001 requirements and pitfalls.

In our thesis we have studied a single case and can therefore not produce theories based on the case organization which can be generalized to the entire population (Saunders, 2009, p. 158). The results of our study that shows what barriers are likely to occur in the case organization cannot be directly applicable to other organizations. It is however, possible to generalize our findings of how we identified and came to the conclusion that a barrier is likely to occur in the case organization. The aim is that our findings will complement existing knowledge and research on the subject of QMSs and that organizations' can use this study as a practical example on how to prepare themselves before implementing a QMS. Identifying what barriers will affect them is ultimately up to them.

### **2.4.2 Credibility**

We believe that this qualitative study holds a strong credibility. By being as explicit and transparent as possible in how our study has been conducted, the reader can understand how we have arrived at the findings of our study. The theoretical framework has been built on the relevance of the theories in connection to our problem statement and purpose. The

concepts that we have used has been defined clearly and been applied consistently in our analysis and concluding chapter. The framework for our analysis has been thoroughly described as well as the method for our research. To ensure the trustworthiness of our empirical data, we have explicitly described the process for collecting qualitative data i.e. the choice of respondents and the choice method for collecting the data. In addition to this any problems with data collection, limitations and potential bias has been reported. Also, the respondents have proof-read the transcripts of their interviews to ensure that we have not misinterpreted any of their statements and opinions. By retrieving respondent validation it has been confirmed that we have understood their social world correctly, further ensuring the credibility of our study. We have also put ourselves to external scrutiny by being critically evaluated by our tutor throughout the study which also adds to this study's credibility.

## **2.5 Pre-understanding**

Through our education we have learned about management and the importance of leadership and how to manage different situations properly therefore we can say that we have a pre-understanding of how management plays a vital role in any organization. This is likely to have an impact on our study and influence our choices and interpretations of theories and data analysis.

From our quite similar academic backgrounds we have gained knowledge about organizational changes and possible cultural impacts on change, as well as quality systems in general. The theories used in this study have been more or less stumbled upon in our past studies. With this study we hope to extend this already gained knowledge with a more in-depth analysis of the other side of management systems, i.e. the negative aspects and issues they may have. Prior to this study we were yet to assert our knowledge in a more practical situation and we feel that we can gain significant practical experiences through this study. Furthermore, we realize that our knowledge is not sufficient within the topic of management, although we have a rough overview of the entire practice of management.

As we have chosen to examine an organization in which Marcus has prior work-experience in, we also have an internal perspective and an understanding of how he perceived his work and the organization as a whole. However, as Marcus only has been a seasonal worker for two years, he does not claim that he has a complete understanding or knowledge of the case organization. His pre-understanding of the case organization may affect our choices in interview topics and the overall perception of the organization. The preconception that we have is the fact that the case organization lacks proper standardization procedures even though they claim to have extensive standardized processes and procedures. Also we knew before we started this project that they were not fully devoted to quality improvements and that the company had recently been quality-aware due to quality and security requirements put forth by some of their clients. Even though they may be devoted to quality today, it was our preconception that this was due to external pressure and not an internal priority.

When beginning this project, Marcus already had a specific view of the firm regarding the work-environment, the organizational culture, and how they conduct business on a daily basis. He could at this point identify the troubled areas for implementing a QMS and thanks

to this experience we were able to start building the questionnaire for the managers. In our opinion it was not enough that Marcus had insight to the right areas but necessary to gain the views from the managers in the case organization. Although Marcus experiences are valuable we could not solely depend on him, and we made the choice that we had to let the managers provide us with their view. The risks with Marcus experience from the organization was that we could neglect other areas of which Marcus had no insight in and only focus on those he had. Thanks to the literature examined we were able to minimize this risk as we utilized the information found in literary sources to cover the areas of the organization which were of interest. Another risk is the fact that Marcus is an employee, although short-term, and therefore we may be hold back with our criticism not to jeopardize his relation the the organization. However, we have tried to trust the results based on our theoretical research and show the results as they are, not how the company would like to have them.

Prior to this study we believed that there were more or less efficient ways of managing an implementation of a QMS and that planning this process beforehand was essential. Depending on how fast and easy a management system implementation can be is in our opinion dependent on how well the organization plans this process. By not identifying the obstacles and issues may cause the implementation of a management system to linger over an unnecessary time-period and result in added costs and resources.

As we are looking for ways in which the organization can plan for a future implementation of a QMS and specifically overcoming any barriers related to this process, we hope to generate an action plan as detailed as possible for our case organization. However, given the fact that we have selected one single case within a specific context, we acknowledge the fact that we are unable to establish any optimal suggestions applicable to other organizations in general. Our case organization is subject to the context of our specific problem and therefore we believe that we cannot provide with an optimal solution for Scandinavian companies of the same sizes.

## **2.6 Scientific Approach and Choice of Method**

The way researchers choose to address a problem and the way they choose to interpret reality is what will determine how a reader will view and understand a study (Saunders *et al.*, 2009, p. 272). With the aim of finding answers that can help us determine how organizations can prepare for the implementation of a QMS and overcome potential barriers, we have chosen to use a qualitative research approach. It is our view that a qualitative research approach is most suitable for this study as it can help us gather empirical support to our research problem. The gathering of qualitative data will be done through semi-structured interviews.

Unlike structured interviews, semi-structured interviews allow a less degree of standardization. While structured interviews are based on a predetermined and 'standardized' or an identical set of questions, semi-structured interviews are based on themes and questions that may differ from interview to interview (Saunders *et al.*, 2009, p. 320). Being less standardized will allow us to add or omit questions in particular interviews, given the specific situation or context and relation to the research topic

(Saunders *et al.*, 2009, p.320). Depending on the flow of the conversation, the order of interview questions may be varied. Also additional questions can be utilized if they are required to explore the research question and objectives. We wanted to have a predetermined interview guide that would allow us to gather data that could answer our research question and objectives, therefore the unstructured interview technique was ruled out. Unstructured interviews are informal, with no predetermined list of questions (Saunders *et al.*, 2009, p. 321). The interviewee has the opportunity to talk freely about events and is not directed by the interviewer (Saunders *et al.*, 2009, p. 321). With an unstructured interview technique it would have been hard for us to gather the necessary data since it would be the interviewee that would guide the conduct of the interview (Saunders *et al.*, 2009, p. 321).

What we have focused upon is how we can capture the problems/barriers that are likely to occur so that organizations can prepare themselves before implementing a QMS. To be able to do so, we have utilized the semi-structured interview to pose questions that we believe can extract this information. Asking about topics that describes the situation at EDB Card Services today can help us in determining barriers that are likely to occur. Also, the semi-structured interviewing allowed our respondents to give their honest opinion regarding what they believe would be the most likely barriers or problems to occur. Asking questions that are linked to the barriers which have been identified by previous studies enables us to determine whether or not they are likely to occur. With our interviews we aim to identify potential barriers to the implementation of a QMS, which means that the barriers may or may not be evident in the future. We are basically looking to pre-assess the situation at EDB Card Services and by asking the respondents which factors that may negatively affect the implementation, we are asking for predictions and not hard facts.

A qualitative approach with semi-structured interviews will allow us, in our analysis, to explore our gathered data in-depth and yield detailed insights of the case organization. We hope that we can gain a greater understanding through the interviews of how our case organization has experienced change initiatives in the past, how they are currently working with systems and quality, what benefits they hope to achieve with a QMS, and what resources and capabilities they believe is needed for an implementation of a QMS. These topics among others will be covered in our empirical research.

The ways of achieving quality through different methods and practices are seemingly endless. Quality and quality management has been widely discussed since the 1950's and there is a large amount of knowledge available in this area. However, when it comes to quality management and QMSs we see a lack of attention to a certain problem that occurs too frequently. When an organization implements a QMS, the risk is high that this process is interrupted by unforeseen and unwanted barriers. We would like to highlight this issue as it seems to have been forgotten or neglected by the leading researchers and complement the existing knowledge base with a new perspective.

For this study a deductive approach has mainly been used, however during the process of gathering data and analyzing it, additional theories has been included suggesting that this study also take an inductive approach which is common for case studies with a qualitative research strategy (Bryman & Bell, 2007, pp. 62-63). Our deductive approach supports an

extensive analysis of a single organization and the possibility to generate new insights and knowledge to the area of research (Saunders *et al.*, 2009, pp. 489-490). If we are able to recognize any existing patterns we can draw conclusions and recommendations for organizations that they can consider when eventually implementing a quality management system.

### **2.6.1 View of reality**

The collection of data for this study is performed through interviews. The reality of how prepared the case organization is to implement a quality management system is therefore based on what the respondents from our interviews have said. We aim to gain knowledge by interpreting and exploring the opinions and views of the respondent in the case organization with regard to our problem and research objectives (Bryman & Bell, 2007, pp. 17-18). The value of the information presented in this study and the degree to which it holds true is subject to the way in which it is used, in what context and to what purpose. Therefore, the knowledge that we have produced cannot be viewed as completely objective, like in the positivistic approach, but subjective to our interpretations and our view of knowledge (Bryman & Bell, 2007, p. 16)

Throughout our study we have tried to be as accurate and true to the information that we have presented. By conducting a total of six semi-structured and face-to-face interviews with managers in the case organization we have been able to establish and acquire as accurate answers as possible that depict the situation at EDB Card Services and the views of the respondents. To ensure this accuracy, we asked our respondents to review and proofread our transcribed interview-material and make changes if they felt misinterpreted or misquoted. However, even if the information gathered from our respondents is accurate and true, there is a possibility that we as researchers can inflict errors through misinterpretations and misjudgments in our analysis. If such errors have been made it could mean that our intentions to add new knowledge to an existing knowledge base are not fulfilled. Therefore it is up to the reader to determine whether this study can contribute to the area of our research.

## **2.7 Sources of Literature**

During our search for literature sources we focused on finding theories and information, which were relevant and related to our problem and research objectives. We first looked at the theories that we believed had most relevance to our research topic which was the original theories of quality, quality management and change management, developed in the 1950's and throughout the 20th century. However, as our work progressed we felt it was necessary to use theories and information presented after the 1990's to capture the current state of the original theories and how they have been examined and used in relation to today's organizations and current market needs and demands. We also felt that the original theories would be more updated to better address the current market trends and business situations. Furthermore, in our opinion using scientific articles published more than 20 years ago do not capture the current trends and practical experiences of organizations. Therefore we have excluded a number of publications based on our perception that they may be too outdated and not reflecting today's business environment. We aimed to find

primary sources in order to ensure the accuracy of our chosen literary sources. Our theoretical framework mostly contains primary sources because if we were using secondary sources it would have resulted in less accurate capturing of theories and information (Saunders, 2009, p. 68). According to Saunders (2009) secondary sources are usually less detailed than primary sources, but they are often easier to access (Saunders, 2009, p. 69). However, our aim when searching literature has always been to use primary sources.

### **2.7.1 Collection of Literature**

In this study, literature has been collected through the use of Internet, databases and libraries. Through Umeå University library's search functions we have been able to acquire both books and scientific articles and journals. We have also retrieved some books from the University library of Groningen Rijksuniversiteit. The articles and journals were accessed from databases in cooperation with Umeå University library. The primary databases we used were EBSCO, Emerald Insights, and ScienceDirect. We have also searched for studies and scientific articles through Google Scholar, which could redirect us to one of the above mentioned databases. As we have been working with a case organization it was also important that we obtained information that described it correctly. Through our contacts at EDB Card Services and the official website ([www.edb.com](http://www.edb.com)) we were able to gather the necessary information about the organization.

### **2.7.2 Choice of theory**

The choice of theories throughout our research has been based on our evaluation of whether or not they are relevant for our research problem. We started examining different books in search for different views and opinions on our chosen theories and later examined scientific articles and publications.

An author and researcher who has been frequently used, and solely used for some chapters, is Barrie G. Dale and the co-writers of "Quality Management". This choice is based on the fact that Dale has specifically examined quality, quality management systems, and ISO 9001 thoroughly the last 20 years. Many other authors and researchers have also cited his books and articles when researching quality and QMSs. Dale has presented insightful views and theories on the implementation process of quality management systems and the strive for TQM and how organizations can improve their work towards quality. The fact that we have used Dale for specific chapters is due to a lack of a free access to the ISO 9001 framework. Our budgetary restrictions have limited ourselves in purchasing the ISO 9001 standards and requirements for the official price of €150. We acknowledge the fact that Dale's views and opinions are in fact interpretations of ISO 9001, but his recognition in the field of quality makes him a strong advocate of quality and QMSs. Another author used frequently throughout this study is Beckford who in his publications and books have expressed critical views of quality and QMSs. We have also chosen to examine scientific articles on specific cases in which practical experiences of ISO in different industries and companies have been examined. The different views of our chosen literary sources, both theoretical and practical, along with positive and negative experiences of QMSs, have assisted us in explaining both sides of our research topic and contributed to the discussion of QMSs.

Our theoretical framework is intended to provide the reader with an introduction to our research and the foundation of which we intend to address our research problem. Starting with change management we hope to give the reader a clear view of how change plays a vital role in wanting to implement a QMS. Change can be initiated for different reasons and hence it was important for us to clearly explain why change occurs and how change can be experienced differently depending on how it is managed and accepted by those involved. How to manage change is also a key aspect of our research problem. By using a force-field analysis we are able to show the readers how change can be facilitated or inhibited by different factors of the organization. Regarding these subjects, Lewis (2011) is one of the authors that we have used the most. The reason for this is that her recently published book draws on existing literature and her own extensive research which not only gives us a comprehensive perspective on what is mutually agreed upon in the realm of organizational change but also an updated perspective on the subject. Saunders & Swailes (2010) are two other authors who have contributed extensively to the realm of organizational change which ensure that we have used theories that are mutually agreed upon by other authors and researchers in this area.

A key element of our theoretical framework is the presentation of a QMS, and specifically ISO 9001, and although we have mostly looked at Dale, for reasons stated before, we also wanted to provide the reader with practical examples of possible problems and issues in the process of implementing ISO 9001.

### **2.7.3 Criticism of literature sources**

Literature sources have been discarded throughout the process of writing this thesis as we have felt that they were irrelevant to our study. We believe that the literature sources we chose for our thesis are the most relevant while others may have chosen differently. We have tried to find literary sources that complimented and suited our specific research problem. Our preconceptions of our research problem may have affected the choice of our theories and our choice of authors presenting them. As there are a lot of different authors, researchers and scholars on our chosen theories, the process of selecting whom to use has been difficult. The search for literary sources has been a continuous process throughout this project and we have tried not to let our preconceptions influence our choices of sources and theories.

Since the start of this project we have added and excluded different theories as our work progressed. Change management was not included at first but we soon realized the importance of including it and its key role in our research problem.

The lack of complete access to the specific documents for ISO 9001 has limited us in the choice of literature sources of ISO 9001 which can be criticized. The purpose behind the selection of theories to represent the framework of ISO 9001 is to provide an understanding of the standards and the implementation process of the QMS, with the reservation for not showing a complete first-hand examination of the standards. We believe that the selected sources on this subject fulfill the purpose of providing an overview and understanding of ISO 9001 as a whole.

What we have seen in our search for literary sources is the fact that most researchers often cover the end-results of the implementation process of a QMS. Problems and issues discovered after the implementations are vaguely discussed, and not much focus is put on the pre-conditions of successfully implementing a QMS. Of course it is difficult for anyone to predict how successful a change initiative will be in the end, but it is worth examining how organizations can, to the best of their abilities, prepare for a future implementation process of a QMS.

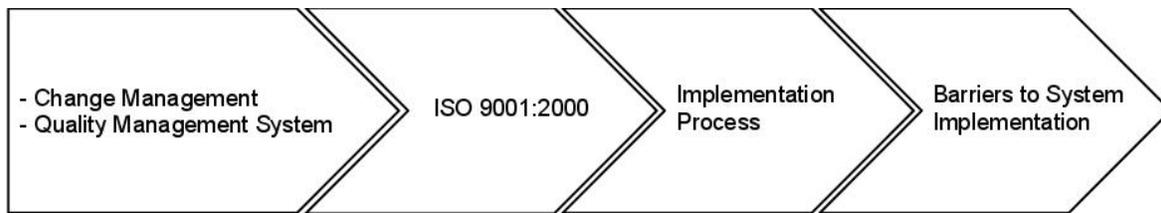
We had some difficulties in finding reliable critical views of QMSs and quality in general, as most researchers today often present the benefits and not the pitfalls with QMSs. We believe this is due to a quality hype in today's society, that quality is always something important and a factor that should be addressed, but the ways of doing this is seldom criticized.

# 3. Theoretical Framework

*In the following chapter, we introduce the structure of our theoretical framework and present the theories that are related to our research question which make up the foundation of our thesis. The theories presented herein have also been used to develop the framework for our interview guide. This chapter covers the topics of organizational change and change management and continues with quality management systems and the barriers to the implementation of a quality management system.*

## 3.1 Structure of theory

Our theoretical framework starts with a presentation of organizational change and change management, followed by management systems with regard to quality, moving on to examine the characteristics of ISO 9001:2000 more specifically, and also a short introduction of the EFQM model. Furthermore an examination of different implementation processes of a quality management system will follow. Finally we will examine the issues and problems that quality management systems may bring to the organization.



**Figure 1 - Theoretical Framework Model**

In this chapter, there are two areas that are particularly interesting for this study that we have chosen to give a bit more attention. These areas are change and quality. This study demands that we examine both of these areas closely as they are highly correlated and interconnected considering the context of our research. When deciding to implement, for example, a quality management system, change is inevitably brought to the organization. We aim to examine the work towards quality which is highly related to change and the management of change within the organization. It is important that we create an understanding of what quality management systems are and how the change that is implied by it should be managed. In this study, these areas are given equal importance as they cannot solely contribute a foundation for our research.

After giving the foundation based on these two areas we will examine the specific characteristics of ISO 9001:2000 which has been chosen as an example of a QMS.

## 3.2 Organizational change & change management

*By taking the decision to implement, for example, a quality management system, change is inevitably brought to the organization. Change accompany any decision that the organization makes and requires that management prepare and takes the appropriate measures to ensure that change can be benefited from. In this part we identify the factors*

*that triggers change, the forces for and against change and how organizations and its leaders can, in the best possible way, manage change.*

In general terms, change is an event that occurs when something passes from one state or phase to another (Merriam-Webster.com). Today, organizations are experiencing a higher rate of change than ever before. One plausible reason to this is globalization, which has increased immensely during the last couple of decades. A more interconnected world has resulted in an increase of available markets and opportunities for more growth and revenue (McNamara, managementhelp.org, 2011). With increasingly diverse markets come an increased variety of needs and expectations by stakeholders. The ability to manage change, while continuing to satisfy the stakeholders, is a very important task for any organization today. (McNamara, managementhelp.org)

Change is significant for any organization as it can help develop and improve it. However, change must be triggered for the right reasons to be beneficial for the organization and its stakeholders. Zorn, Christensen and Cheney (1999) argue that “change” has become “...a managerial fashion for stakeholders to constantly change their organization. If it isn’t new, it cannot be good. If we aren’t changing, we must be stagnant. If we don’t have the latest, we must be falling behind. If we aren’t improving, we must be inadequate.” (Zorn *et al.*, 1999, pp. 21-22). According to Zorn *et al.* (1999), constant change in competitive organizations that is demanded by cultural and market pressures can lead to “...disastrous outcomes including adoption of changes that are not suited to the goals of the organization; ill considered timing of change; dysfunctional human resource management practices; exhaustion from repetitive cycles of change; and loss of benefits of stability and consistency.” (Zorn *et al.*, 1999, p. 22). So it seems that this “change” trend can lead poor decision-making and poor use of resources. (Zorn *et al.*, 1999). Consequently, if organizations fail to realize the need for change and adopt false strategies, it will not survive for long.

According to Leana & Barry (2000) organizations that are posed to dynamic environments that seem to demand constant change needs to be flexible so that they can adapt quickly to environmental changes. Change is part of the development of an organization and, if pursued, can enhance its competitive position and its adaptability in volatile markets (Leana & Barry, 2000, p. 754). However, as stated by Zorn *et al.* (1999) an organization cannot seek out to be too flexible and pursue change for the wrong reasons. This is because being too flexible and pursuing change too often can inflict uncertainty and instability into an organization and onto its employees (Leana & Barry, 2000). Consequently, an organization also needs to seek to create stability both in its operations and for their employees. This is because stability can reduce uncertainty and provide inimitable resources for the organization as well as predictable relationships and stability in behavior for the employees (Leana & Barry, 2000, p. 758). This is an important perspective to consider as implementing a QMS can not only be seen as implementing change but also as an implementation of stability into an organization. A QMS is intended to fix inconsistencies in an organization’s processes and procedures, thus we can say that it is intended to, through change (implementing a new system), create stability (more consistent and standardized processes and procedures). Change and resistance to it, flexibility and stability are forces that affect both individual actors and organizational actions (Leana & Barry,

2000, p. 758). According to Leana & Barry (2000) change and stability are forces that are simultaneously present in an organization and both a necessary part of organizations' effective functioning over the long term (Leana & Barry, 2000, p. 758).

Organizations operate in both external and internal environments. The main task for any organization is to work with these and try to manage them (Senior & Swailes, 2010). It is therefore, important that organizations are quick to anticipate the opportunities and threats of those environments and react with knowledge to any unpredictable surprises (Senior & Swailes, 2010). However, since scanning tools are somewhat limited and the determinants of change difficult to identify, it is hard for organizations to prescribe the appropriate strategies to manage change (Senior & Swailes, 2010). By identifying, collecting and translating information about the environment that influence the organization it is possible to prepare for and make change less dramatic.

Change is triggered by the environment in which the organization is active in. This means that there are internal and external factors that constantly change and demand the organization to adapt and innovate (Lewis, 2011). The external environment of an organization can be divided into four main factors: the macro-environment, the industry (or sector), competitors and markets (Johnson *et al.*, 2005). When these factors change, they have, to a greater or lesser extent an impact on the organization. For example, an economic downturn would most certainly trigger organizational changes such as layoffs, restructuring, mergers, store closings, sell-offs, product redevelopment and new strategies. Therefore it is important that these factors are identified so that organizations can reduce the impact that changing circumstances can have. This requires that the environment is monitored continuously and that the organization holds a degree of flexibility to adapt to any changes that occur.

The factors in the external environment can be identified through several methods, such as: PESTEL, Porter's Five Forces, SWOT, and etcetera. If organizations can increase their understanding and keep track of changes that might occur in the external business environment, it is possible to identify the key drivers of change, the forces within the specific industry and what competitors do and what is happening in the markets. From this, strategies can be developed accordingly to better cope with change and minimize unwanted surprises.

Although the external environment often serves as the main trigger of change, organizations can self initiate change. Change that is initiated within organizations can stem from many sources. According to Lewis (2011, p. 23) these sources include personal innovation of employees (individuals developing new ideas for products, practices, processes, relationships), serendipity (stumbling across something that works and then catches on in an organization), and through arguments support specific directions that stakeholders in and around organizations think should be adopted or resisted. As stakeholders assert their own preferences for what organizations do and how they operate, Lewis (2011) argues that their interactions produce both evaluations of current practice and visions for future practice that incite change initiatives.

Even though there are many factors that triggers change, Lewis (2011) argues that “...none of them are truly the direct cause for change until stakeholders recognize them, frame them in terms that suggest change is necessary, and convince resource holding decision makers to act on them by implementing change.” (Lewis, 2011, p. 23). In other words, the necessity for change or responding to changing circumstances is determined in the interaction among stakeholders (Lewis, 2011). This implies that the views and beliefs of the stakeholders determine how change is addressed and managed. According to Lewis (2011) “...communication plays tremendously important roles throughout change processes in serving as the means by which people construct what is happening, influence the constructions of others, and develop responses to what is being introduced to them as change.” (Lewis, 2011, p. 48). Lewis (2011) continues and states “...the ways in which stakeholders enact their environments through social interaction are highly influential in enabling change to be considered and implemented (Lewis, 2011, p. 48).

Change is defined by Zorn *et al.* (1999) as “...any alteration or modification of organizational structures or processes” (1999, p. 10). This definition, however, does not depict the complexity of change. Change can be described as planned and unplanned; of different types; and of different size and scope (Lewis, 2011). According to Lewis (2011) *planned changes* are those brought about through the purposeful efforts of organizational stakeholders who are accountable for the organization’s operation. *Unplanned changes* are those brought into the organization due to environmental or uncontrollable forces (e.g., downturn in economy, fire in production facilities) or emergent processes and interactions in the organization (e.g., drift in practices, erosion of skills). (Lewis, 2011, p. 37). This study will mainly focus on planned change since the implementation of a QMS system is a self-initiated process.

The process of implementing change in organizations is sometimes characterized by processes of innovation and diffusion and often involves a formal adoption process and implementation (Lewis, 2011, p. 26). In this case, EDB Card Services has chosen to implement a QMS, which may have been influenced by either the external or internal environment or both. As pointed out earlier, there has been an increase in the number of ISO 9001 certified organizations throughout Europe and the rest of the world. Also, the parent corporation of EDB Card Services has implemented ISO 9001, which shows that there have been both external and internal pressures to change and adopt a QMS. Evidently, the process of implementing change has not been caused through innovation but rather the process of diffusion. According to Lewis (2011) diffusion is the process involved in sharing new ideas with others to the point that they “catch on”. Organizational changes may be spread through a diffusion process where important organizational stakeholders or networked organizations select an idea and then others in the network become aware of the choice (Lewis, 2011). Often the social pressure of what other successful organizations in the environment or context is doing and how success is defined is a key to diffusion (Lewis, 2011, p. 28). If more and more organizations within the same sector or industry adopt a specific standard, such as ISO9001, the pressure increases on those who not yet have adopted it.

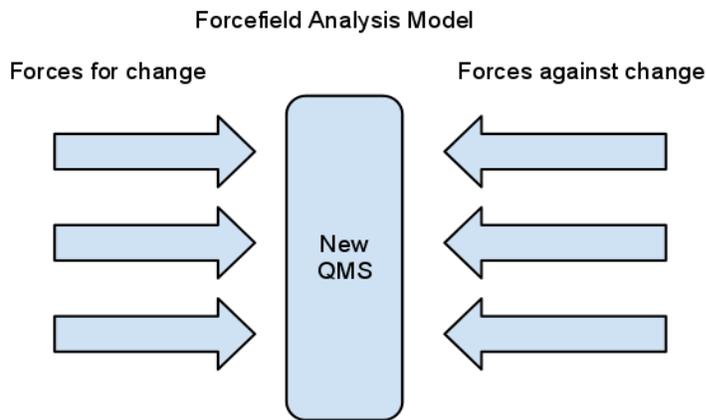
QMS’s has become increasingly popular (more diffused) and having a quality program in your organization has been used as an indicator that your products, services and operations

are well run, reliable and continuously being improved (Lewis, 2011, p. 28). The reasons why these practices and standards create pressure to engage in change are because important stakeholders such as major trading partners and customers value them (Lewis, 2011, p. 28).

In planned organizational change, an idea is evaluated and scrutinized before the decision is made to implement it (Lewis, 2011, p. 30). Tornatzky & Johnson (1982) defined implementation as “the translation of any tool or technique, process, or method of doing, from knowledge to practice” (Tornatzky & Johnson, 1982, p. 193). According to Lewis (2011, p. 30) communication plays a very important part in that translation. Before and during the implementation, stakeholders need to be convinced to alter practices, processes, procedures, work arrangements and often beliefs and values as well (Lewis, 2011, p. 30). Depending on the scope of the changes, external help might be needed to install new technology; train personnel, explain changes to clients and customers, and redesign work processes around these changes. According to Lewis (2011, p. 31), in change implementation, communication is a means by which stakeholders describe, persuade, define, instruct, support, resist, and evaluate the new and old practices.

### **3.2.1 Forcefield analysis**

As discussed earlier, external forces push an organization into change situations but it is the stakeholders that ultimately decide whether or not change will be pursued and attempted (Lewis 2011; Senior & Swailes, 2010). Initiating internal change is not only a way for organizations to create stability towards the changes in the external environment, but also a way to deal with changes in the internal environment. In other words, creating stability towards changes in the external environment requires that the organization undergoes internal changes. However, inside an organization there will always be forces that work for and against change. It is important, therefore, that these forces are identified and analyzed to be able to see whether change will be prevented or accepted within the organization. Identifying the forces which will work for and against change can effectively prepare an organization prior to the implementation of a QMS. The *forcefield analysis* is a technique for analyzing the range and strength of forces for and against change. Developed by Kurt Lewin (1951) the Forcefield theory regards every change behavior as a result of the balance between driving and opposing forces. Change is prevented when the opposing forces are stronger than the driving forces, and if change is to happen, the balance must be shifted so that the driving forces are stronger than opposing forces. Factors acting against change in this respect are: group norms, fear of change, ingrained behavior and member complacency (Lewin 1951).



**Figure 2 - The Forcefield Analysis Model (Source: Lewin, 1951)**

Force field analysis helps identify and highlight the forces that are impacting on a change situation (Lewin, 1951). By identifying power interest of the actors involved, it is possible to influence the actors so that opposing forces are reduced and driving forces strengthened (Lewin, 1951). Lewin (1951) saw the implementation of planned change as a three-stage process; unfreezing, moving (changing) and refreezing. Unfreezing can be explained as understanding the forces operating in the system and realigning them so that the balance is shifted. The moving stage can be seen as a process of communication, support and development so that a different change situation can be created. The third stage is refreezing which is a process of returning to stability where the actors become used to the new balance of forces.

According to Senior & Swailes (2010) this three stage process can be seen as rather simplistic and can be criticized for its portrayal of rigid (frozen) situations rather than the flexible situations that modern business rhetoric calls for. Senior & Swailes (2010) continues and states that it also overlooks the politics of change. Although criticized, Lewin's three stage process is appraised by Burnes (2004a, 2004b) who considers it to have parallels with complexity theory and that is still has a lot to offer in analyzing change situations and resistance to change. Recent applications of the technique have been done by several researchers (Wilson & Thomson, 2006; Hayden, 2006; Elsass & Veiga, 1994), which shows that it is still a valid technique. Senior & Swailes (2010, p. 270) outlines nine steps in carrying out a force field analysis:

**Step 1:** Define the problem in terms of the present situation, with its strengths and weaknesses, and the situation you would wish to achieve. Define the target situation as precisely and unambiguously as possible.

**Step 2:** List the forces working for and against the desired changes. These can be based on power, symbols, procedures, resources, time, external factors and aspects of corporate culture.

**Step 3:** Rate each of the forces for and against change in terms of strength: high, medium or low. Numerical values can be given.

**Step 4:** Using a diagram and draw lines of different lengths to indicate the different strengths of the forces.

**Step 5:** Label each line to indicate whether that force is very important, important or not important.

**Step 6:** For each very important and important force supporting the change, indicate how the force might be strengthened. Then do the same for those forces opposing the change, but in this case indicate how they could be weakened.

**Step 7:** Agree on those actions that appear most likely to help solve the problem of achieving change.

**Step 8:** Identify the resources that will be needed to take the agreed actions and how these resources may be obtained.

**Step 9:** Make a practical action plan designed to achieve the target situation, which should include timing of events, specified milestones and deadlines, specific responsibilities - who does what.

Besides determining the forces acting for and against change it is also possible to determine whether an organization is open or closed to change. Strebel (1992, p. 67) gives the following advice:

- 1.) Look for closed attitudes by examining what processes are in place for bringing new ideas into the sector, company or business unit, especially at the highest levels; and by probing whether management is aware of the change forces.
- 2.) Look for an entrenched culture by examining what processes are in place for reflecting on values and improving behavior and skills; and by enquiring to what extent behavior and skills are adapted to the forces of change.
- 3.) Look for rigid structures and systems, by examining when the organization, business system, the stakeholder resource base and the industry last changed significantly; and by enquiring to what extent the structures and systems are capable of accommodating the forces of change.
- 4.) Look for the counterproductive change dynamics by examining whether historical forces of change are driving the business; and by enquiring to what extent the historical forces of change have become the new force of resistance.
- 5.) Assess the strength of the overall resistance to change by examining to what extent the various forces of resistance are correlated with one another; and by describing the resistance threshold in terms of power and resources needed to deal with the resistance.

If this kind of assessment can be made, compiling the level of intensity of forces for change with the degree of resistance expected, it is possible to determine the leadership behavior

and overall management approach to implementing change (Senior & Swailes, 2010). The forcefield model can serve as a tool for managers when implementing planned change such as the implementation of a QMS in the case organization, EDB Card Services.

### **3.2.2 Leadership and change**

When implementing change there are always difficulties and risks that are involved, such as resistance to change and lack of commitment to it (Gill, 2003, p. 307; Saunders & Swailes, 2010, p. 263). These are only two examples of what difficulties and risks that are posed by change and a manager must be aware that other barriers might occur. Failure to plan and implement change is not necessarily because of poor management but rather a lack of effective leadership (Gill, 2003, p. 307). Gill (2003) argues that "...while change must be well managed - it must be planned, organized, directed and controlled - it also requires effective leadership to introduce change successfully: it is leadership that makes the difference." (Gill, 2003, p. 307). What is generally agreed upon is that change programs often fail due to poor management (Beer *et al.*, 1990, p. 4; Gill, 2003, p. 308; Kotter, 1995, p. 3). Poor management includes: poor planning, monitoring and control, lack of resources and know-how, and incompatible corporate policies and practices (Gill, 2003, p. 308). Kotter (1995) argues that change efforts in organizations fails through: not establishing a great sense of urgency; not creating a powerful enough coalition; lacking a vision; under-communicating in a big way; not removing obstacles to the new vision; not systematically planning for and creating short-term wins; declaring victory too soon; and not anchoring changes in the corporation's culture (Kotter, 1995, pp. 3-9).

## **3.3 Quality Management Systems**

In order to identify the barriers of implementing a quality management system we first take a look at the history of quality management systems, which has led us to today's world-known QMS, namely the ISO 9001:2000. Note that ISO 9001 is used throughout this thesis as an example of a QMS to highlight key elements, implementation processes, responsibilities and potential problems arising from the perspective of a quality management system.

### **3.3.1 The development of quality management systems**

The quality management system developed by the International Organization for Standardization is highly related to early military systems (Hallström, 2000). ISO 9000 can be traced back to the military standards developed by the US Military, the NATO, and the British military in the 1930's (Hallström, 2000). As a result of the quality developments in military sectors, many countries began forming national standards for specific branches and industries (Hallström, 2000). Quality management systems grew significantly in the defense industry, space technology, and manufacturing processes and in the 1970's other industries began implementing quality management systems (Hallström, 2000). In 1977 an international proposal was presented by the national standardization institute of Germany (DIN) to form an international committee responsible for quality standardization and certification (Hallström, 2000). Discussions between the standardization institutes of Germany, France, Canada, and Great Britain led to the forming of ISO - TC 176. The committee was formed with the purpose of "Standardization and harmonization in the field

of generic quality systems and quality assurance, and appropriate related quality technologies” (Hallström, 2000, p. 69). The first ISO 9000 series was presented in 1987, which described the idea of standardizing production, processes in organization in an efficient and thought-through way (Hallström, 2000). It promoted the benefits of having a structured system of documented work routines in order to measure the quality of products and the processes of manufacturing (Hallström 2000). The International Organization for Standardization’s (ISO) defines a ‘quality management system’ as “a management system to direct and control an organization with regard to quality” (BS EN ISO 9000, 2000, in Dale *et al.*, 2007, p. 280).

Today the ISO 9000 series consist of a set of standards and represents an internationally consensus of what good quality management practices are ([www.iso.org](http://www.iso.org)). The ISO 9000 series has four major standards: ISO 9000, ISO 9001, ISO 9004, and ISO 19011 (Dale *et al.*, 2007). The four standards each concern a specific part of quality management systems (Dale *et al.*, 2007, p. 288):

ISO 9000: Quality Management Systems: Fundamentals and Vocabulary

ISO 9001: Quality Management Systems: Requirements

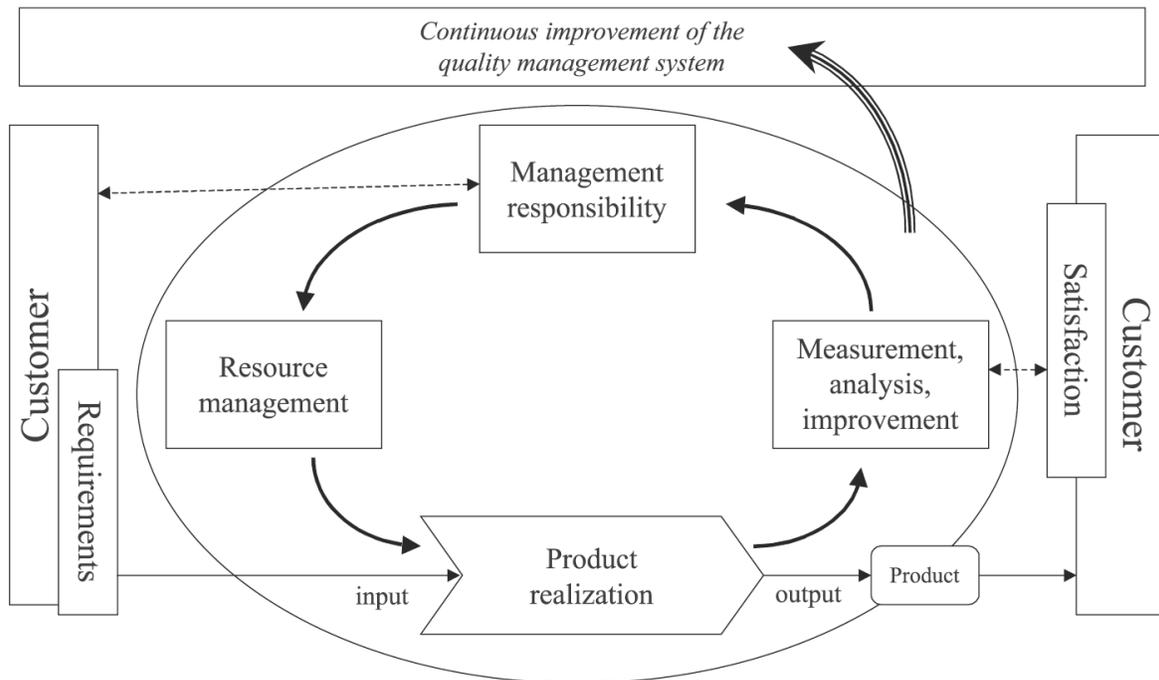
ISO 9004: Quality Management Systems: Guidelines for Performance Improvement

ISO 19011: Guidelines on Quality and Environmental Auditing

The standards have two separate functions where the first function is to identify the elements to be covered by an organization’s quality system and provide guidance on quality management and the application of it (Dale *et al.*, 2007, p. 288). The second function is the explanation of features and characteristics of a quality management system that are key for assuring quality (Dale *et al.*, 2007, p. 288).

The aim of having a quality management system is to create a framework of reference points that ensures that each process within an organization is performed using the same information, methods, skills, and controls and applied in a consistent way (Dale *et al.*, 2007; Hallström, 2000). A quality system should assist in defining requirements, communicating policies and procedures, supervising the work performed and improve overall teamwork (Dale *et al.*, 2007). It is important that documents are established that describes the quality management system and the activities through which quality is created, assured and continuously improved (Dale *et al.*, 2007). The fundamental documents behind quality management systems are: (1) a company quality manual describing the quality policies and quality objectives in line with company policies and objectives; (2) a procedures manual describing the functions of the system and outlines the structure, responsibilities and practices for each department or business unit; and (3) other documents containing work instructions, specifications, and methods of how to perform work activities (Dale *et al.*, 2007). Apart from having documents supporting the quality system, organizations usually include a database containing other forms, standards, and reference-information relevant for its quality system (Dale *et al.*, 2007).

### 3.3.2 ISO 9001:2000 Framework



**Figure 3 - ISO 9001:2000 Source: BS EN ISO 9001 (2000)**

The model of ISO 9001:2000 is presented above and it serves as a framework of how organization should work in regard to quality and more specifically, what the organization requires to do (Dale *et al.*, 2007). The model shows five principal elements, which each include a set of requirements, actions, and processes. The first element is ‘continuous improvement of the quality management system’ (top box in the Figure 1), which includes general requirements of a quality management system and documentation requirements. In this element organization are expected to “establish, document, implement and maintain a quality management system and continually improve its effectiveness in accordance with the requirements of this international standard” (BS EN ISO 9001, 2000).

The second element is ‘management responsibility’ and covers the demanded level of management commitment, customer focus, quality policy, planning, responsibility, authority and communication (Dale *et al.*, 2007). The third element of the ISO 9001:2000 framework is ‘resource management’ and includes provision of resources, human resources, infrastructure, and work environment (Dale *et al.*, 2007).

The fourth element is ‘product realization’ and covers the planning of product realization, customer-related processes, design and development, purchasing, production and service provision, and control of monitoring and measuring devices (Dale *et al.*, 2007). The fifth and last element of the framework is ‘measurement, analysis and improvement’. This element suggests that organizations should “plan and implement the monitoring,

measurement, analysis and improvement processes needed: (a) to demonstrate conformity of the product; (b) to ensure conformity of the quality management system and ( c ) to continually improve the effectiveness of the quality management system” (BS EN ISO 9001, 2000).

The framework of ISO 9001 and the requirements included can be adapted by any organization to include specific quality assurance specifications related to the organization. In the case of our organization that means that their specific quality requirements such as the MC CQM (MasterCard Card Quality Management) and PCI DSS (Payment Card Industry Data Security Standard) can be included and pursued along with the ISO 9001 framework.

### **3.3.3 QMS Implementation**

The implementation process of a quality management system is a process for improving quality (Dale *et al.*, 2007). In order for quality to be improved in an organization, certain changes need to be done. There are several methods and tools that can guide an organization towards improved quality, but since no organization looks the same or has the same point of departure when implementing a QMS, the process of implementation needs to be adjusted to better fit the specific organization and context. Each organization is unique in, for example the business culture, the structure, goals and objectives, the hierarchy etc., which means that there is no universal method for quality improvement. Therefore quality management systems suggest frameworks for improving quality, not strict implementation guides that should be followed explicitly (BS EN ISO 9001:2000).

### **3.3.4 ISO 9001 Implementation Guidelines**

The guidelines presented by Dale *et al.* (2007) are primarily focused on small and medium-sized enterprises applying ISO 9001 but the author ascertains that the guidelines are also relevant and applicable to larger organizations. As our case organization EDB Card Services has not yet embraced and adopted ISO 9001 it is important to provide a thorough analysis of its implementation process.

Before an organization chooses to implement ISO 9001 they first have to be clear on the reasons for pursuing ISO 9001 certification. Dale *et al.* (2007) suggests that implementing and maintaining quality management systems for the wrong reasons will only result in burdening the organizations with extra costs and paperwork with no compensating benefits. Seeking ISO 9001 registration just to conform to contractual agreements and please the customers or clients is not desirable (Dale *et al.*, 2007). However, some researchers believe that the fundamental reason behind a quality management system is to satisfy the customers and improve organizational results (Lambert & Ouedraogo, 2008). In Lambert’s and Ouedraogo’s research 83 percent of the 85 French companies subject to the research, stated that one of their main objective with the QMS was to improve customer satisfaction (Lambert & Ouedraogo, 2008).

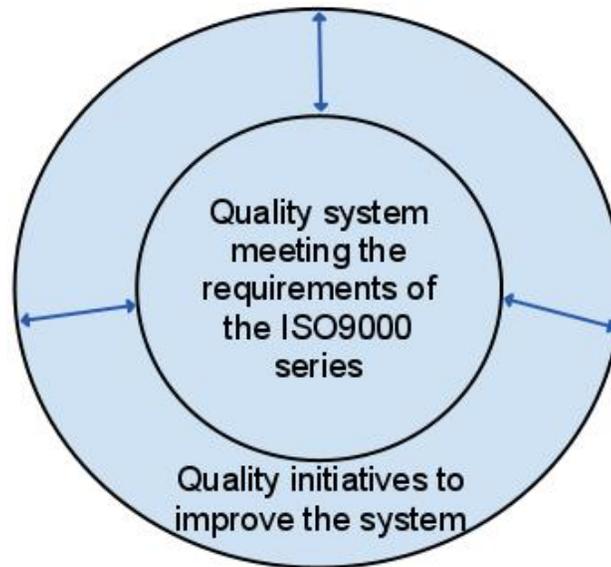
The implementation of a quality management system is something that is chosen and decided by the organization and is prioritized second to the main operations (Dale *et al.*,

2007). Organizations should manage the development of a quality management system as a project with clear key steps, milestones and time-scales (Dale *et al.*, 2007).

One of the first steps towards implementing a program of ISO 9001 is the internal quality audit of existing quality management systems (Dale *et al.*, 2007). A qualified auditor should do this and it will assist in determining the status of an organization's quality management system and as an initial assessment of the work necessary to meet the requirements (Dale *et al.*, 2007). In this initial procedure it is important to develop a realistic timetable of the implementation process to avoid excessive hours being spent on trouble-shooting and backtracking (Dale *et al.*, 2007). When developing a quality management system for the first time organizations should establish a quality steering group, or quality council, which may include department managers and the CEO of the company (Dale *et al.*, 2007, p. 51). The purpose of such a group is to achieve cross-functional support and to help ensure the smoothest development and continuity of the program (Dale *et al.*, 2007, p. 51). A quality council should steer the work of quality, or TQM and engage in overseeing and managing the improvement processes. Dale *et al.* (2007) presents the roles of such a group to be:

- *Agree plans and goals and provide and manage resources*
  - *Monitor progress*
  - *Determine actions*
  - *Create an environment that is conducive to continuous improvement*
  - *Concur on issues of continuous improvement*
  - *Facilitate teamwork*
  - *Ensure that firm foundations are laid down*
  - *Identify impediments to progress*
- (Dale *et al.*, 2007, p. 51)

It is important that all department managers are committed and participate in the project in order to gain support from employees as well as enabling a smooth implementation and continuous maintenance of the standards (Dale *et al.*, 2007, pp. 51-52). ISO 9001 should always be viewed as a minimum requirement and it is essential that organizations aim for having a quality system that exceeds the ISO 9001 requirements (Dale *et al.*, 2007, pp. 51-52). Implementing ISO 9001 means that an organization has an initial documented quality management system, which allows for improvements through new quality initiatives (Dale *et al.*, 2007, p. 52).



**Figure 4 - Enhancement of the Quality System (Reconstructed from Dale *et al.*, 2007)**

For organization having implemented ISO 9001 it should be acknowledged that it is not the pinnacle of their quality management achievements, merely a precursor to future total quality management (Dale *et al.*, 2007). When organizations have decided to adopt a quality management system there are a number of recommendations of what organizations should do, however not how they should execute those recommendations. Also, there are no specific recommendations for any specific types of organizations, nor of their current situations, organizational environment or culture. One of the most important recommendations for organizations is to establish an organizational environment, which promotes the development of the QMS according to the requirements of ISO 9001 (Dale *et al.*, 2007). This would include changing the business culture of the organization, which will be later discussed. One step in this direction is to develop quality policies and quality objectives (Dale *et al.*, 2007). This is also the task of senior management and their role in establishing, developing and maintaining ISO 9001 cannot be over-emphasized (Dale *et al.*, 2007). Senior management should act as quality leaders because they are the only ones who can deliver the resources and co-operation of selected staff and show the direction of which the company is going (Dale *et al.*, 2007). The CEO of the organization should take full responsibility of the quality management system and delegate the tasks necessary to fulfill the requirements (Dale *et al.*, 2007). Even though these are valuable recommendations they are very general and do not take enough consideration of specific organizational situations and their internal environment, including those who will drive and maintain the work towards improved quality systems.

Another step towards implementing a quality management system is to educate everyone within the organization, highlighting the importance of product and service quality in general, and the underlying reasons for pursuit of quality (Dale *et al.*, 2007). If the employees on all levels of the organization understand quality, it will generate the positive attitudes and behaviors towards ISO 9001 and ultimately encourage their commitment (Dale *et al.*, 2007).

As of this point in the implementation process the organization should start developing its system to meet the requirements of ISO 9001. This includes establishing procedures and instructions for operations and tasks as well as start documenting what employees are currently doing in order to assess whether or not the activities can be modified according to the standards (Dale *et al.*, 2007). If the procedures cannot be adapted to ISO 9001 they should be left alone (Dale *et al.*, 2007). If all of the procedures are documented the organization can use it to demonstrate to the quality auditor that the ISO 9001 requirements have been fulfilled (Dale *et al.*, 2007). The staff in charge of documenting the procedures needs to have knowledge of ISO 9001 in order to claim ‘ownership’ of the procedure (Dale *et al.*, 2007). If organizations feel that hiring external experts and consultants for this task they are likely to end up with inaccurate interpretations of how the procedures are carried out (Dale *et al.*, 2007). The procedures should be documented by those who have full expertise of how they are performed and are dependent on the style of the organization (Dale *et al.*, 2007). Otherwise the changes suggested may not be welcomed by the employees as it interferes with “the way it has been done before” (Dale *et al.*, 2007). The final step of the ISO 9001 implementation process is to make the quality management system an integral part of the management process which ensures that further business improvements are incorporated into the system (Dale *et al.*, 2007).

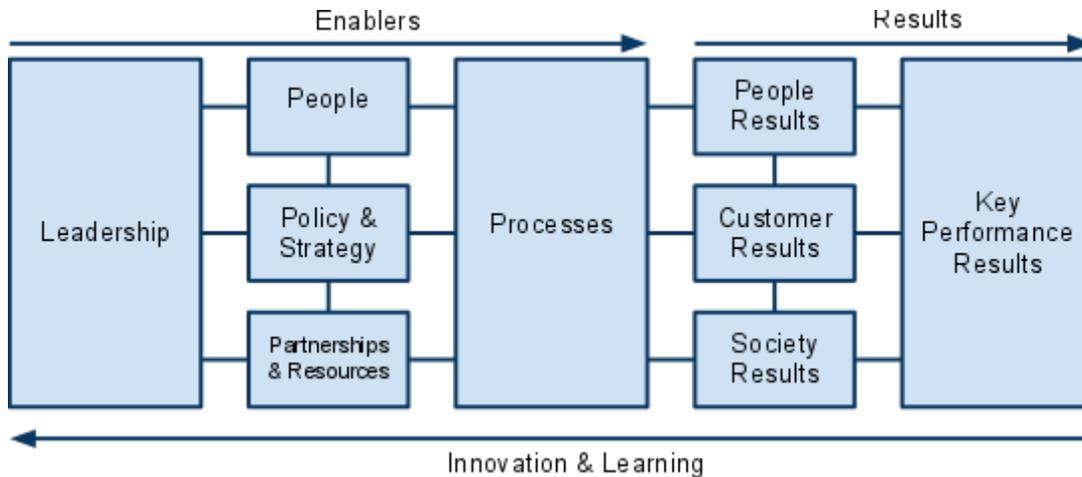
### **3.3.5 Pre-assessment of a successful QMS implementation**

In order for us to assess the conditions of our case organization and how they can prepare for the implementation of a QMS we need to determine which organizational factors are of most importance.

#### **3.3.5.1 The EFQM Excellence Model**

In 1998 the European Foundation for Quality Management developed an assessment tool, or rather a diagnostic tool for self-evaluating organizations’ TQM development and philosophies. It was developed mutually by 14 European companies to promote self-evaluation of any organization’s progress of total quality management. (Heras-Saizarbitoriaa, Casadesús, Marimón, 2011, p. 201).

The EFQM Excellence Model is supposed to provide an overview of what elements organizations should focus on when introducing new improvements and initiatives. The model is strongly connected to quality initiatives and quality improvements, and the model suggests how organizations can manage the changes implied in such actions. The model is presented below and consists of nine key elements.



**Figure 5 - The EFQM Model (Source: EFQM, 1998)**

The four elements to the right represent the performance goals and results, which an organization wishes to achieve. Basically, they represent the purpose of the organization whilst the other five elements on the left side represent the route for achieving the purpose and the desired results. The five elements are the so-called “enablers” which will facilitate an organization’s work towards the end-results (Sandbrook, 2001, p. 84). The EFQM Excellence Model can either be a stand-alone evaluation for organizations wanting to change and improve its current businesses and operations, but it may also be utilized alongside ISO 9001 for example, and the strive for TQM (Heras-Saizarbitoriaa *et al*, 2011, p. 201-202).

### 3.3.5.2 The use of the EFQM Model

The EFQM model has been a strong influence in our evaluation of the company and its situation, and it can be seen as one of the major influences on the creation of our interview guides. The EFQM model represents some of the key success factors of a QMS and the work towards quality improvements and along with the framework of ISO 9001 we are able to utilize their features in creating the interview topics and questions for the respondents. The “enablers” within the EFQM model are the elements of which an organization can assess their success and determine whether or not they were successful according to their expectations and desires.

### 3.3.6 ISO Certification

For companies wishing to become ISO certified they need to meet the requirements stipulated in the ISO 9001 standards. However, since ISO only provides the requirements needed for the certification and not specifically how the requirements should be fulfilled. The certification is performed by a certification body which audits the QMS in line with the requirements provided by ISO. An independent external body accredited for issuing an ISO certification carries out the certification. The external body auditing the company looks at the organizational level of conformity to the standards or requirements of ISO 9001. The external body would consider whether or not the products, services, and/or systems are in

conformance to the necessary requirements of the ISO standards. ISO itself has no certification privileges or authority to assess an organization's conformance to the ISO standards. (www.iso.org)

### **3.4 Barriers to the implementation of a QMS**

In organizations there will always be forces that act against change which ultimately will create barriers specific to the change that is to be implemented. Therefore, when implementing a QMS, the barriers that will occur will be specific to the QMS and the organization that implements it. The barriers include the elements of a QMS such as the ISO 9001 framework and can be identified and extracted from the implementation process and the activities and tasks within. Also, looking at the success factors of the EFQM model it is fair to conclude that those factors also may pose as barriers, yet it would be repetitive and redundant to go through them once again as you may find them under its specific section. In Beckford (1998) we can find barriers of implementing a management system with the purpose of pursuing quality:

- (1) The systems and procedures inhibiting the pursuit of quality
- (2) The organizational culture preventing quality
- (3) The design of the organization inhibiting the strive for quality
- (4) The managerial and employee recognition of the importance of quality and attitudes towards it
- (5) Costs of quality resulting from not maintaining a certain quality level

The first barrier is systems and procedures, which may inhibit the pursuit of quality due to the fact that most organizations have long established processes and organizational systems with a certain bureaucratic process. When adding a new organizational system, such as the QMS, organizations have to change or adapt their original systems and procedures to the new one. It is likely that the original systems and procedures will conflict with the new ones as QMS implies standardized procedures. When adopting a QMS, standard requirements should be met by the organization through its systems and procedures and as they become "fixed" they may become frozen into the organization. This means that when introducing new requirements for specific procedures the pressure for change and adaptation may cause resistance from those in charge of the procedures. (Beckford, 1998)

The second barrier is the organizational culture that may prevent the successful introduction of quality. Adopting a QMS brings changes to the organizational culture, or business culture, and it is important to consider how the organizational culture should be dealt with. Culture is by definition "a set of behavioral and attitudinal norms, to which most or all members of an organization subscribe, either consciously or unconsciously, and which exert a strong influence on the way people resolve problems, make decisions and carry out their everyday task" (Clutterbuck & Crainer, 1990: 195). In any organization there are entrenched norms of behavior as well as certain values and beliefs to which employees conform. They are exchanged through informal and formal processes and are often a template of how one should behave in order to fit in with the organization. Changing the norms that have been established under a long period of time is a very difficult task for any organization and requires managerial and employee commitment and dedication (Beckford,

1998). Ultimately changing the culture can be a long lasting task for the organization and is most often met with resistance, which makes the barrier of culture one of the most difficult tasks.

The third barrier presented by Beckford (1998) is the design of the organization inhibiting the strive for quality. By 'design' Beckford (1998) means it is not only the hierarchical structure of the organization but also the interaction between units, the information and management systems and their inter-relationships. The barrier of organizational design includes smaller issues, which together make up the design barrier, which Beckford presents. The first of these issues are the risk of institutionalized conflicts, that is, conflicts between quality and for example productivity. This situation can be exemplified by looking at a quality manager reporting to a production manager and on the one hand wanting to achieve quality, and on the other hand meeting the customer orders. One of these needs is likely to override the other and thus the overridden manager will be redundant and value will be lost. The second issue is the design of the organizational information system. The activities of generating and procession information have to contain the right information, in the right format, at the right time and deliver it to the right person if the information system should be of value.

A common problem is the fact that organizations spend a lot of time analyzing and discussing "old" information and that wrong people are getting the information. This should be highly considered by our case organization EDB Card Services as they deal with a lot of sensitive information that requires the outmost precision. The third issue related to the design barrier is the organizational understanding of roles and articulation. The staff and managers with direct control of operations and in fixing errors that may occur may become to blind sighted and only dealing with the errors instead of focusing on their specific role within the organization. Those in charge of specific operational matters should be given the freedom to deal with errors rather than having other managers and/or employees' trying to fix what is not theirs to fix. The final issue of the design barrier is the irrelevant or inappropriate activities. Organizations often have procedures, which its users have developed and become accustomed to without deliberate creation. Such procedures may contain unique peculiarities and unnecessary methods that have been unconsciously accepted just because they have been forgotten and not evaluated. Irrelevant procedures are those with a lost purpose, which employees often complain about but no one addresses them. These are unconscious parts of the organizational design and may pose as a barrier to quality. (Beckford, 1998) What is important is to determine if and how these barriers are something that EDB Card Services should be worried about. Just acknowledging their existence does not mean that they will pose as a barrier in general, only that there is a possibility of it.

The fourth barrier to quality is the managerial and employee recognition of quality. Beckford suggests that management have to acknowledge the importance of quality and that it is of concern to the entire organization. Quality has to be treated as a part of the problem when things do not go as expected and that a lack of quality may be a cause to decline. The attitude towards maintaining quality as a key issue in an organization's operations, products and services, and performance must be consistent in all levels of the organization. Management needs to recognize that sacrificing quality in lieu of meeting

customer demands is not a desirable sacrifice. Management should not emphasize on being purely productive but on being productive with quality. This attitude needs to be communicated and adopted by employees as well.

The fifth and final barrier presented by Beckford (1998) is the costs of quality. Costs of quality can be divided into two categories; direct costs and invisible costs. Direct costs are costs that arise from not achieving quality and are attributes visible to the organization. Invisible costs are costs that arise when the organization are not achieving quality but cannot be seen by the organization. Direct costs can be products with errors that require rework and rectification. Invisible costs can be dissatisfied customers who move to a competitor for an alternative product/service. If organizations are aware of the costs of quality they can save time and money on inspections and quality control in order to eliminate these costs. If quality is inherent in the processes of the organization, less inspection is needed in the future and thus the cost of inspection decreases. Avoiding backtracking and analyses of errors and mistakes can save a lot for any organization. (Beckford, 1998)

Other researchers such as Carlsson & Carlsson (1994) made a study on how Swedish organizations experienced the implementation of ISO 9001. The study showed that organizations had some major and some minor difficulties when implementing ISO 9001 (Carlsson & Carlsson, 1994).

The major difficulties included:

- (1) Time and resource consumption
- (2) Interpreting the standards of ISO 9001
- (3) Unclear and too bureaucratic documentation
- (4) Making the quality system understood and accepted

The minor difficulties included:

- (5) Choosing a suitable level for documentation
- (6) Setting relevant quality goals
- (7) Communicating the message
- (8) Securing employee commitment

Carlsson & Carlsson (1994) found in their study that the Swedish organizations (in their study) had the most difficulty with the time and resources consumption. The organizations in study stated that they had problems of assessing the time it would take to implement the QMS and estimate how much resources they would consume in the process. Average time spent on fully implementing ISO 9001 was 1.5 years and the average expenditure for certification was SEK 300,000. Carlsson & Carlsson (1994) meant that this showed the fundamental problems for any organization to allocate the right amount of resources and necessary time on implementing a QMS such as ISO 9001. The authors also found that the organizations had problems understanding and interpreting the standards of ISO 9001 and that it provided too bureaucratic documentation with little room for flexibility. When management communicated and shared the visions and objectives of the QMS they were met with problems of employees not fully understanding and thus not accepting certain changes. However the answers provided by the organizations were not consistent. Some

organizations experienced high levels of employee acceptance of the QMS and some organizations did not.

Based on the study made by Carlsson & Carlsson (1994) the authors presented some recommendations for organizations to consider when implementing ISO 9001. They recommended that top management's support and commitment should be considered as vital; the entire staff should be included in the process; the external body for certification should be included at an early stage; make preparations of the manual first; make a long-term plan; educate the entire organization; hire qualified consultants to interpret the standard; utilize existing routines as a starting-point, establish a common plan of action; do not set up a quality department; and distribute responsibility to line members. (Carlsson & Carlsson, 1994)

Other pitfalls and barriers when working towards quality is presented in Dale *et al.* (2007) are:

- (1) *Inadequate leadership*
  - (2) *Resistance to change*
  - (3) *Conflicting policies*
  - (4) *Unsuitable organizational structure*
  - (5) *Poor management of the change process*
- (Dale, Chapter 7, in Dale et al, 2007, pp. 131-146)

Dale suggests that inadequate leadership will affect the implementation of a QMS negatively. Managers leading the implementation process of a QMS should try and eliminate the notion of "us" and "them" between management and employees. If unsuccessful, they are likely to meet employee resistance and a low level of acceptance of the suggested reforms in a QMS. The more managers try to gain the trust and commitment from employees the more likely it is to avoid resistance to change. It is also important the leaders have the right attitudes, values and interpersonal skills to facilitate the best possible interaction with employees. Dale also presents that there may be minority groups within an organization that is set on rejecting anything that management puts forward which is why it is important that managers commit in gaining their trust. (Dale, in Dale *et al.*, 2007, pp. 134-137)

The third barrier presented by Dale (in Dale *et al.*, 2007, pp. 137-138) is the fact that existing policies within organizations may conflict or be inconsistent with the policies of pursuing quality. Human resource management includes policies that encourage individual progress through reward systems, which may undermine the teamwork spirit of QMSs. Other policies are financial policies, which encourage short-term decisions and objectives in order to achieve certain short-term results and shareholder benefits. These policies are likely to conflict with quality systems, which encourage long-term objectives and results. The maintenance policies of organization usually deal with trying to reduce costs and limit the amount of work necessary for planned maintenance. These policies are likely to have negative impacts on production performance and the ability to create conforming products. The last category of policies presented by Dale (in Dale *et al.*, 2007, p. 137-138) is the manufacturing policies. In manufacturing processes organizations strive to produce a

certain output and may neglect quality performance and customer satisfaction. Striving to reach for a specific number of outputs is harmful to the quality levels and in satisfying customers.

A fourth issue in implementing a QMS according to Dale (in Dale *et al.*, 2007, pp. 138-139) is the organizational structure. The way which the organizational structure compliments and facilitate the adoption of a QMS is key in a successful implementation. The organizational structure includes functions, roles, responsibilities, hierarchies, boundaries, flexibility and innovation. If the roles and responsibilities stipulated in quality policies are not uniform with the original roles and responsibilities there is a risk that employees and managers are rejects the ownership of the quality processes. An increased work-load may result in people not putting their best effort into their newly given responsibility. As quality management is concerned with everyone being committed to the quality assurance, and striving to improve the processes on a daily basis, it would be detriment to the implementation of the QMS if people neglected it. Also a part of the organizational structure is the boundaries between departments. Dale (in Dale *et al.*, 2007, p. 139) means that in most organizations there are barriers between departments and in some cases a lack of teamwork and co-operation. Whether or not departments can eliminate these bureaucratic walls and hierarchical structures between each other will affect the success of implementing a QMS. Dale (in Dale *et al.*, 2007, p. 139) suggests that organizations should try and break the barriers, if existing that is, to enable cross-functional teamwork and collaboration. Even though there may be separate departments, they are still a part of the bigger picture that is the organization, and ultimately the same objectives. (Dale, in Dale *et al.*, 2007, pp. 139-140)

The fifth issue that may pose as a barrier to the implementation of a QMS is the management of the change process. Dale (in Dale *et al.*, 2007, pp. 142-143) presents that in order for the implementation to be efficient and effective, an environment where employees and managers are motivated and determined to achieve the goals must be created. It could be complex and wide-ranged to try and integrate the philosophy of total quality management within a QMS however it requires a great deal of management attention and control (Dale, in Dale *et al.*, 2007, p. 142).

# 4 Practical Methodology

*The following chapter outlines the practical ways of how we intend to carry out our research and specifically which methods we have chosen. We will present our chosen respondents, how we carry out the interviews, access and criticism of primary sources.*

## 4.1 Empirical Data Collection

For this study we wanted to gain a greater understanding of the organization and consequently determine how the preconditions for the organization looks like prior to the implementation of a QMS. The qualitative nature of this thesis entail that we use qualitative methods to gather our empirical data. The initial desire that we had was to gather empirical data throughout the whole case organization including managers and employees. By gathering data throughout the whole organization we aimed to capture a better understanding with viewpoints from each segment. It is our belief that managers and employees have different views and standpoints that provides different perspectives to the case. Performing interviews has always been on the agenda as we consider it to be one of the best methods to gain an in-depth understanding of our case organization. However, we realize that interviews are time-consuming and thus only a small fraction of the organization can be examined. Hence we also wanted to gather the views of the employees. At the occasion of performing interviews we also included a questionnaire for the employees that would give us an insight of what their opinions and values were. However this questionnaire was not included as we did not have sufficient amount of time to process and analyse the material gathered together with the interviews. Unfortunatley, this may have resulted in a loss of vital information about the views of the employees that essentially forms the organization and plays a major role when implementing change. However, we believe that the opinions and views of the interviewed managers can to some extent indicate the views of the employees and therefore still provide accurate findings.

## 4.2 Interviews

As mentioned in the theoretical research method, this thesis takes on a qualitative research approach and has been conducted through semi-structured interviews. By performing interviews we are able to gain a greater understanding of how the preconditions looks like for the case organization prior to the implementation of a QMS. Determining the preconditions of the case organization and comparing these with our theoretical findings will provide us with an insight of what barriers are most likely to occur and how capable the case organization is to overcome them and implement a QMS. With this information we are able to generate knowledge and give recommendations on how to the case organization should prepare for the implementation of a QMS.

The interviews have been conducted through face-to-face meetings however with one exception of a phone-interview. The meetings have been held at mutually agreed locations and with a set time at the convenience of the respondents. The aim was to perform as many face-to-face interviews as possible since it is generally easier for the respondent to answer open-ended questions and talk more freely. One interview was performed via phone due to

unforeseen events that caused a cancellation of our planned face-to-face interview however we did not experience any loss of information due to this. The purpose of the interviews was to gain as much information about the case organization and its preconditions for implementing a QMS, therefore we wanted the respondents to, through a predetermined interview guide, give their opinions and views on their organization. Consequently, the semi-structured interview approach was chosen as it would give the respondents the opportunity to be as detailed and exhaustive as possible in their statements within the framework of our interview guide (Saunders *et al.*, 2009). We preferred meeting with the respondents since it would give us the possibility not only to read verbal but also non-verbal communication which can be useful in interpreting the full meaning of the answers (Bryman & Bell, 2007, p. 216). Of course there are other ways of acquiring empirical data and this has been discussed in chapter 2.6.

#### **4.2.1 Selection**

When making a qualitative study it is important to consider how many interviews that are required (Kvale, 1997, p. 19). The number of respondents that a researcher should interview depends on how many that is needed to obtain the information that is required (Kvale, 1997, p. 97). Another issue that needs to be considered, when estimating the number of interviews that are appropriate, is the timeframe of the study (Kvale, 1997, pp. 97-99). A too large number of interviews will impede the ability to perform in-depth analysis of the material gathered. A too small number of interviews will, on the other hand, make generalization impossible. Another restriction to the empirical data gathering is that we are only two persons that are writing this thesis and the ability to perform interviews and process all of the information that we collect depends on how much we can handle given our timeframe. This study focuses on one organization and it was important that the chosen respondents would be relevant for our interviews. We wanted to interview persons that had knowledge about the organization and that would be involved in the implementation process when implementing a QMS. The number of respondents interviewed was also dependent on and limited to how many respondents in the organization that was available and relevant for our study.

Since a QMS implies that management of an organization takes first and foremost responsibility for the implementation of a QMS and its overall maintenance, we felt that it would be necessary to include employees working at a managerial level at EDB Card Services. The CEO and the managers have the main responsibilities when changes are initiated, as they need to make sure that these are promoted and followed. By interviewing the CEO and the managers we could acquire answers to our interview questions regarding the subject from the persons whom are going to be the drivers behind the implementation of a future QMS. Managers from the three departments within EDB Card Services were asked to participate but we ended up with managers from two departments and unfortunately no manager from the Fraud department. The CEO of the organization could not participate in this study due to a lack of time, however we considered the managers of the departments to be sufficient enough as they are the ones driving change and the work towards quality on a daily basis. We did not select any other employees below the management level as we have had a limited amount of time and we felt that it was more important to fully commit to the management views on our research topic. Of course we see

the benefit of also including some other employee perspectives on our research problem, however as we are conducting a qualitative research we cannot include too many perspectives as it would lose our overall purpose.

The purpose and subject of our research was e-mailed to our contact person in the case organization who directed us to the persons who would be of most interest for us to interview. Another e-mail concerning the purpose and subject was then sent to the persons suggested by our contact and an interview was booked at their convenience. After booking the interviews we sent the respondents our themes and questions that would be covered in the interviews. By doing so, the respondents could examine the questions in advance and prepare themselves prior to the interview. We believe that this helped the respondents to understand and gather enough information to be able to answer our questions as accurately and exhaustively as possible.

Saunders *et al.* (2009) argues that the location in which the interviews are held must be convenient for the participants and in an environment where they will feel comfortable and where the interview is unlikely to be disturbed (Saunders *et al.*, 2009, p. 329). Another aspect that Saunders *et al.* (2009) points out is that the place for interview is quiet so that outside noise does not conflict with the quality of an audio recording (Saunders *et al.*, 2009, p. 329). As stated earlier, the interviews were decided upon the convenience of the respondents. The time and location was decided by them which most of the time meant that the interviews were held in the respondents' offices with the exception of three interviews which were held in a conference room.

The interviews were recorded by using notes of lesser detail, audio recording and memory. The respondents were told before each interview that we would record the conversation and that we would only do so if we had their permission. The advantage of using audio recording is that we could, when transcribing the interview, be precise in what the respondents answered and minimize the risk of misinterpretation and bias. Also, the audio recording allowed us to focus more on questioning and listening. However, Saunders *et al.* (2009) argue that audio-recording can have its disadvantages: an audio-recording may adversely affect the relationship between interviewee and interviewer, it may inhibit some interviewee responses and reduce reliability, there is a possibility of technical problems, the time required to transcribe the audio-recording (Saunders *et al.*, 2009, p. 341). The experience that we had during the interviews is that none of the respondents was disturbed by the fact that the conversation was audio-recorded. We believe that this was because the respondents knew that they would be kept anonymous and that no personal or sensitive information was discussed. To reduce the risk of misinterpretation and biasness we sent the transcribed material back to the respondents for proof-reading and scrutiny so that they could correct, change and remove parts that they felt were inaccurately transcribed, translated, or interpreted. After the respondents approved the transcriptions the audio-recordings were deleted.

#### **4.2.2 Choice of interview structure**

For this study, a semi-structured interview technique has been used. The semi-structured interviews provide a lower degree of standardization than for example a questionnaire, as

the questions posed to the respondents may vary from interview to interview. The researcher can choose to omit or add questions in particular interviews depending on what is required to explore the research question and objectives (Saunders *et al.*, 2009, p. 320). Another advantage of using semi-structured interviews is that it gives us the opportunity to 'probe' answers, where we want our respondents to explain, or build on their responses (Saunders *et al.* 2009, p. 324). By probing the answers we can gain greater understanding to the meanings of the respondents answer and provide a greater depth and significance to the data that we obtain (Saunders *et al.*, 2009, p. 324). This thesis aims to study how an organization can prepare them in overcoming the barriers when implementing a quality management system. It is therefore important to get a description and understand what the organization looks like and how it works to be able to determine why barriers may occur in an organization. As discussed in the theoretical framework, the preconditions of an organization is a big determinant of what barriers might occur and how prepared the organization is to overcome these. The semi-structured interview enables the possibility to get a better understanding about an organization and how it can prepare itself to overcome barriers.

### **4.2.3 Interview guide**

The interviews conducted in this study were based on a predetermined interview guide (see appendix 1). The interview guide is based upon the theoretical framework and some theories and models have had a stronger influence on the interview than others. However, we have tried to include as much of the larger theoretical parts than the smaller ones. The models of the forcefield analysis and the EFQM model have also had some influence even though not used frequently throughout this thesis. This is because they present key success factors specifically towards the implementation of QMS. The utilized theories in the interview guide have been divided into categories from which we have developed open-ended questions, and utilized during the interviews. During the interview stage (prior to and during the interviews) the interview guide was developed and altered as topics and questions arose from the discussions that we had with the participants of the study. Hence the interview guide (appendix 1) is not congruent with the topics below. The topics below are the actual topics that were discussed during the interviews and here we present them together with their underlying purpose:

#### 1. Current quality discussion

- To establish what management had discussed about quality, where the work was heading and to see if they had any poor or good experience henceforth.

#### 2. Reasons behind a future QMS

- To see what the expectations and objectives are with adopting a quality management system.

#### 3. Attitudes towards change

- Management attitudes towards changes, as well as their perception of employees' attitudes.

#### 4. Quality department

- To establish whether or not the quality department needs more time and resources to spare equally between the departments.

#### 5. Education and training

- How should the training and education of new routines be performed and for whom?

#### 6. Communication

- How do the managers feel about their internal communication procedures?

#### 7. Organizational culture

- To determine how the organizational climate, internal environment and culture are within the organization, and how it may affect the implementation of a QMS.

#### 8. Information sharing and documentation

- To determine how departments and leaders share and distribute information and documentation

#### 9. Leadership

- To determine what role the leaders have in implementing a QMS and how to develop it according to the needs of the organization.

What has been shown in the theoretical framework is that there are many potential barriers to implementing a QMS. As we want to investigate how organizations can prepare themselves in overcoming the barriers when implementing a QMS, we wanted to examine the preconditions at the case organization in order to determine what barriers are most likely to occur. The themes and questions posed in the interview guide has been selected and developed from our theoretical framework in order to gain the most relevant information connected to our research question and objectives.

At the beginning of each interview, the respondents were asked to talk freely about their view on quality and how the discussion had been, so far, in the organization. By doing so, the interview became less controlled as the respondent's answers lead the direction of the conversation and thus was not tied to the order of questions in the interview guide. The prepared questions in the interview guide were posed in the order that was most suitable to the given situation and related to the respondents' answers. Where possible, follow-up questions were asked in order to clarify or elaborate the answers of the respondent. Also, the use of follow-up questions could effectively lead the respondent into a new topic in the interview guide. The number of topics from the interview guide that was discussed differed depending on the direction of the conversation and how knowledgeable the respondents were. Some of the respondents were very talkative and elaborate in their answers while others were less talkative and brief. However, we tried to pose the same questions to the extent that it was possible.

### **4.3 Data processing and method for analysis**

The data collected through our interviews was, as stated before, audio-recorded. Saunders *et al.* (2009) argues that it is important that collected data should be processed as soon as

possible after the interview has been completed, this because it is easiest to recollect the interview from memory. After each interview a quick recap and discussion was made to highlight the answers that we believe had most significance. In addition, our notes were compared and completed to assure that we had understood the answers by our respondents correctly. As soon as we arrived in Umeå we began transcribing and translating the interviews and within five days we had completed the task. Worth noting is that the interviews were held in Swedish and Norwegian and then transcribed, translated into English. It might be argued that this may have had an effect on how opinions and values of the individuals that were interviewed could have been distorted when translated in so many steps. However, since the transcribed and translated material was verified and approved by respective interviewee, we can dismiss the risk of misinterpretation.

The transcribed interviews were initially handled individually and categorized according to the themes and interview topics that we had decided upon prior to the interviews. The categorization was made to facilitate the process of connecting the answers to our theoretical framework. To further facilitate the understanding of our empirical data the answers of all managers in one category were composed to give an overview of what each respondent had answered in that category.

The theoretical framework functioned as a guideline to determine what information was considered to be relevant from our interviews. Consequently, we will apply theories to our findings to examine whether or not the case organization, with the interviewed managers, has the opportunities to overcome the barriers inherent with a new QMS. We will also highlight and utilize some of the models from the theoretical chapter in order to determine what the success factors and key enablers of a successfully introducing a QMS.

## **4.4 Access**

Our case organization was chosen based on our selection criteria, and after a telephone conversation with its CEO a prospective collaboration was initiated. Having discussed the topic of our paper and its purpose via a telephone conference with the management group of EDB Card Services, the decision was made to meet up and further discuss how we could collaborate. After some initial research was made of what the research problem should be, the case organization was contacted and a meeting in Mo i Rana, Norway was scheduled. At the meeting we presented our research topic and its purpose and the managers at EDB gave feedback and ideas for what they would be interested in finding out through our thesis. Having cleared the research topic with the case organization as well as our supervisor, we independently started to find suitable theories to use as a foundation for our study.

The case organization was very eager and interested in assisting us throughout the process and several emails were exchanged in the beginning of our work. The participants of the case organization were established to be all of the managers of the EDB Card Services section. This is also where all of the interviews took place. The interviews were scheduled a week before the actual meetings, but some had to be postponed a day due to a lack of time and unforeseen events forcing some participants to be at a different location or in different meetings. The scheduled 1,5 hour for each interview proved to be more than we needed and

our interviews ranged from the minimum of 35 min to a maximum of 70 minutes. The interviews were conducted in secluded offices with no one else but the respondent and the interviewers.

Prior to the meetings the participants had all been emailed the agenda for the interview, as well as the approximate time frame and a non-disclosure clausal regarding their identities and management positions. We informed the participants that their answers would be recorded and later transcribed, and that it would be anonymous. We wanted the interviews to be anonymous in order for the managers to really express their opinions how of their currently are working towards quality, what mistakes they may have made before, and how they thought they should work henceforth. We also wanted it to be anonymous in order for the managers to feel confident that their responses would not be met with any reprisals. Even though some managers said that it would be easy to identify the manager behind specific quotes and responses, we still felt it was better to ensure anonymity for each manager than to single out their views and opinions. Since the case organization was very eager and interested in participating in our study it could be argued that making their responses anonymous was irrelevant, as they wanted to be included in our study. Perhaps they could benefit from knowing who said what and try to accommodate the opinions of their managers in order to mutually strive for an improved work environment. However, it is not our responsibility to accommodate the opinions of the managers and we are confident that the managers are able to freely express their opinions within the case organization if they wish so.

We informed the participants that they would have the right and opportunity to proofread and control the transcribed material. We saw no reasons why the participants would be untruthful in their answers, nor any reluctance in sharing necessary information. As the participants felt very motivated to assist us in our research, we were met with great positivity and friendliness not only from the participants but also from the other employees who knew we were coming. Before each interview, the respondents were given a short briefing of the intentions of our thesis and why they were selected for participation. By giving a briefing to our respondents we aimed to increase the understanding of why we were there and what we wanted to achieve. However, this might have had an impact on how the respondents thought about and answered our questions. In retrospect, we should have assessed the presentation to determine whether or not we were influencing the outcome of the interviews. In our thesis we have used ISO 9001 as an example of a QMS and during the interviews it has been mentioned to the respondents as a possible future QMS for EDB Card Services. The issue that arose was that many of the respondents perceived that ISO 9001 had already been decided to implement and felt that they did not know about this. This worry by some of the respondents may have affected the extent to which they felt knowledgeable and confident enough to answer our questions.

Since the managers had worked from one year to 20 years at the case organization it would also reflect the extent of how much they were able to tell us about the organization. Some had been there for a very long time and had had the same position for a long time, and others had just been promoted to a new position. Their experiences either from the case organization or other experiences would of course affect their responses on our topics which was especially noticeable when we asked about quality experiences. Some had not

worked with quality measures at all, while some had worked with quality for a long time in other organizations. These factors have affected the responses from our interviews and some topics were not reflected upon by some managers, which is something that we have taken into consideration. If everyone had answered to all of our questions and topics we would have a more accurate picture of the case organization and our analysis would be more substantial.

When we returned to Sweden the material was transcribed and in five days we were able to send our material back to our participants. We gave the participants a deadline of which we had to get their changes or corrections of the transcribed material. If the participants did not get back to us before the deadline, we told them that we would consider the material as valid and accepted from the participants. We received two emails, saying that the transcribed material had been read and no changes were needed. We did not receive any other email, and therefore we concluded that they were satisfied with the transcriptions and approved the material to be put in our thesis. However, there may have been events, which prevented some participants from approving or rejecting our transcribed material. Due to our time frame we did not send out any new emails concerning their acceptance of the transcribed material. In retrospect we maybe should have contacted them once again, after the deadline has passed, and informed them that their interview answers are now approved for publication. However, the case organization has the opportunity to read the thesis prior to the publication and they have time to give us feedback and comments.

## **4.5 Criticism of sources and criteria for scientific value**

The main aim of this study is to find and share solutions for Scandinavian companies to be able to prepare them for a future implementation of a QMS. We have acknowledged that as our empirical results are based on interviews at a case organization we cannot generalize or quantify our results directly (Saunders *et al.*, 2009, p. 327). We have tried though to make our results as reliable and valid as possible in order to facilitate future research within our subject. Considering the reliability of our results one can say that the results are difficult to be repeatable as the answers reflect the current reality of which the respondents are asked to describe (Saunders *et al.*, 2009, p. 327). In other cases the circumstances and situations may differ from our study and therefore it is unrealistic that our results can be directly repeatable. Given our research problem and purpose, we consider our results as reliable based on the circumstances and the context of our case organization. The results gathered are considered to be accurate in showing the reality and experiences of each interviewed manager, which combined contribute to possible solutions for our research problem.

We believe that since we used semi-structure interviews, and specifically open- and probing- interview questions, we are able to gain the best possible foundation for our research.

# 5 Empirical Findings

*In this chapter we will present the data collected from our semi-structured interviews at the case organization. The empirical data from all interviews are presented in a range of different categories that includes the answers from each respondent. In each category, we explain what was asked by the respondents and summarize the answers at the end.*

Each of the interview respondents represents a specific department or management position, but for them to answer freely and honestly, their identities will be kept anonymous. We wanted the interviews to be anonymous to assure the freedom of each respondent and their ability to reflect and provide us with unrestricted answers regardless of the topic. The material from our recorded interviews have been transcribed into text have been subject to proofreading and approval from each respondent.

The empirical material has been translated, sorted and put together into categories so that the reader will be able to follow and understand the discussions with our respondents. The categories are developed from the interview guide and the topics that we discussed during the interviews. A total of 14 categories break down the responses from our interviews. Some of these topics were not explicitly noted in the interview guide (appendix 1) but were brought up and discussed by the individuals that were interviewed and therefore these have been added in this chapter.

Although the original empirical material has been rephrased and shortened in order to create a more comprehensive and unitized transcription, the empirical findings still represents the views and opinions of our respondents. The interview respondents were given the opportunity to read and correct any misinterpretations which assures that the material presented herein do in-fact represent the views and opinions of our respondents. The text written in italics are the actual answers and comments from the respondents, however since they have been transcribed from recordings and translated from Norwegian and Swedish to English, the comments are not direct quotes but quotes nonetheless.

For each of the theme and question, the respondents have given their answers as an opinion or view on our chosen topics. The respondents are all managers at some level and out of the three departments at EDB Card Services, i.e. Support and Services, Production and Personalization, and Fraud Department, we were able to perform interviews with managers across two departments, however the Fraud Department was unable to participate in this study. All in all we managed to interview a total of six (6) different managers. The managers' positions range from administrative managers, operational managers to department managers.

## Note!

- *Not every manager had an opinion or view on ALL themes and questions, which is why we lack responses on certain topics from some managers. This is also because certain managers perceived some topics as irrelevant and they chose not to provide us with their views.*
- *Summaries are not to be found in EVERY topic as some of the themes and questions were not answered by ALL and therefore would not portray an opinion and view shared by all managers.*

## 5.1 Quality Discussion

The first topic that was discussed with our respondents was quality. The respondents were asked to describe how current discussions and views on working towards quality are going. The first reaction by our respondents was that quality had not until recently been brought up by the upper management and discussed among middle managers. The only topic that was covered was the fact that the organization had been given specific quality and security requirements from VISA and MasterCard, which were needed to fulfill (i.e. Card Quality Management and Payment Card Industry). If they do not meet these requirements they could eventually lose business. Below are the comments from our respondents on this topic.

### **Manager A**

*At the moment there is no discussion concerning ISO9001 certification since it is not yet a requirement that needs to be fulfilled in order to deliver our products. Instead, what is required of us today is to comply with the requirements given by VISA and MasterCard. The certification that we are currently involved in is CQM which in general has some parts that are similar to the ISO9001 certification. We need to make sure that we meet the requirements for CQM certification before we can start with ISO9001 or any other certification.*

### **Manager B**

*Since we are obligated to become accredited with PCI and CQM, our focus is now on quality because it is partly a demand and expectation from our customers but also an internal motivation to improve and develop. At a management level, quality is considered to be very important for us. Even though quality has been considered very important to us since the start of our business, we have not had the time to focus upon it.*

*We are currently working with several topics within quality, often connected to security issues and we feel that quality and security goes hand in hand in our businesses. Since we are obligated to become accredited with PCI and CQM, our focus is now on quality because it is partly a demand and expectation from our customers but also an internal motivation to improve and develop. At a management level, quality is considered to be very important for us. Even though quality has been considered very important to us since the start of our business, we have not had the time to focus upon it. However, today we are very determined and focused on quality improvements. Thanks to external recruitments and their expertise we have realized the importance of quality more today than before. New staff has highlighted quality as a necessity in relation to customer requirements and expectations. ISO 9001 has not been specifically asked for, however we do get questions whether or not we are ISO certified. Even though we are not yet certified, we do not lose any business over this, but we see a possible certification as a competitive advantage. Being ISO certified may come up as a requirement in the future, like our current PCI and CQM certifications.*

### **Manager C**

*We are currently working with a quality certification, CQM, and we haven't decided any time-frame of this implementation and the work of quality in general. As this certification is a requirement we first and foremost have to work with it since it came as an obligation*

*from MasterCard. It is good that these developments occur, as we have not had specific quality requirements to follow before. It is a tool to establish concrete goals and objectives with our operations. It seems that this is very urgent. The work with CQM and PCI are close to the requirements of ISO 9001, but it is specifically intended for our industry of banking. We just have to start working with what we can do, in terms of quality.*

*The CQM demand is an external suggestion, and internally we have not discussed quality specifically but of course everyone is keen on maintaining and improving our quality. Thanks to CQM and PCI the discussion on quality has been brought to light. And also some managers are driven to start working towards quality, and specifically ISO 9001.*

#### **Manager D**

*I have not been that much informed or included in the discussion of quality or ISO, but we have had some questions regarding whether or not we are ISO certified. Even though ISO has not been specifically expressed as a requirement from our customers I feel that the current discussions about ISO are very exciting. If we would be certified with ISO or any other quality certification, we could show our customers and our markets that we are certified, and that we are competitive.*

#### **Manager E**

*There has always been a focus on quality but it has become more concrete when working with CQM. As an organization we are dependent on delivering a good product. In cases where we have had the risk of being delayed with a product we have always focused on delivering a product with good quality late rather than a “half done” product on time. The main focus and driving force to work towards quality has of course always been from the top management, but now more and more people at EDB Card Services are beginning to understand and agree that it is important that we deliver good quality to our customers and that it will be beneficial to our organization.*

#### **Manager F**

*We have received some information about the work towards quality, and some info of the eventual ISO certification. This is a realization and we feel that we need to work more with quality. Working towards quality will simplify our daily processes and procedures, making our work-days easier and with fewer errors. Quality is something that we really need and should focus on today.*

In summary, the respondents believe that the current discussions on quality is mainly focused on the obligated requirements put forward by VISA and MasterCard and that the interest to work towards quality in the entire organization has been brought to light as a result of the work with CQM and PCI.

## **5.2 Reasons behind a future QMS**

For our second topic we asked the respondents if they felt that a QMS was needed, additional to the work of CQM and PCI. If the respondents felt that a QMS was needed, we asked them why they felt this need in order to identify the underlying reasons of adding a

QMS to the organization. We also asked the managers if they saw any benefits as well as their expectations of working with a QMS.

### **Manager A**

*I believe that a quality management system (QMS) will help us with delivering on time, to the expected quality of the customer. We should be able to feel a sense of security and comfort that we can deliver what we promise and this is what I would expect from a QMS. If we can comply with the requirements set by, for example ISO 9001, we will deliver a high quality product. This can be seen as a competitive advantage. In some cases, our potential customers will benchmark us towards our competitors and then, only then it can be seen as a competitive advantage if we can show that we have complied with certain quality standards that our competitors has not. We promise to our customers to deliver a certain level of quality and if we do not do so we will lose them.*

### **Manager B**

*The purpose of working towards quality and in the end have an ISO certification is to gain a competitive advantage in our industry as well as increase customer satisfaction and the fact that it may be a necessity in the future. We see an ISO certification as a necessary tool to improve our processes and even though we are famous for maintaining and delivering high quality, we have had some quality flaws, which have been costly in retrospect and also unnecessary. We have seen that it can take a long time to re-gain this loss of trust from customers. We should be grateful that the quality flaws have been few and thankful that we have not lost customers because of it.*

*It is a mutual decision to strive for ISO certification, but of course some managers see the necessity of an ISO certification and the overall need for it more than others, and thus they are the driving force behind this. Card production and Personalization is the highest prioritized section for quality improvements. The focus on quality within this department is related to the fact that it can easily be measured than for example in the Service & Support Department, and Fraud. Striving for quality within the entire organization is now internally driven and motivated and we want to change the way we have worked before to something new and more improved. We aim to become even more professional in terms of systems and the way we work. We need to have a more systematic way of working.*

*Customers choose us because of the fact that we have high quality and fast deliveries even though we tend to have a higher price than our competitors. Of course some customers discard us because of our high price compared to some competitors, but as they talk to our other customers and hear that we have a high quality and fast delivery time, they come back and in the end they choose us. To maintain competitiveness now and in the future as well as strengthening our reputation we need work hard with quality improvements and initiatives.*

### **Manager C**

*At the moment CQM and PCI are obligated certifications, and ISO is something to be focused when the other certifications have been achieved. We have only had one customer, to my knowledge, which has audited us with regard to quality. No other customer has said that ISO was a demand or requirement for EDB Card Services. The CQM demand is an*

*external suggestion, and internally we have not discussed quality specifically but of course everyone is keen on maintaining and improving our quality. Thanks to CQM and PCI the discussion on quality has been brought to light. And also some managers are driven to start working towards quality, and specifically ISO 9001. We will feel safer and more secure in what we deliver and do if we all start “thinking quality” and acting accordingly.*

*In the long-term we need a more efficient and effective production and delivery of services, but it seems as we have and maintain a high quality according to our customers who enlighten this when they choose our products and services. However as we grow, we would benefit from working in systematic ways with proper guidelines, instructions, documents and procedures. It would be great to have stricter control procedures and follow-ups of the daily work.*

*As the level of production has increased tremendously we see a need for better systems, both software systems and manual systems for control/checking/procedures. We are likely to save a huge amount of time and money when we start working more towards quality assurances. We need to increase our internal control of our business processes and we can then map the defects or flaws that occur and make sure that they are minimized in the future.*

*If we start working towards quality and towards certification we may trigger the start of developing a quality assertive corporation.*

#### **Manager D**

*If we can implement a system of quality within the minds of our employees, they can get the fundamental picture of it, and understand it, they will have the knowledge why we need a certain quality and how we should achieve it. If we have a certification in our portfolio, we will have better opportunities to grow and develop. We wish to show others that we are quality assertive, environmental focused and much more. It is required a whole lot from us managers to include everyone, and if we only discuss it at the top-levels we will have no greater benefits.*

#### **Manager E**

*I believe that it is very positive to show our customers that we are dedicated in delivering good quality and the way we do it. Acquiring an ISO 9001 certification or similar would be an important competitive advantage to show to our customers. I also believe that the internal processes and procedures of this organization would benefit from striving towards quality improvement and a quality certification. A certification would most definitely help and support us in our work towards quality.*

#### **Manager F**

*It is both a wish from our customers and an internal motivation to work more with quality and quality assurance. If we do not maintain our high standard we may lose our customers to competitors. We aim to improve our sharing of information through new and improved data systems, and also to have a better system for finding flaws in our different business channels.*

What all managers believe is the fact that working towards quality will benefit the organization when it comes to competitiveness, their internal processes will improve, meeting customer expectations and demands, working in a more systematic way, and creating a quality culture within the entire establishment. All in all, the managers hope that if gaining a quality certification, beyond CQM and PCI, they are likely to further improve their overall work of quality improvement.

### **5.3 Attitudes towards change**

We asked the managers to tell us about historical changes, what they have changed and how it was perceived and embraced by managers and employees. This is an important topic as we are able to identify whether or not the attitudes towards change could be a factor against change, and thus a barrier to implementing a QMS. Also, our knowledge of EDB Card Services provides that they have been going through significant changes regarding the steering and ownership of the company and therefore we feel it is necessary to examine how these historical changes have been embraced before. We also want to examine how the work with the current requirements of CQM and PCI has affected the company and the employees. It is important to establish how the work towards quality has been perceived until today. Conclusively we are then able to assess the risks of negative attitudes towards the establishment of a potential QMS within EDB Card Services.

#### **Manager A**

*We have had a lot of changes, mainly concerning the production departments as a result of the CQM implementation. A couple of these changes will concern controlling and testing of our products. The thoughts around this system has been mixed where on the one side management has thought of it as an extra expense that requires additional resources but a necessity since it has been a requirement by MasterCard. On the other side, the departments who are involved with this system has embraced it since they have been alarmed by how many risks there are to make mistakes in the processes and procedures that they have. The system has brought a sense of security and reassurance.*

*...the changes which CQM has brought have not always been compatible with the normal operations of the departments. We have a lot of flaws in our processes and procedures, for example we did not have the testing equipment that was necessary to comply with the CQM requirements, we did not have the support and traceability in our system and we did not have any proper mapping of our processes and procedures. Today we are mapping and drawing up all of our processes and procedures so that we can establish control points and checklists to monitor the performance of them.*

*Concerning the willingness to change among the employees, we have been met with some resistance. If a change means increased workload, many of the employees are resistant towards it. What they fail to realize is that change is a natural cycle and that we live in a constantly changing and evolving world. We need to communicate and convince our employees that change is something good and that we are changing to become more efficient and effective in what we do. It is very important that everyone is positive towards change.*

**Manager B**

*It is exciting and necessary to work with changes, such as CQM and PCI and everyone is included in these processes because everyone is driven in this organization. Everyone has recognized the importance and benefits of the changes today and those to come. We maybe not have the speed of change but regardless we are heading in the right direction. Maybe we should be faster in implementing these changes of CQM and PCI but we are currently working towards it, having regular meetings and discussions. The leaders have brought down the changes and communicated those to employees and thus included everyone. Striving for quality within the entire organization is now internally driven and motivated and we want to change the way we have worked before to something new and more improved.*

**Manager C**

*I feel that the employees are positive to the changes made with regard to quality, and most feel that introducing systems to uphold proper procedures and processes are good and beneficial to the everyday work. Of course the concern is the time that is needed for these systems and that everyone understands and knows what is expected from them.*

*Most employees recognize the needs and the reasons behind certain elements of CQM. So therefore they are positive to most changes. But sometimes the work stops because of a lack of resources or time.*

**Manager D**

*There have been a lot of changes in the entire corporation with the mergers and acquisitions, and of course we have benefitted from it. And we want to be included and be able to influence the overall operations of the corporation. We wish to strengthen our position in sales and tell prospective customers of our activities.*

*I expect the same type of work regardless if we work with obligated changes or self-motivated. (PCI, CQM vs. ISO). We first need the research behind the changes in order for us to know what we are supposed to do. We need to have a driving force behind us to support and tell us of our progress and how well we follow the standards necessary. We as managers cannot focus solely on quality, we need to prioritize our work, and a quality department can assist in the process of adding quality to our work.*

**Manager E**

*Today we have put in place a number of routines and control points connected to CQM/PCI and it is my understanding that the employees has gotten a better grasp of what they are doing and why. If my employees feel more comfortable and have more insight in their job I can work better as their leader. If they know what they are supposed to do, then they can come with comments on the daily work and how to change or improve it.*

**Manager F**

*Everything that is new is scary but the employees have shown that over time they realize that the changes have had positive effects. If new employees are recruited they become aware that we must have certain quality systems such as the CQM and that change is constant.*

## 5.4 Quality Department

We asked our respondents whether or not they felt a quality department was needed, and if so, what role and responsibilities should they have. We also asked if they wanted externally recruited quality managers, or internally promoted workers in a prospective, larger, quality department. Today, EDB Card Services has a quality department, yet it is primarily focused on the work of the Production and Personalization department, and it is according to the company under further development.

### Manager A

*An issue with a QMS is that it needs to be implemented and controlled. In this case a quality department is needed, to make sure that the QMS implemented in the correct way and works properly. This is something that I feel has been lacking, a group of people that works towards improved quality with internal audits, process audits, receiving, controlling and prevention. It is also vital that this quality department has the authority to intervene when quality standards are not met. In addition, the department needs to be independent to other departments so that they can focus to 100% on quality improvement. To make a QMS work properly it is not only important that a quality department is developed and put in place, but also that everyone in the organization knows what is required by them and that they support and help the process of becoming certified. Unless all of the employees feel that they have a responsibility towards the organization and work towards improving quality, a QMS will be worthless.*

*In order for a quality department to work properly, we need the right people with the right competences that have the necessary knowledge within quality and leadership and who can work independently and with an understanding of where the organization is going and how it is going to get there.*

### Manager B

*We have a quality department with quality leaders but this group needs to be strengthened, adding more staff and becoming more self-going. I think this department is a necessity and we have not had that big focus on quality earlier, as we have today. It is very important but today it is only a concern in the production department, and the next step is to start this work towards quality in the entire organization. We have to start thinking quality across the different departments and in the entire organization. We are on our way and creating a quality department is a fundamental step towards it. Step by step we are spreading quality across departments. Today the quality department has no significant role in Service & Support, only in the Production Department. It would be beneficial to see how they can work with the other departments, and they should be an authority that can interfere and act on its own. They should be like an institution. They should be able to intervene if quality is lacking or flawed. It is important that they can intervene if the leaders are not able to see something as a problem or quality issue.*

### Manager C

*It would be beneficial to have more resources so that we can capture the quality opportunities of all departments. As the requirements may differ between departments it would be positive to have a group that could focus on all the everyday operations.*

*It is difficult to say whether or not a quality department should have a very high authority and as we are yet to define the role of a quality department, we first need to discuss its' role in the company and how they should interact with the department. It would feel more secure to have such a group in combination with a management-group in which department managers and quality leaders interact and discuss the quality requirements and the operation requirements. We need to determine how quality leaders communicate and work with the department managers. They should not be single entity only acting by themselves; they need to work alongside department managers. This connection is very important. Every manager should be included in the work towards quality.*

#### **Manager D**

*The quality department should have an authority position and check and inform us if we are compliant to our current systems and new ones. There are positive and negative elements of external and internal recruitment of new managers. We have a certain culture and by recruiting externally, they will have difficulties in conforming to our culture, or knowing our culture. The way we treat and work with customers, it would be difficult for external employees to understand this. The collaboration we have with our customers and the communication is very important to us, and it is vital for new employees at managerial levels to gain this knowledge and accept it. The culture between us and our customers (banks) are pretty much the same.*

#### **Manager E**

*A larger and more dedicated group concerned with only quality should be put in place so that we as an organization can make sure that we deliver a certain quality. The group should have authority as I see it as a requirement that they can come in and say stop when they see a problem concerning quality but they should take consideration to the degree of the situation and not intervene too much. If the group would lack authority it would not make much sense as the function of it would be lost. As it is today, we have a person working with quality external to the departments and I have not seen any negative aspects with that. I see many advantages with a person who has the main responsibility concerning quality and only works with maintaining and improving quality. Having a quality group or manager to communicate with is important. It is important that they can look in my department and see whether or not we are complying with the quality requirements that we have. Also, in those cases that we lack in quality, a quality group would be able to steer us to take the proper measures to retain quality requirements. The middle managers would also be beneficial in the way that they can talk to the quality group and be relieved of some of the responsibility concerning the setting-up, planning and follow-up of the quality goals and focus more on their everyday operations.*

#### **Manager F**

*We should have a quality department who can follow the daily work, identify any deviance or flaws. They should assess the need for quality improvements in the departments and make sure that it is presented and followed when delivered. The quality department should be an authoritative body and have the right to intervene when quality is lacking, regardless of process.*

## 5.5 Education and Training

We asked our respondents to identify how they thought that they should be educated and trained in terms of quality, and quality management systems, and what their previous experiences of training and education were. The purpose of this topic was to see how and where most training would be needed and the managers' views on its importance and necessity.

### **Manager A**

*In middle management there is a motivation to learn more about QMS but little effort has been put on education. However, today education has been put forth and managers have been sent to various courses and training. Concerning leadership, almost none of the middle managers have the experience or training in how to be a leader. Therefore, educating the ones in such a position has been a priority. In EDB Card Services it has been a common practice to recruit leaders internally. This process has been driven by the fact that employees should be able to advance within the firm. However, recruiting externally should also be considered since it will provide with new experiences and insights to the organization. In my view, a mix of the both would be most beneficial to us.*

*Education and the development of the competences of the employees should be considered as a very helpful tool. Employees whom do not know what is needed to know about their job are a useless resource to the organization. We need to establish a checklist by which we can check the competence and knowledge level of our employees and educate and train them on their shortcomings. This will result in a more motivated workforce who feels more comfortable in what they are doing and can deliver a better product or service. Also, new employees need to be trained and educated according to what is expected from them. We need a well developed program in which we go step by step to make sure that they know what is needed to know. This is a task that human resources need to work more with and it is their responsibility to put forth this program on how employees ought to be trained and educated. The human resources department also has to work closely with the departmental managers to create a more specific program for each department and position.*

### **Manager B**

*It is important that every existing employee and every new employee are properly trained when given specific job-tasks and responsibilities. There is a need to develop and maintain a procedure or routine for this and also a schedule for follow-ups and personal development plans. One of our pre-auditors has expressed this need or rather demand that we have this procedure. We need a better plan for educating and training staff, which is something that has been poorly executed before. It is also important that each employee is given an introduction to the whole organization, because we have widespread operations with different levels of operations and employees should know what sort of corporation we are.*

*It is a strict organization in terms of security and if you're working within Services & Support you do not have access to the Production department, but it would be beneficial in my opinion to show employees what other departments do. This knowledge can then be brought to your specific job description and you would have a better understanding of the*

*company. What also should be included is our expectations, how you should act/dress, how we do things (culture). Today we work towards creating an understanding and an overview of what the employees know, what they do, and that everyone goes through the same process of training/education.*

*When given a job title / position with certain tasks and responsibilities there should be documentation in place prior to the start of the job with instructions and job descriptions. There should be a training plan in which an employee can check their level of competence and knowledge and receive training accordingly. If new tasks and responsibilities are introduced, it is important to start training those affected by the changes either through courses and/or seminars. In that sense employees are given the room for personal development and professional achievements. This may also promote greater responsibilities and advancements within the organization. Better employee documentation can benefit in better employee placements, that is, the right person for the right job. We have not had very good documentation procedures, and not in a systematic way and that is something we are currently looking to improve. We aim to have a better system for documentation regarding employees and their development and knowledge and that we follow the system consistently.*

#### **Manager C**

*We need to be consistent and start educating everyone, not only managers. Employees have been given an overview of current quality measures and changes but of course it can be improved and increased. Managers at department levels are the cornerstone of the work towards quality. They are the glue that keeps upper management and employees together. They communicate the ideas and suggestions brought by upper management and it is important that this chain of communication functions properly and today it does but of course it can always be improved. It is important that quality leaders gain the knowledge of the quality requirements, make systems and procedures according to them, and communicate and get feedback back from department managers who are to follow and improve them.*

*If managers gain more experience and knowledge of quality systems, not specifically ISO, but in general, we can better understand how quality can be achieved through a systematic procedure of work. We have started certain tests of quality assurance but it is not specifically expressed in routines or documents to be followed explicitly.*

#### **Manager D**

N/A

#### **Manager E**

N/A

#### **Manager F**

*New leaders should be given more training and education of CQM/PCI but perhaps it is about to start for real now. After the auditor was here we now have regular meetings with the quality department to talk about quality. Together we come up with schedules, plans*

*and control structures in our work towards improved quality. In other words we have started working towards quality.*

## **5.6 Communication**

We had not specifically made topics concerning the communication within the case organization, however as some respondents brought it up, we felt it was necessary to include their views on communication in general. Of course we acknowledge that communication is key when introducing change in any type of organization, and as we may have overlooked it, the respondents stressed its importance.

### **Manager A**

*New policies are always communicated to the middle management and it is the common practice that each manager communicates this to his/her employees. During the meetings where the new policies are presented, managers are involved so that a greater understanding of what is being changed can be created. These changes are also sent out for testing so that employees can give feedback about what they believe is good and what can be changed. I believe that it is good that everyone can participate in the development of new policies and give their thoughts on them.*

### **Manager B**

N/A

### **Manager C**

*Previously we have not had a specific communication procedure, such as regular meetings, but this has improved today and now we are on our way. Earlier we have not had a “quality organization” but this has been widely discussed and brought to everyone’s attention now (CQM and PCI for example). Within the Production department we have achieved a better communication, and as we develop a framework of a “leading-group” where managers are involved and coordinated, we can reach further out in the organization, across departments and business units.*

### **Manager D**

*Knowledge is gained through forums and groups of specific purposes and the discussions between members are key for everyone to excel in their business operations.*

### **Manager E**

*Concerning the communication of new policies I feel that much more effort has been made the last couple of years to inform the employees of what is happening in the organization. Of course this might have been because of the recent merger with EDB Business Partner but I still see this as a positive trend. Also we as employees have been asked to take part in developing new values and objectives as a cause of the new merger.*

*I feel that I can get more feedback from my employees now than I could before and this is something I view as very important and beneficial. The employees know best about what they do and should be able to affect their daily job. With CQM, new tasks have been given to the employees and although these have seemed hard sometimes, they have understood*

*why they are necessary and worked their hardest to solve them. Also it is important that they understand that CQM is there to help them and bring security in their work and I think that they have started to realize that. Some of the employees' responsibility can be relieved by the system which they work with.*

**Manager F**

*Today there is no direct contact or communication between some sectors in the production department and the other departments of Services and Fraud. It would be beneficial if we were better connected to increase the understanding of what different departments work with and how they are connected. The communication is good between employees and managers in general. When it comes to our work with CQM everyone is involved and included in the Production Department. The information of our work with CQM has been well-provided and communicated throughout the department.*

## **5.7 Characteristics of EDB Card Services**

We asked the respondents to describe their organization and the characteristics of their fellow colleagues and the level of cooperation and interaction between them. The purpose of this topic was to assess how the organizational culture could benefit or intervene with a QMS and especially if it would compliment an introduction of a quality system.

**Manager A**

*My view is that people in this organization are motivated to work towards quality and are starting to see that these certifications can be used as a tool to improve ourselves and the processes and procedures we have. I have the perception that at least the middle managers, are positive towards quality improvement, however I do not have any perception of what the lower level employees believes about working towards quality. But of course I do not believe that they would think about it negatively. The idea of pursuing quality improvements and certifications is something that has started at a higher level in this organization. Therefore one can say that it has been a single decision to initiate the process of working more towards quality.*

**Manager B**

*We have a culture where we do not think that we should clean up after others or even intervene in colleagues' actions. If a colleague is not following the routine given it is easy for others to follow his example, i.e. do the same thing as the colleague does, even if it's wrong. The importance of team-work and that we should work in the same way must be stressed. It should be in everyone's interest that we should deliver the same quality, and high quality, through the same procedures. We have a great culture in this company and what we do is very positive overall, but we seen tendencies of people not having the level of loyalty and work-pride that we wish for. Employees like to work here but I wish that they would work more for the organization rather than just for themselves.*

**Manager C**

N/A

**Manager D**

*There is a strong sense of team-work. We feel that it is easy to ask each other for help and feedback.*

**Manager E**

*I feel that most of the people that I work with have a sense of belonging to this organization and that they are driven in the work they perform. I believe that most of them have a sense of responsibility in what they do, but naturally some feel more responsibility than others. Another good thing is that most of my employees work on their own initiative; I do not have to come in and say what they should do and if there is a problem they can most of the time solve it on their own. However, we have requirements that if there is a bigger problem they need to speak with me or another supervisor.*

**Manager F**

*I would say that 50% of the employees in my sector work for the company as a whole, and the others work for themselves. Thanks to meetings with our Chief Executive the employees are given the vision, mission and direction of EDB Card Services. My goal with my employees is to have a great atmosphere where people enjoy working and that less people are ill and have sick-leaves. This can be achieved by giving more responsibilities and creating an employee ownership of their tasks and this is very important. The employees are always included and involved in changes and suggestions to become better and improve our processes and procedures. In case of errors and flaws we try to solve and fix it as a team. Seemingly there is no problem of delegating responsibilities and tasks to employees.*

## **5.8 Information Sharing & Documentation**

We learned from the ISO 9001 model that one of the key characteristics of successfully adopting a QMS is to share, distribute and communicate information and documents. Without proper routines and processes of handling information and documentation, much of the work with quality assurances and improvements may be lost. We asked the respondents of their view on this issue, and how they thought the information sharing and documentation was functioning in EDB Card Services before and today.

**Manager A**

*Documentation needs to be made and statistics needs to be developed in order to assure that we are following the quality that we have promised. Today we have a certain amount of documentation of what we are doing, however very little of this information is kept statistics on. I feel that it is important that we make use of this information and share it with our employees. If they know what the consequences of their work is they can improve themselves and feel proud of what they are doing. However, I believe that this is a matter of resources and we need more resources to handle all of the information that is documented. Middle-managers should not be the ones analyzing the information but they should at least gather the material needed to keep statistics.*

**Manager B**

*We have systems for sharing information and knowledge within the same or other departments. We have specific categories for our different departments and we can share*

*information and documents with others. We can use it differently in my opinion and increase its purposes in terms of training and education as well. It is important that the results, which each department achieves, are communicated and followed through documentation and sharing. Having a system like SharePoint requires that everyone knows its capabilities and how to use it properly. If we can visualize our results and achievements to our employees we can motivate them to further improve and achieve greater results in the future.*

### **Manager C**

*SharePoint is something we have, but we have no mutual process for document-steering, templates etcetera, and what we need is to be educated and trained in working with this system. SharePoint is very good, but the processes behind upgrading, changing and sharing documents and procedures within it are confusing and we do not have that much expertise. Before we really start to work towards quality we need to establish templates and documents supporting this work in a database for mutual supervision and sharing. Creating the understanding of quality and the importance of documents is key when later being audited by certification agencies.*

*As we have very strict security requirements we have come far in terms of security but specifically the quality requirements on documentation and how it is used came almost as a surprise. The requirements of proper documentation have not been expressed before by certification agencies but it feels positive to start in that end when beginning to think more about quality.*

### **Manager D**

*Everyone should have the right information at every time. However, since we are a quite large organization, with our parent corporation in mind, we have problem of accessing the documents needed and databases from which we distribute and communicate the information. In terms of sharing information we need to be better at spreading the information to those who needs it. Keeping the information collected and updated needs to be better coordinated, and there is a lack of purpose of stored documents and information. How we use our templates is very confusing, we can have several different types of templates. We do not have the routines of how to write a manual for a specific system or task, and what template should be used? We can have 10 different templates to one document/routine, how can we choose the right one?*

*It seems as if the IT sector has a lack of resources as they do not have the time to help us with this, and we do not have the time to start working with this either. Nor do we have the knowledge required to go into a system and start altering the documents and procedures. If we were better educated we could relieve some of the IT department's tasks.*

*A solution would be to create a completely new database for the work with quality, so that the info has a clear purpose, direction and easy access for those who need it. We have to educate our employees of the existing databases, but we as managers would also need how to use the databases. SharePoint is a very good database and it is updated but we do need more education and resources. A quality department should also focus on the rest of the departments and therefore they need more resources to be able to help us with the work*

*towards quality. From our perspective we have to focus on customers and therefore quality cannot be prioritized on a daily basis.*

*We do not get proper guidance of how to handle documents and what they should include and who they should go to. A quality leader who follows this work can provide feedback of this and help us perform according to the requirements. We have some service level agreements, which we have to follow and we do monthly statistics of our operations and other statistics which are forwarded to our customers. We do not have proper guidelines or agenda for internal statistics and what we did, how we did it and what should be improved the coming time period.*

### **Manager E**

*Concerning the communication and sharing of information we have little knowledge of what the other departments are doing and what is happening in them. However, the case is probably that there is no need to know what other departments are doing. But on the other hand, we can probably learn from other departments if we were to communicate with them, at least within quality work. For example, I know that other departments work with education and training of their employees more than we do and I am sure that we could learn from that. I believe that the employees would benefit from getting to know each other better and improve the relationship with each other. Knowing what goes on in the rest of the organization creates a better understanding of what "I" am doing. Also, if there are any problems in one department the employees can understand what the consequences will be in another.*

*I believe that the reason why we do not communicate and try to learn from other departments is simply because we do not know what they do and how things work. Maybe if we know what they do in other departments we can start learning from each other. Collaborating in such way could make it possible control that the same quality is delivered to the same customer regardless of which department delivers what product or service.*

*There has been a lack of knowledge and information about the processes and procedures that we perform. Therefore I think it will be very good to work towards quality and quality assures those processes and procedures so that we can increase the knowledge of what we are doing. Several improvements that have been done to increase quality have already shown themselves to be beneficial. The requirements that CQM places on us is something that we just have to accept. CQM has shown that there are some areas in which we are insufficient in quality and need to improve the structure of our processes and procedures.*

### **Manager F**

*We have weekly meetings with managers and employees where we all get the information and share accordingly. It is very important that new requirements and guidelines are communicated to everyone, because if only 1-2 people know about it, the rest will make mistakes or errors.*

## 5.9 Leadership

We asked the respondents to define leadership qualities and what types of leadership that does exist within the organization, and how it could be improved in the future. The purpose of this topic was to see how the organization would be successful in coordinating, directing, planning and controlling the implementation of a QMS and its work-processes.

### **Manager A**

*I feel that there is a tendency that middle managers are working too much within operations rather than what they should do, that is: monitor, instruct, control, check and improve. We leaders have to work according to our job description as leaders and nothing else. A too broad scope of our work has made us overburden and incapable to focus on what we really should work with.*

### **Manager B**

*What is also very important in this pursuit for quality is to find the “right” leaders with the right skills in the right department. The way that you are as a leader plays a big role on whether or not you can deliver what is required. The issue of having the right leader needs to be addressed to see whether or not we have the right leaders in place. It has been a common practice to, through an internal process, employ new leaders. EDB has often promoted internal advancement for their employees which can be said to be both good and bad. On the positive side we have come this far using this type of recruitment and promotion which has proven to be successful, however we have learned that external recruitments also have had very positive results on the organization. Adding staff from the outside have proven to result in new aims and new perspectives on our operations.*

### **Manager C**

N/A

### **Manager D**

N/A

### **Manager E**

N/A

### **Manager F**

N/A

## 5.10 Departmental barriers

With a QMS comes collaboration and a “mutual co-operation” (Dale et al, 2007, p. 30), and therefore it is essential that departments are aware of what other departments work with, how it is going, and the processes from which they can learn from one another. We thought it would be interesting to find out how the managers perceived this interaction, or lack of, to be able to find suitable recommendations for avoiding barriers between the employees of different sectors.

### **Manager A**

*In our organization there is an “us vs. them” feeling between departments. I believe that this is caused somewhat by the jealousy, for example “why do they receive a higher pay check than us” and “why do they have so much compared to us”. We need to change this behavior of “us vs. them” because it is just a matter of stupidity. Why should it be like that? It does not benefit anyone and it only has negative effects. Maybe an ISO9001 certification or similar can cure this behavior. With a QMS it becomes more important that the employees has an idea of what other employees are doing and that they have an understanding of the whole organization and hopefully by achieving this we can reduce the feeling of “us vs. them”.*

*The employees need to understand that in order for us to deliver good quality we need to deliver good quality between the departments, internally, just like if we were delivering a high quality product or service to our customer. We need to work with how we make the departments work with each other in terms of quality and quality thinking. Another behavior we need to change among the employees is their sense of responsibility to do their job within their working hours even if it takes longer time to complete. Because if we are to work towards quality, more time is needed from our employees to make sure that we implement the system properly. There has been a misunderstanding and wrong prioritization by the employees that we want them to produce as much as possible. We want them to focus on their job description and doing their job properly and on time.*

### **Manager B**

*We have had a culture of “us” and “them” between leaders and employees, however if it so today I do not know. We aim towards not having the feeling of us and them in any department or in any situation between leaders and employees. At a managerial level we do not wish for this behavior, but it may be an issue in the middle section, between those leaders and employees. The middle managers are the glue that holds the relationship between management and employees together.*

### **Manager C**

*Thanks to CQM we have started developing training plans and procedures in one department. Learning what other departments are doing and exchanging information and knowledge would benefit everyone. We should have a mutual template for training and education and employee competence development. We have different templates now but we have realized the benefit of mutual and identical documentation for every department.*

### **Manager D**

*Since we are a high security company, it is important that the employees are loyal and career-oriented. However it would be beneficial for everyone within our organization to have knowledge of the other departments and their activities. Everyone is involved in the process of card fraud prevention, production and support. We are connected to each different department and the communication to uphold this connection is very important. It has to work for us in order to deliver the best possible services. Coordinating and communicating between departments is vital. Of course we have strict procedures for communication but we can achieve it according to our security standards and without any*

*breaches of security. We have to acknowledge that we are EDB Card Services, Production and Support. We all work for the same cause and objective regardless of department.*

*There is a barrier between departments itself, something that is evident during lunches and breaks, and even though we have a basis of “need-to-know” there are parts of our jobs that we can share without breaching this rule. Integrating and sharing knowledge between departments should be improved. We have had some experience with sharing resources, giving other employees of other departments the opportunity to see how the colleagues work and perform the everyday procedures. It was a pity that we did not stay with this program. Many employees have not seen the other departments, how they produce cards, how they treat customers over the phone, how they oversee frauds and card problems. Create a better understanding of what the organization actually does.*

**Manager E**

N/A

**Manager F**

*There is a sense of “us” vs. “them” both in the Production sectors and between Production and Service & Support and Fraud. However, we are trying to eliminate this barrier. It is important for employees to have some knowledge of what other departments do and therefore a mutual exchange of knowledge or resources may benefit the entire organization.*

## **5.11 Responsibilities**

With a quality management system come greater responsibilities and ownership of processes such as quality assurances, quality creation, and quality controlling. We asked the managers to give their views on the matter of giving more responsibilities to employees as well as managers.

**Manager A**

N/A

**Manager B**

*Everyone should know how to do everything but these are very high expectations, we cannot expect this from everyone. Setting up specific specialization areas for some, employees feel more responsible for specific processes and areas. Everyone may not want this responsibility but those who do, should also get it. Regardless of the magnitude of the responsibilities given, each employee should have something to be proud of and have ownership of. How are we to affect the employees so that they feel proud of what they do, and that they wish to go to work not just for the money it brings? Learn by others, not only managers. Adding more employee competence development is key in ensuring that employees feel comfortable with the tasks and responsibilities given. Helping employees in becoming more secure with their tasks is important for us.*

**Manager C**

N/A

**Manager D**

*Employees can take decisions of their own actions but when in doubt, it is common to ask colleague or manager in order to ensure that the right action is taken. Due to the demands and requirements from our customers, we are more aware that we should not go beyond our specific authorities. Sometimes they can make the decision just by asking a colleague, and if everyone is given the same information of how to properly complete a task, the employees will have less doubt that they are incorrect in their judgment. We have specific guidelines of what we can do and what we cannot do. It is to be followed by everyone and as it seems today, people are following these standard forms and routines. The employees seem to be proud of their work and even if you may not feel part of EDB ErgoGroup, you feel a great pride for EDB Card Services. We work for our department and that we should perform the best possible work and exceed expectations.*

**Manager E**

N/A

**Manager F**

*We have established specific responsibilities for the employees who wants more responsibility, and for those who do not wish that do not get it. Those who have responsibilities are under my supervision and it is my task to make sure that they follow their responsibilities.*

## **5.12 Structure of processes and procedures**

We asked the managers to give their views on the structure of their current processes and procedures in order for us to see whether or not it is compatible with the philosophy of a QMS. By asking this we can also determine the amount of work and focus needed to improve the structure of the processes and procedures in order to achieve the QMS requirements.

**Manager A**

N/A

**Manager B**

*Sometimes we feel that we are performing very well in some processes and systems but when something goes wrong we realize that we are not. We have a lot of skilled personnel who are performing well beyond our expectations and the routines and processes are considered to be well-functioning. But the processes and routines may not always been working as a complete system. Connecting the processes together and organizing them as a complete system can sometimes be neglected, this could be the reasons behind the errors and flaws. We have positive and good processes but they should be connected to one another in a framework. This task may be considered by many to be exhausting, time consuming, too bureaucratic, to attentive. Applying ISO standards and requirements to these processes may be, in my opinion, on one side very good and positive but on the other side, very exhausting and questionable whether or not we really need everything and if we can manage without some elements.*

*We have made a large amount of routines and documents of our processes and procedures, but as time passes the routines may have been altered and it is the leaders' role to follow-up and control these mistakes and educate and train those not following it. There should also be consequences to the mistakes that are made but as it were before, leaders did not view mistakes as serious as they should. Even though we have not had any significant mistake by an employee, it should be regarded as serious to the extent that he/she is informed of how to do it correctly the next time.*

*Even though we have strict routines, it is common that we have to go back and tell everyone that they need to be followed and do so consistently. New routines are usually informed to those affected and agreed upon, but as time passes the routines are being neglected. If you then do not have the leader who addresses this problem and the fact that it has a consequence, then the problem will sustain. This has been a problem before.*

**Manager C**

N/A

**Manager D**

*In many years we have made various lists and checklists of how we should control and check our internal knowledge and yet we do not have a complete and agreed standard for these lists and checklists. Would be great if we had a standard like ISO, to see what employees know, can and are expected to do and know before they are put in a certain position. Regardless of how new or old you are as an employee, you should have gone through the same list and procedure. Having small follow-up procedures for each service we would know how people are performing and what they know and can do. As we are given new information by our customers we need checklists and control points to see if this new information is followed and performed according to a set standard. We need to know that the person taking on a task is qualified and has the knowledge to perform it.*

**Manager E**

*I believe that we would benefit from strict routines and checklists to follow. Each employee should know exactly how processes and procedures are to be performed and what is needed to be documented. This would increase the level of control and the possibility to check "what we did well", "what went bad" and "what to improve". I feel that we are already making progress in developing and increasing the level of control in our processes and procedures. However, there is room for improvements in the controls we are doing; we need to make sure that we are performing the right type of controls and that we understand what we need to control. Also it is important that we understand the results that we get from our controls and that we make the proper documentation of those. In addition we need to be aware if we make changes that these are also quality assured and documented properly. Today there is a certain level of documentation that is used to control and make sure that we deliver what is required by our customers. We all believe that documentation is a good tool to use since we can see if we have delivered to the requirements of the customer. The purpose of the documentation is clear to and accepted by all employees.*

*In many processes and procedures there is little room for flexibility. Most of the processes and procedures have requirements to what we can and cannot do. However, EDB Card Services should be able to put their own demands towards their customers and make sure that EDB Card Services does everything they can to ensure a certain level of quality.*

**Manager F**

N/A

## **5.13 Resources & Time**

Some of the more important themes for the interviews were how the organization have dealt with quality assurance and control, and also the expected resources and time willing to allocate for quality issues. We wanted to see if EDB Card Services could improve their current quality assurance procedures and whether or not more resources would be needed and the amount of time the managers were willing to spend on quality issues.

**Manager A**

*I believe that the only thing that is necessary in order for us to achieve an ISO9001 or similar certification is that we put in a lot of work and effort to comply with the requirements. The only problem that I see is that it is going to take time. Also, I believe that proper documentation of our routines is a prerequisite for us in order to be able to work towards being certified. If we know what we are doing and how, we can see what is missing and develop our processes and procedures so that they comply with the requirements of a QMS.*

**Manager B**

*As we are currently growing very fast in terms of entering new markets, gaining more and more customers we are very willing to spend time on quality assurance because it is considered very important. On the one hand, our parent corporation is growing through mergers and acquisitions, and on the other hand we ourselves are growing into the Scandinavian and Nordic markets. As we grow we want to create a sense of stability and security. As we are very concerned with maintaining high security of our business activities and processes, we would benefit from systems in order for us to have better control of what we do. Even though working towards quality with a system like ISO may imply more work for everyone, the time we spend on fixing errors and flaws takes even more time and is very costly to us. When things go wrong a lot of people are affected and therefore it is better to spend time on improving and developing processes in terms of quality to minimize errors and flaws. By assuring quality we are able to minimize the time and money spent on fixing errors and flaws. I feel that many people realized that there is a need to assure and control quality when something goes wrong in our processes.*

*Today we have a lot of quality controls but not in a systematic way. It takes a long time to fix errors if these control points are not being properly followed. We just have to work in a more systematic way through set routines and standards. If we lack the quality that we ensure our customers there is a risk that we may lose their trust. Regaining this trust is very difficult and requires twice the effort. Today we do follow strict routines and processes with regard to control, but putting them as one single system will be very beneficial to our*

*practices. We have changed routines and changed the systems in order to simplify and improve our control points and control actions. The quality assurances we have today is based on our previous experiences, learning by doing, and in some cases we learn from our mistakes. Sometimes our control procedures are working properly and in other time we fail in maintaining these control procedures. This can be because of a lack of leadership and consistency. If different persons are given the same tasks over different periods of time, the tasks will not be consistently executed. This can be explained by a lack of a proper system for procedures. Regardless of which person who is performing the task/procedure, it should be executed in exactly the same/systematic way. Everyone should be aware and follow the same routines for a specific job/task/process and produce the same result.*

### **Manager C**

*Department managers are often under a lot of pressure in their daily operations and it is difficult for them to start prioritize quality. Quality is a long-term commitment and therefore it is less prioritized, which is understandable. Even though there may be problems and difficulties with just starting a quality department it may be necessary to start the work and relieve other managers of this responsibility and assist them in the work towards quality.*

*I have a wish that department managers would have more time and opportunity to secure quality and follow the work on a regular basis. Every manager has an interest and motivation in improving quality but often resources are not enough and delegating tasks and responsibilities may sometimes be difficult.*

*Proper documentation, systems, and procedures are needed to support our daily work and specifically towards maintaining a high quality. Resources are needed. The goals with quality is to reach a certain level of minimized errors and therefore we save resources, and time but it would benefit the work and the work would go faster if resources were increased. But it does not solve anything, it may only benefit. Currently we have not been given specific resources for working towards CQM/PCI.*

*In my opinion, we don't lack that much documentation for how we should follow-through our processes. But of course we would benefit with more and more structured documents.*

### **Manager D**

N/A

### **Manager E**

*Today I do not believe that we have enough resources to work towards quality improvement. There is a tendency that the middle managers are "biting of more than they can chew", in other words, doing work that is not related to their specific job description. In many cases this problem could be solved by hiring another person who can relieve some of the responsibility from the middle-manager. Working towards quality and integrating this with normal operations should not be a problem as I see it as a natural part of our job to always improve and develop. The problem that I see is that the initiation period will be the hardest and also, time needs to be freed so we can be more attentive to our work towards quality.*

**Manager F**

*We lack some tools and resources in our department to better work towards quality and especially become more efficient and effective. We should prioritize quality and maintaining and assuring quality. We should rather be slow in our deliveries than deliver poor quality.*

## **5.14 Goals & Policies**

With a QMS comes quality goals, objectives and policies and therefore we felt it was necessary to ask the managers what their views on current quality goals (if any), and how it can be improved to facilitate the introduction of a QMS.

**Manager A**

*As it is today, we do not set that many goals for the employees other than, for example the timeframe for which a product should be delivered. This depends on the fact that we do not have a system that supports the extraction of information and statistics that are necessary to be able to set up goals. But I believe that we need more goals to follow so that the employees can see what they are doing and how they are performing, this would most certainly increase their motivation to do a good job.*

**Manager B**

N/A

**Manager C**

N/A

**Manager D**

N/A

**Manager E**

*Related to quality we do not have any goals set up. However in non-relation to quality we have a few goals set up to achieve, for example the timeframe in which we are to deliver a certain product. These goals are, however, not set up by us. Our customers control these goals i.e. what we should do and how fast we should do it. I believe that goals, set up by us, could be beneficial. I have thought of this myself and in some of our processes I believe that goals can be set up. However I have not come that far in realizing the setting-up of goals. If employees were to know what was required of them during a period of time it would probably make them more motivated to achieve those requirements. However, I believe that this would also require a lot of work. If goals were to be set up, efforts would be needed to plan and follow up these goals. I am afraid that we would create too much work with too many goals that would not be followed up properly.*

**Manager F**

N/A

## 6 Analysis

*In chapter six we will analyze our empirical findings in connection with our theoretical framework. In this chapter we will apply theories to our findings to examine whether or not the case organization, with the interviewed managers, have the opportunities to overcome the barriers inherent with a new QMS. We will also highlight and utilize some of the models from the theoretical chapter in order to determine what the success factors and key enablers of a successfully introducing a QMS. The analysis will be the foundation of our conclusions and recommendations.*

The purpose of this study is to identify how organizations can prepare themselves in overcoming the barriers when implementing a quality management system. When preparing to implement a quality management system there is a number of issues that need to be recognized as hinders or obstacles, which are likely to negatively affect the implementation. If organizations know beforehand which barriers or difficulties they are likely to encounter when implementing a quality management system, they can take proper measures and decisions before implementing the system. Throughout the analysis we will, through the use of Lewin's (1951) forcefield analysis, try to identify the forces that will act for and against the new change i.e. the implementation of a QMS, and thus determine what barriers will need the most attention from the case organization. The forcefield analysis will lay as a foundation for our conclusions and recommendations.

### 6.1 Managing change

When we examined the literature concerning what barriers an organization may encounter when implementing a QMS we found that change can be a barrier in itself. Dale *et al.* (2007) identified resistance to change and poor management of the change process as barriers that can hinder the successful implementation of a QMS. By looking at the current changes that are being implemented in the case organization we can establish whether or not change has been and is accepted. We can also determine whether it is likely that this barrier will occur and find ways for them to overcome this barrier.

The case organization is currently involved in a change process of implementing CQM and PCI. CQM and PCI are two requirements that were recently put up by VISA and MasterCard. These systems are subject to improving quality and security and EDB Card Services is obliged to comply with these requirements to be able to produce certain products and comply with higher security standards (Manager: A, B, C). Therefore the focus on improving quality and conforming to higher security standards is of highest priority. In order to comply with these requirements, an increased work effort has been demanded on the workforce. The experience so far has been positive, with little resistance to change by the employees. According to Lewis (2011, p. 48) communication plays a very important role before and during the implementation of change. Bad communication of upcoming changes can create a resistance towards change. Manager A identified this risk and stated that they had been met with some resistance mainly because the employees see change as an increase in workload. According to Manager A it is a necessity to

communicate and convince the employees that change is positive and needed to become more efficient and effective.

What we have understood from our interviews and answers is that the managers believe that it is important to include everyone that are affected by the change process and the ones that can benefit from being aware of it. Manager B says that “The leaders have brought down the changes and communicated those to employees and thus included everyone.”. By informing our employees they have been able to “...recognize the importance and benefits of the changes today and those to come.”(Manager B).

As it seems, employees tend to embrace changes as long as they can see the benefits from it, however upper management has not been as embracing according to Manager A. Manager A states that “...upper management has thought of CQM and PCI as extra expenses that requires additional resources but a necessity since it has been a requirement by MasterCard.” This indicates that resources may be a force against change in the future since upper management might be unwilling to provide the necessary resources for a QMS. Not having enough time and resources appointed to a change process has been identified by Carlsson & Carlsson (1994) as a barrier to the implementation of ISO9001. Similar to other QMS, time and resources are vital for the change process. A lack of time and resources will effectively hinder the progression of a new QMS. The underlying reason for not having enough resources can be traced to low knowledge of the long term benefits an improvement in quality can have. If upper management can realize the importance of improving quality through the improvement of processes and procedures the necessary resources should be allocated.

It seems that the case organization has self-initiated change as a result of the external forces of change, namely CQM and PCI. Because of these changes the organization has the motivation to change the way they work by utilizing quality. Manager B states that:

“Striving for quality within the entire organization is now internally driven and motivated and we want to change the way we have worked before to something new and more improved.”(Manager B)

This is in line with the theories presented by Lewis (2011) who stated that the external environment can trigger self-initiated changes.

As the employees at EDB Card Services has been subject to corporate changes in recent years it fair to say that they are no strangers to change and is likely to accept change that directly affects them. Even though the EDB Corporation has merged and acquired other companies, manager D states that EDB Card Services has benefited from it and wish to become more strong and influential within the corporation. Also, Manager D believes that this can be used, with advantage, as a selling argument towards prospective customers.

As stated in the theoretical chapter, change can be triggered by both internal and external factors, however for change to be implemented successfully it must be triggered for the right reasons. Being obliged to change something might not always be considered as a valid reason to change, but in this case the requirement to comply with CQM and PCI can be

viewed as a valid reason considering the necessity of the change and the positive reactions that it has had so far. According to Manager E, quality has been brought to light and "...become more concrete..." as a result of the work with PCI and CQM. Also, as Manager B points out, because of CQM and PCI, an internal motivation to work towards quality has been triggered and "Everyone has recognized the importance and benefits of the changes today and those to come.". The fact that these changes has been so widely accepted by the employees shows that the organization is positive towards changes as long as they can see the benefits.

It seems that managers have realized that effective management is important when dealing with organizational change. Manager D highlights the importance of direction and purpose of change initiatives by saying: "We first need the reasons behind the changes in order for us to know what we are supposed to do. We need to have a driving force behind us to support and tell us of our progress and how well we follow the standards necessary. We as managers cannot focus solely on quality, we need to prioritize our work, and thus a quality department can assist in the process of adding quality to our work."

Considering this statement it is obvious that change is best embraced if there is a clear purpose as well as directions of how the change should be carried out. According to Gill (2003) change must be well managed, planned, organized, directed and controlled. Clearly this is also the view of some managers. What is clear from the managerial perspective on change is that change is considered to be part of the evolvement of the organization and a constant force in their everyday operations. Regarding whether or not change is considered to be a barrier to the implementation of a QMS we have seen that managers are positive towards change, have a lot of experience of changes, realize the requirements for change and a belief that employees is likely to embrace change. However, most of the managers believe that in order to implement change successfully, it is necessary to have clear directives, purpose, and guidelines.

Even though change might not be considered to be a significant barrier today because of the positive attitudes towards it we still see the risk of it becoming a barrier depending on the size of changes implied with a QMS. For example, it was very few managers who had knowledge and experiences of QMSs such as ISO9001 and therefore they may not realize the magnitude of the changes required.

## **6.2 Quality Management System**

The managers of EDB Card Services present similar views and thoughts on the reasons behind adding a QMS to the daily operations. The purpose this topic was to determine if the managers believed a QMS was needed and the underlying reasons of adding a QMS to the organization.

### **6.2.1 Reasons behind a future QMS & Quality Discussion**

From our interviews we observed a strong positive view of a potential QMS and that a QMS would help EDB Card Services to become certified with quality in the future. Manager A stated that a QMS "will help us with delivering on time to the expected quality

of the customer”. Manager B is under the same impression that gaining a quality certification such as ISO will help EDB Card Services of ”gaining a competitive advantage in our industry, as well as increasing customer satisfaction”. What is a mutual reason for working with a QMS is to “start thinking quality” and becoming more secure with the daily operations and to gain a system which the employees and manager can rely and support their work on. A key element of a QMS is that the daily operations are improved in a “systematic” way (Hoyle, 1994, in Terziovski *et al.*, 1997, p 2), and Manager C states that ” we would benefit from working in systematic ways with proper guidelines, instructions, documents and procedures”. This shows that Manager C highlights the need of a QMS, but first and foremost the need for a system in general to assist him/her with the daily work.

As our theory states, having the wrong reasons for implementing a QMS may burden and overload the managers and employees, and that just conforming to contractual agreements or customer pressure is not desirable reasons. Clearly, our case organization has reasons to improve quality overall, with a strong internal motivation on a management level and a willingness to become more competitive and stronger within their industry. This makes us draw the conclusion that the reasons, based on our theories, are good and highly desirable when striving to implement a QMS. Manager B also stated that it is “a mutual decision to strive for an ISO certification”, and Manager C said that no customer has specifically expressed the requirement of being ISO certified, which proves that their reasons for wanting to work with a QMS is internally driven and motivated.

The managers all share the wish for achieving a quality certification, either an ISO certification or another quality criteria, which shows that there is a mutual understanding of where they are heading and where they want to go. Manager D expresses that it is important to involve everyone from the employee level to the management level, and if only discussing the work towards quality on the upper management level, they will not reap any greater benefits. This statement is in line with the theory on striving for TQM, which is “mutual co-operation of everyone in an organization....to produce value for money products and services....hopefully exceed the needs and expectations of customers” (Dale *et al.*, 2007, p. 30). Manager B also stresses the importance of “we” and that “it is a mutual decision to strive for an ISO certification” and that “we need to work hard on quality improvements and initiatives”. This also shows that there is a strong sense of “us” and that a mutual co-operation is highly desirable when working towards quality.

The fourth barrier to a successful pursuit of quality presented by Beckford highlights the importance of managerial and employee recognition of quality, and that it should pervade the entire organization. Looking at the responses from managers it is clear that everyone recognizes quality as a major concern and a willingness to start focusing on it. Manager F stated “if we do not maintain our high standards we may lose our customers to competitors”. Manager C continues this thought by saying “...everyone is keen on maintaining and improving our quality”. Even though the managers may be motivated and driven of the process of working towards quality, this level of commitment needs to be communicated and adopted by the employees as well. Carlsson & Carlsson expresses the concern of “securing employee commitment” as a minor difficulty or barrier to quality and

working with a QMS, and therefore it is important that managers put a large effort in making employees committed.

Having the potential barriers in mind, it seems like the managers of EDB Card Services are very focused and determined in working more towards quality, and that the barriers of managerial commitment are not of a very big concern for them. What is left to be done however is to convey the management attitudes towards quality to the employees.

### **6.2.2 Resources & Time**

In our theoretical framework we have not covered the aspect of time and resources needed for an implementation of a QMS because we acknowledged that every company is unique and there is no specific time-frame or resources for companies when following the different requirements. However, we did find studies who had examined this and therefore it was evident that we needed to identify if our case organization believed that they had sufficient resources and time to dedicate to a QMS. Equally important was to determine if the respondents felt that time and resources could be potential barriers when starting the work towards quality.

Manager B expresses that the organization is “very willing to spend time on quality assurance” and even though it may imply more time and work, “the time spent on fixing errors and flaws takes even more time and is very costly to us”. Manager C acknowledged that “department managers are often under a lot of pressure in their daily operations...it is difficult for them to start prioritize quality”. Manager C continues by saying “every manager has an interest and motivation in improving quality but often resources are not enough and delegating tasks and responsibilities may sometimes be difficult. Manager E also has the same view on resources needed and stated:

“Today I believe that we do not have enough resources to work towards quality improvement”. (Manager E)

Manager E adds that “...this problem could be solved by hiring another person who can relieve some of the responsibilities from the middle manager”. What is clear is that the managers interviewed believe that everyday businesses must be the main-focus and that additional human resources would assist the overall work towards quality improvements. Manager A expressed the concern of potential problems of a QMS by saying:

“The only problem that I see with a QMS is the certification requirements that needs to be complied with that takes up a lot of resources; there will be an increase in administrative tasks; and the organization often does not recognize the need for these resources. Resources are money and upper management may not always recognize the benefits that can be derived.” (Manager A)

What Manager A is expressing could be considered as a potential barrier, and if the organization is not given the required resources for achieving a quality certification, or for working with a QMS in general, it is likely that the process will be long and costly.

It is obvious that one of EDB Card Services own barrier to quality is in fact time and resources. The managers agree with each other that they have to be concerned with the daily operations and, even if quality is considered highly important to them, they do not see the possibility of spending an equal amount of time on quality. Even though there is a strong will to work towards quality improvement, time and resources seems to be limiting the ability for managers to provide enough dedication to improve quality. Beckford (1998) identified that the managerial and employee recognition of the importance of quality and attitudes towards it can act as a barrier if lacking. Hence, it seems that upper-management has failed to realize the importance of pursuing quality as not enough resources and time has been allocated. Thus it can be argued that no dedication can be given until resources and time is allocated by upper-management. To address this barrier further we asked the respondents how a quality department could work with assuring quality on a daily basis and whether or not they thought extending the responsibilities of their quality department and adding more staff as a solution and tool for addressing this problem the best way.

### **6.2.3 Quality Department**

The purpose of this topic was to determine how managers felt about a quality department, what their role should be and how the department should interact and work throughout the organization. Currently, the quality department within EDB Card Services primarily works alongside the Production department however there is a mutual wish from the interviewed managers that the quality department should be strengthened and more integrated throughout the different departments. We also identified a desire to have a quality council, or a “leading-group” as one manager stated.

Manager A expressed a concern that along with a QMS it is important to have control over the implementation, and for that task a quality department is needed. Manager A explicitly stated that a quality department has to make sure that a QMS is implemented the correct way and that it functions properly as well. The lack of a group of people steering the work towards quality can be explained by the fact that the case organization has not worked specifically with quality issues yet. Of course the managers have all been concerned with quality, and seemingly they have delivered high quality in the past according to the managers interviewed.

Manager A expresses the need for a quality department that works with quality in terms of auditing, controlling quality standards, and prevention the lack of quality. It is also important, to Manager A that the quality department has jurisdiction to intervene in the daily operations if quality is lacking or neglected. According to Manager A, a quality department should be able to focus on quality on an everyday basis, so that departmental managers and upper management can focus on the daily operations and business activities. Thus it is fair to assume that the quality department should ease the workload of quality that is put on departmental and sector managers.

Manager B said that it is important to add and provide the existent quality department with more resources in order for the entire organization to start working towards quality improvements. Like Manager A, Manager B and D believe that a quality department should have the authority to intervene if quality is flawed in business processes. While Manager C

believes that this must be clearly defined before their work can start. In our opinion, it is clear that some managers' wants to be directed by an additional department specifically concerned with quality and we acknowledge that the roles and authorities of the quality department have to be mutually consented. We do not think that the case organization will benefit from strengthening the quality department and defining its role without consulting with the employees and managers. As mutual co-operation is stressed in the work towards quality, it should be evident in this case as well.

What is clear when reviewing the responses from the interviews is that there is a desire from managers that the quality department should have more resources and that they should have a more extensive role within the entire organization. This also seems to be the wishes of upper management, based on the fact that the quality department is under further development.

For EDB Card Services to successfully implement a QMS it is obvious that there is a need of direction by another part than upper management, this may be through the establishment of a strengthened quality department with the right competence and knowledge of quality.

#### **6.2.4 Education & Training**

The purpose of this topic was to determine what thoughts and opinions the managers had on the current training and education within the organization. In order for organization to overcome the barriers inherent to a QMS they are obligated to start educating and training the staff in order to ease and facilitate a successful introduction of the QMS. The employees, managers, and other indispensable assets of organization would have to gain sufficient knowledge and understanding for upcoming QMSs. We also wanted to find out how the training and education could be improved especially if they are going to implement a quality management system.

Manager A stated "in middle management there is a motivation to learn about QMS but little effort has been put on education". As the obliged programs of CQM and PCI, there has only been information regarding those two requirements, and no information on QMS have been distributed. This is due to the fact that no mutual decision of what QMS should be followed in the future, and the focus today is on achieving CQM and PCI certification in order to continue their business operations. Also, a priority today has been to train managers in terms of leadership and not so much learning about a potential QMS. Manager A expressed the need for training employees according to their job descriptions, and stated that a program should be developed so that we can check whether or not they know what is needed to know. If employees are educated and trained according to what is expected and on their shortcomings they will become more confident and motivated to do better.

Manager B has the same view on training and education as Manager A, and stated that: "It is important that every existing employee and every new employee are properly trained when given specific job-tasks and responsibilities. There is a need to develop and maintain a procedure or routine for this and also a schedule for follow-ups and personal development plans" (Manager B). It is clear that there is a need for better developed training plans and procedures in order to ascertain that every employee knows their specific tasks and

activities but also how to execute them. Manager B also mentioned that: “It is also important that each employee is given an introduction to the whole organization, because we have widespread operations with different levels of operations and employees should know what sort of corporation we are” (Manager B). This statement can be connected to the implementation guidelines of a QMS; the fact that employees should have knowledge about the organization and specifically its goals and objectives. Striving for quality within the entire organization needs to be acknowledged by employees and they should know what quality policies and objectives the organization has. Dale *et al.* (2007) stated that employees on all levels need to understand quality and if so, it will generate positive attitudes and behaviors towards a QMS, and resulting in a high employee commitment.

Another important aspect that Manager B highlights is the need for a training plan in which employees are able to check their competence level and knowledge to assess where they need more training in. Manager B also stated that: “If new tasks and responsibilities are introduced, it is important to start training those affected by the changes either through courses and/or seminars. In that sense employees are given the room for personal development and professional achievements” (Manager B). It is clear that Manager B wishes are to establish guidelines and plans for employee growth and promotion, and considering an implementation of a QMS, which affects everyone in the organization; there should be a training plan for it.

What Manager C recognized is that education and training needs to be consistent and not only focused on managers, but employees as well. If the case organization is to adopt a QMS, employees should have a more in-depth training on quality measures. As Manager C states: “Employees have been given an overview of current quality measures and changes but of course it can be improved and increased” (Manager C). Not only does Manager C think that the education and training can be improved, but Manager E and F both believe that there has been a lack of knowledge and information about our processes and procedures, especially when it comes to CQM and PCI. Manager E also states that as we today have started to work more towards quality we will increase the knowledge of the daily operations.

Carlsson & Carlsson stated in their research that one barrier to quality and QMS could be in making the quality system understood and accepted. For this barrier to be avoided or dealt with it is obvious that our case organization has to train and educate both managers and employees better. Even though today’s training and education is not poorly performed, it can be improved and made more systematic. If the employees are to accept the changes implied in a QMS, they need to understand its purpose and goals. A QMS stresses the fact that organizations need to have strict documentations and procedures of the activities and operations but clearly this should be also be acknowledged the training and education procedures. However, Carlsson and Carlsson also found that a barrier may be “too strict and bureaucratic documentation” and obviously there is a thin line between having “strict documentation and “too strict documentation”. Having a standardized documentation procedure when training and educating employees and managers also needs a level of flexibility as new procedures are introduced by customer requirements and new activities. Not allowing for flexibility could also be a future barrier for our case organization when starting the work with a QMS. However, as new processes and activities are introduced, the

framework of training and educating staff would not be subject to change, only added information. The procedure for training staff should be the same regardless of any activities.

In order for EDB Card Services to overcome the barriers of the lack of knowledge and understanding of a quality system, they need to establish a consistent framework and procedures for introducing staff to the system and its goals and objectives. Regardless if you are a new employee or an experienced employee, they should be walked through the same training and education of their job responsibilities and expectations as well as the organizational goals and objectives. By organizational goals and objectives we also mean the policies and goals for quality and more general business performance objectives. Training and education can be considered as a potential barrier for EDB Card Services as the managers believe that it can be improved and more consistent and that it may be flawed in some parts.

### **6.2.5 Structure of Processes & Procedures**

Beckford (1998) presented one of the barriers to a QMS implementation to be the current structures of processes and procedures. The author meant that long established processes and procedures could conflict with the new ones in a QMS, causing the employees to become resistant to the new processes and procedures (Beckford, 1998).

What is evident from the empirical findings is that most managers agree with one another on the fact that there is room for improvement of current processes and procedures. Manager B stated that even though some processes are functioning well, the organization would benefit in integrating processes and procedures in order for them to work as a complete system or framework. Manager E expressed an opinion that stricter processes and procedures, especially concerning checklists and control were needed in order to ascertain that employees know what they are doing regardless of how new the employee is to the process. This was also the opinion of Manager D who also added that a set standard for the processes and procedures would benefit its overall control and performance.

As a QMS implies standardized routines and processes (Brunsson & Jacobsson, 2000, p. 169) the structure and design of how to properly execute and perform in those routines and procedures would improve if EDB Card Services chose to follow it. However, the managers have expressed their concern that current processes and procedures are sometimes altered and not followed-up or communicated to those who performs the processes. Therefore it does not matter whether or not the processes are more structured or standardized, the intention behind them fails if not properly communicated and controlled. Also, Manager E mentioned that most processes and procedures do not allow for much flexibility, meaning that they are already so strict due to requirements put on EDB Card Services from their clients and/or partners such as VISA and MasterCard International. Thus it is fair to assume that introducing more strictness and structure to existing processes will not be very “new” to the organization as they have already very strict requirements.

With a new QMS come new processes and procedures and the existing ones will become stricter and more standardized, and evidently the managers who expressed their opinions

felt their current processes could be improved accordingly. Since the existing processes and procedures are fairly much standardized, however could use better structure, the fact of the matter is that a QMS such as the ISO framework could assist EDB Card Services with this issue. Since Manager E stated that there is no room for much flexibility in current processes, more standardization would make processes and procedures even less flexible (Beckford 1998, p. 21). It is fair to assume that this measure could be harmful in the long-run, as the processes may become more “frozen” (Beckford, 1998, p. 21) but in the short run we cannot see that a QMS would “chock” the existing processes with more standardization. Employees are not very likely to be resistant to newly structured processes and procedures because it seems like they are in need of it, at least according to the managers.

## **6.3 EDB Card Services**

The organizational culture has been identified as a potential barrier that can hinder quality and change (Beckford, 1998; Cachadinha, 2009). It is important to consider how well the organizational culture can deal with the changes that a QMS brings. As explained in the theoretical framework culture is by definition “a set of behavioral and attitudinal norms, to which most or all members of an organization subscribe, either consciously or unconsciously, and which exert a strong influence on the way people resolve problems, make decisions and carry out their everyday task” (Clutterbuck & Crainer, 1990: 195).

### **6.3.1 Internal characteristics**

The organizational culture at EDB Card Services has many characteristics. Most of the managers feel that there is a great sense of belonging, responsibility and team-work among the employees. The workforce is driven and motivated to do a good job. According to Manager E, most of the people working at EDB Card Services “...have a sense of belonging to the organization and are driven in the work they perform.” Also, “...most of them have a sense of responsibility in what they do, but naturally some feel more responsibility than others.” Manager E goes on and states that “...the employees also work on their own initiative...” and can, most of the time, solve problems they encounter on their own.

Having employees who feels that they belong and contribute to the organization is very important as it is more likely that they will be more motivated and excel in what they are doing. Also, being able to take own initiative when solving problems shows that the organization is confident in the competence and abilities of their employees.

According to Manager D “...there is a strong sense of team-work.” and “...it is easy to ask each other for help and feedback. However, Manager B says that team-work can be improved: “The importance of team-work and that we should work in the same way must be stressed. It should be in everyone’s’ interest that we should deliver the same quality, and high quality, through the same procedures.”. Otherwise Manager B feels that “We have a great culture in this company and what we do is very positive overall, but we seen tendencies of people have not having the level of loyalty and work-pride that we wish for.

Employees like to work here but I wish that they would work more for the organization rather than just for themselves.”

According to Manager A there are two types of employees working at EDB Card Services: “I believe that the greater part of the employees that are working here enjoys their work and take a big responsibility in what they are doing. However, there is a tendency of unwillingness by some to accept an increased workload and a jealousy if others receive a greater pay check.”. Manager F shares Manager A’s view but believes that “50% of the employees in my sector work for the company as a whole, and the others work for themselves.”. Manager F continues and states that:

“Thanks to meetings with our Chief Executive the employees are given the vision, mission and direction of EDB Card Services. My goal with my employees is to have a great atmosphere where people enjoy working and that less people are ill and have sick-leaves. This can be achieved by giving more responsibilities and creating an employee ownership of their tasks and this is very important. The employees are always included and involved in changes and suggestions to become better and improve our processes and procedures. In case of errors and flaws we try to solve and fix it as a team. Seemingly there is no problem of delegating responsibilities and tasks to employees.”

Overall the managers are positive to their organizational culture but Manager D points out an issue that is evident at EDB Card Services and should be dealt with:

“There is however a barrier between departments themselves, something that is evident during lunches and breaks, and even though we have a basis of “need-to-know” there are parts of our jobs that we can share without breaching this rule. Integrating and sharing knowledge between departments should be improved. We have had some experience with sharing resources, giving other employees of other departments the opportunity to see how the colleagues work and perform the everyday procedures. It was a pity that we did not stay with this program. Many employees have not seen the other departments, how they produce cards, how they treat customers over the phone, how they oversee frauds and card problems. This would create a better understanding of what the organization actually does.”

Manager B also points out an issue that might cause problems: “We have a culture where we do not think that we should clean up after others or even intervene in our colleagues’ actions. If a colleague is not following the routine given it is easy for others to follow his example, i.e. do the same thing as the colleague does, even if it’s wrong.”.

Concerning the motivation to work with quality and towards a potential QMS, Manager A states that: “My view is that people in this organization are motivated to work towards quality and are starting to see that these certifications can be used as a tool to improve ourselves and the processes and procedures we have. I have the perception that at least the middle managers, are positive towards quality improvement, however I do not have any perception of what the lower level employees believes about working towards quality. But of course I do not believe that they would think about it negatively.”.

Overall it does not seem that the organizational culture will pose a big barrier when implementing a QMS, but there are issues that need to be fixed. Although managers feel that each department and its respective employees are motivated and work as a team there is the issue of departments not cooperating as much as they should. As it is now, employees from different departments know very little about each other and what others do. If this could be fixed, there would be an increased understanding about how the organization in large is working and the departments could learn from each other. Also, if an employee knows what the preceding and following tasks are he/she would have a greater understanding of what has been done and what needs to be done in order for the task to be properly performed.

An increased cooperation between departments would also improve the relationship on an informal level which would benefit social interaction and thus improve the working environment making the employees more comfortable in the organization. Another issue that might cause problems is that there is a tendency to do things your own way and not follow specific routines and procedures put up for a specific task. If employees have problems following the guidelines for processes and procedures there is no guarantee that they will follow new guidelines concerning a QMS. A third issue that needs to be addressed is work motivation. Most of the employees are motivated and work for the organization, but a handful does not. It is vital that everyone feel that they are a part of the organization and want to contribute to the success of it.

### **6.3.2 Communication**

Some of the managers addressed the issue of communication within the case organization, but initially it was not intended to be part of our interview topics. However, as Carlsson and Carlsson addressed “communicating the message” as a potential barrier to quality and QMS, we realized the necessity to address the issue. Communication is one of those topics which occurs in different places throughout our empirical data and also the analysis, as it is fair to assume that we communicate on a daily basis and therefore it is part of the internal environment of any organization, how we delegate responsibilities, how we educate and train others and most importantly, how we convey information to one another.

We believe that without a proper communication between managers and employees the changes implied in a QMS will not be accepted and conformed to as smoothly as possible. As the work towards quality through a QMS implies new policies and procedures it is important that management to the best of their abilities communicates these policies. Manager A stated that if there are new policies they are always communicated to middle management and that it is “common practice that each manager communicates this to his/her employees. Thanks to regular meetings in which policies are discussed and communicated between managers of the entire organization, everyone is involved to facilitate the best understanding possible of the changes to come. Manager A stated that after the meetings the policies are communicated to employees in order to gain their feedback and participation, which is something Manager A thinks is very positive and important. Manager C mentions that the organization have not had specific communication procedure but which has improved today. When it comes to the requirements of PCI and CQM, the requirements have been widely discussed according to Manager C. Also, the

recent development of forming a “leading-group” in which managers of all departments are involved in communicating new policies and measures, have improved the overall communication between departments and business units according to Manager C.

Manager E agrees with Manager C in saying that there has been more development of communicating new policies from management to employees. Manager E also highlights the fact that employees are asked to participate in developing new objectives and values because of the recent merger. This can be seen as a positive trend, Manager E says.

The fact that employees are included in the development of new policies and objectives shows that the barriers of communication in a QMS could be seen as a minor barrier, and not something that may harm the implementation of a potential QMS. Another positive trend presented by Manager E is that the feedback gained from employees today is needed and important. Manager F also experienced positive communication of new policies and felt that both managers and employees have been included in the communication process. Manager D expressed a concern of the organization becoming larger and larger and that accessing and communicating information can be problematic. Specifically, Manager D stated:

“Everyone should have the right information at every time. However, since we are a quite large organization, with our parent corporation in mind, we have problem of accessing the documents needed and databases from which we distribute and communicate the information” (Manager D). It is important to recognize that as the organization grows, so does the amount of information that needs to be easily accessed and communicated to those affected. If the case organization is to start working with a QMS, they need to make sure that the information, regardless where it comes from, can be accessed and purposefully distributed to those who require it.

In terms of communication being a potential barrier for EDB Card Services, it seems like the work with CQM and PCI has steered the organization in the right direction. Having realized the necessity of communicating the requirements and policies of CQM and PCI makes us believe that EDB Card Services are likely to act the same way with the policies and requirements of a QMS's. We cannot eliminate this barrier completely but we can estimate the level of impact it will have on implementing a QMS. Seemingly the importance communication is acknowledged and as managers have seen the benefits of proper communicating policies and changes we are hopeful that it will not act as an obstacle in implementing a QMS. However, the improvement of communication channels and procedures cannot be stressed enough and it seems like management are willing to dedicate time and efforts to it.

### **6.3.3 Departmental barriers**

When we asked the respondents of the organizational culture with EDB Card Services, we soon found that there was a lack of sharing experiences and ideas across the different departments. Some managers expressed that most employees did not know exactly what the other departments did, or how they worked on a daily basis, and even that some employees had not even seen the inside of other departments.

We soon established that when following a mutual quality system and trying to achieve similar if not identical quality goals and quality objectives, consistency and knowledge is key. As it is important to establish a quality culture in the organization we see this problem as something that needs to be addressed. Manager A have identified this barrier and in the interviews expressed this concern by saying:

“We need to change this behavior of “us” vs. “them” because it does not benefit anyone and it only has negative effects. With a QMS it becomes important that the employees have an idea of what other employees are doing and that they have an understanding of the whole organization.” (Manager A).

If the entire organization is to deliver better quality regardless if it has to do with products or services, it is important that the departments also deliver great quality between each other as well. This was also the opinion of Manager A who stated: “The employees need to understand that in order for us to deliver good quality we need to deliver good quality between the departments, internally, just like if we were delivering a high quality product or service to our customer”.

As the theory of TQM suggests a “mutual co-operation” when striving towards quality, it should be mutual between departments and not only mutual between the employees of certain departments. Manager C also stresses the importance of having mutual documentation and templates for employee development and that the organization has realized the benefit of this. Manager C stated in the interview: “Learning what other departments are doing and exchanging information and knowledge would benefit everyone” (Manager C). However, what is unique for this organization is the fact that so many processes and procedures have a high level of security and confidentiality and therefore it is unusual that employees have complete knowledge of what other departments do. Still, we believe that there are some knowledge that can be exchanged that does not imply a breach of security and confidentiality policies. As the different departments carry out work that later moves to the other departments, showing how the departments are connected and inter-dependent will only increase the understanding and improve the culture within the organization. For EDB Card Services to mutually strive towards quality improvements they can learn from other departments in terms of controlling and maintaining the quality requirements specified in a QMS.

### **6.3.4 Information Sharing & Documentation**

The reason why we wanted to ask about how information is shared and documented is because of its importance when pursuing quality. The ability and ambition to share and document information within an organization can be a good indicator to whether or not it has the capability and motivation to pursue quality and whether or not it will be successful when implementing a QMS. If an organization is good at information sharing and documentation, it is more likely that it will cope better with the documentation requirements of a QMS.

According to our respondents, information sharing and documentation at EDB Card Services is made through the use of SharePoint, a mutual web-based meeting-point for employees and managers to share information, news, updates and much more. Most of the managers are satisfied with the system but believes that it can be improved. According to Manager C there is a need to educate and train the employees in working with the system because there is a lack of expertise in the processes of upgrading, changing and procedures. Manager D also believes that both managers and employees needs to be educated in how to use the databases as there is a lack of knowledge in how to handle documents; what they should include and who they should go to. The expressed need for education by Manager C and D is supported by Manager B: "Having a system like SharePoint requires that everyone knows its capabilities and how to use it properly". A system like SharePoint can make sharing and documentation of information easier in an organization, however this requires that everyone knows how to utilize it. If the users of the system are not knowledgeable enough that they know how it works and can see the benefits of it, the system can become a burden.

From the interviews it is evident that the system in place is not utilized properly as there is a lack of knowledge among the managers and employees. Sharing and documentation of information is part of a system. The system is made up by the users, who share and document information between each other. As important it is that the information that enters the system is relevant, it is important that the user can make use of the information. If these users do not know how to utilize the system, the system loses its purpose. Beckford (1998) stated that systems and procedures could inhibit the pursuit of quality. The fact that employees and managers lack knowledge in how to share and document information consequently inhibits the pursuit of quality.

Another issue that can be identified is that it seems to be a lack of proper procedures for information sharing and documentation. According to Manager C there is no mutual process for document-steering, templates etcetera. Manager D states that there are problems with access to documents and databases from which information is distributed and shared and that better coordination is needed for collected and updated information. Manager D also states that there is a lack of purpose of stored documents and information. The problems mentioned above seem trivial but needs to be fixed when pursuing quality. When looking at the ISO 9001 model, one of the key characteristics of successfully adopting a QMS is to share, distribute and communicate information and documents. Without proper routines and processes of handling information and documentation, much of the work with quality assurances and improvements may be lost.

According to Manager C, security has been the priority at EDB Card Services and "...we have come far in terms of security but the quality requirements on documentation and how it is used came almost as a surprise." (Manager C). "The requirement to have proper documentation has not been expressed before by certification agencies but it feels positive to start in that end when beginning to think more about quality." (Manager C).

EDB Card Services must improve their information sharing and documentation. In any organization it is important that information is shared and documented properly. Improving accessibility and availability of information can help employees in their daily tasks and

create a better understanding for the decisions and changes that are being made in the organization. Proper documentation is on one hand a requirement when implementing a QMS, but on the other hand a useful tool to map and guide the activities of the organization. There must also be a clear purpose of what, why and to whom information should be shared and documented. If not, there is no purpose of doing it.

According to Dale *et al.* (2007) and Hallström (2000) the aim of having a quality management system is to create a framework of reference points that ensures that each process within an organization is performed using the same information, methods, skills, and controls and applied in a consistent way. This implies that the organization creates good and extensive documentation regarding each process. According to Manager C, to support the work towards quality it is important that templates are created so that consistent documents can be established and stored in a database for mutual supervision and sharing. By becoming more consistent in the way documents are established and shared, quality will increase which is important for the employees to understand and key when later being audited by certification agencies (Manager C). Manager D adds to the views of Manager C and states that “How we use our templates is very confusing, we can have several different types of templates. We do not have the routines of how to write a manual for a specific system or task, and what template should be used? We can have 10 different templates to one document/routine, how can we choose the right one?” (Manager D). Manager D continues and says that “It seems as if the IT sector has a lack of resources as they do not have the time to help us with this, and we do not have the time to start working with this either. Nor do we have the knowledge required to go into a system and start altering the documents and procedures. If we were better educated we could relieve some of the IT department’s tasks.”

The lack of consistency in the processes and procedures is alarming, and needs to be attended to in order to support the work towards quality. According to Manager E “There has been a lack of knowledge and information about the processes and procedures that we perform” (Manager E). If employees lack knowledge and information about the processes and procedures that are performed, how can quality be achieved? The inconsistency in the processes and procedures that Manager C and D have experienced is most likely caused by the lack of knowledge and information that Manager E pointed out. Manager E believes that “...it will be very good to work towards quality and quality assures those processes and procedures so that we can increase the knowledge of what we are doing. Several improvements that have been done to increase quality have already shown themselves to be beneficial.” (Manager E).

What is positive is that most of the managers are willing and accepting towards educating themselves and the staff to learn about the system and become better at information sharing and documentation. There are also suggestions as such by manager B who states that the purpose of SharePoint could be increased to other activities such as education of employees and training. Manager D suggests that a quality department should be given more resources so that they can coordinate the departments in the work towards quality. Also, “...a quality leader who follows this work can provide feedback of this and help us perform according to the requirements.” (Manager D). It seems that the managers are aware of what problems that exist and how they can be improved but lack time and resources to attend these.

Some of the managers identified that the documented information is not utilized properly. Manager D points out that there are some service level agreements that need to be followed and made statistics of for the benefit of our customers, but very little internal statistics are made for the benefit of the employees to see what has been done, how it was done and what should be improved. Manager B has also realized this and believes that it is important that results achieved by each department are discussed and followed up so that employees and managers can visualize and understand why those results were achieved. By doing so, according to Manager B, the employees are motivated to further improve and achieve better results in the future. As stated before, Beckford (1998) argues that to avoid a potential barrier the importance of quality has to be acknowledged as a concern for the whole organization. Consequently, this is something that EDB Card Services must attend to.

### **6.3.5 Leadership**

Having the right leader at the right place is very important when initiating change such as implementing a QMS. Leaders act as change agents during the process of change and therefore it is important that the organization appoints leaders that are driven and motivated to make sure that not only change is implemented, but also that it is appreciated and embraced by the employees. If appointed leaders are not able to convince and motivate employees to take part in the change process the consequences can be change inertia and resistance. The role of the leader is also necessary to point out so that they focus on what they are supposed to do.

According to manager A there has been a tendency that middle managers are working too little with what is in their job description. The focus has instead been on operations which have, according to manager A, made them overburden and incapable to focus on what they are supposed to do, that is to monitor, instruct, control, check and improve.

If middle managers at EDB Card Services are incapable of doing their job satisfactory today, how will they cope with the increased workload inherent with a future QMS? The ability to lead is one of the most important traits that middle managers have which is necessary to be able to drive the employees forward to improve themselves and the performance of their job. In the pursuit of improved quality, middle managers have to be scrutinized to determine whether or not they are capable to function as leaders and whether or not new leaders need to be appointed.

Manager B realizes the importance of having the right leaders with the right skills in the right department when pursuing quality. Manager B argues “the way you are as a leader plays a big role on whether or not you can deliver what is required”. As Gill (2003, p. 307) argues, lack of effective leadership often result in failure to plan and implement change. As EDB Card Services are currently under change and will most certainly experience change in the future, it is necessary that they have leaders that can plan, organize, direct and control the change process (as pointed out by manager A). Manager B stresses that the issue of having the right leader needs to be addressed to see whether they have the right leaders in place.

According to Manager B, the common practice at EDB Card Services has been to, through an internal process, recruit new leaders. Manager B states that “EDB Card Services has often promoted internal advancement for their employees which can be said to be both good and bad. On the positive side we have come this far using this type of recruitment and promotion which has proven to be successful, however we have learned that external recruitment also have had very positive results on the organization. Adding staff from the outside have proven to result in new aims and new perspectives on our operations.”.

As pointed out by manager B, there are both positive and negative aspects of recruiting internally and externally. The positive side to internal recruitment is that employees feel that they can grow and advance in the organization. However, the negative side is that no new insights are added to the organization and the recruit may lack important leadership skills. The positive side to external recruitment is that the organization can choose the most suitable person for the job, with the right skills and who brings a new perspective on the organization. The negative side to external recruitment could be that the recruit has low knowledge of the organizational culture and it might take a while before he/she is accepted by the employees. What would be most beneficial to the organization is to recruit both internally and externally. By doing so, organizational experience can remain within the company and new, external competence can be brought in.

### **6.3.6 Responsibilities**

The different responsibilities of a work-force are one of the key elements in the organizational structure and with a QMS come increased responsibilities, often regardless of the employee position (Dale, in Dale *et al.*, 2007, pp. 127-128). When introducing a QMS the new responsibilities and roles of the employees must be uniformed with the original roles and responsibilities, otherwise there is a risk of employees rejecting the ownership of the new responsibilities (Dale, in Dale *et al.*, 2007, p. 127). Dale (in Dale *et al.*, 2007) presented this problem to be one of the barriers to a QMS and with the responses from the case organization’s managers we can determine whether or not it pose as a significant barrier for EDB Card Services.

The managers who gave their opinions on this topic were under the agreement that responsibilities are given to those who wants it, and that most employees know what their responsibilities and tasks are, and when in doubt they usually ask someone for guidance. Manager F also added that it is a manager’s responsibility to ascertain that his/her employees are following given responsibilities and tasks. However, Dale in Dale *et al.* (2007) stated that an increased work-load, that is more responsibilities, may cause employees not to put forth their best efforts. This could be a specific barrier for EDB Card Services as Manager B stated that “everyone may not want this responsibility” and therefore it is key for EDB Card Services to determine which employees that are open for new responsibilities and those who are not. Manager B also stated that it is important to provide employee competence development to ensure that employees feel comfortable with newly given tasks and responsibilities. When introducing a quality council they should create “an environment which is conducive to continuous improvement” and under that category falls educating and assisting the staff in improving their skills and competence (Dale *et al.*, 2007, p. 51). Also stipulated in Dale *et al.* (2007) quality council’s roles, is to

facilitate team-work across the organization, which is also something Manager B stresses, that employees should learn from each other and not only from managers.

Another important aspect in line with specified responsibilities for employees is the fact that it needs to be documented. One of the fundamental documents for setting up a QMS is the one stipulating the responsibilities and practices for each department, which of course also covers the employees in those departments (Dale *et al.*, 2007). If the employees of EDB Card Services are given new responsibilities it is key that these are specified in documents in order to support the ongoing work towards quality improvements and requirements. Not to be forgotten is the fact that in the framework of ISO 9001:2000 there is an element called “management responsibility” and covers the required level of management commitment, customer focus and others (Dale *et al.*, 2007). Thus, we cannot solely evaluate the issues with new responsibilities to the employees but also to the managers. It is important that each manager are aware of what is required by them and the fact that they need to take on more responsibilities than the employees. However, what it seems from our interviews is that there is a general concern from management that quality is needed and that the strive towards quality improvements is a wish from managers at EDB Card Services.

### **6.3.7 Goals & Policies**

Goals and policies are important as they convey the path of the organization and what is to be achieved. Making sure that employees and managers understand the aspirations of an organization can help ensure motivation and commitment of them. This part was only discussed with some of the managers since not everyone had an opinion.

Evident from the empirical data is that there are very few goals established by the managers at EDB Card Services. According to Manager E, the goals that we have are established by our customers, they control what we should make, how much and the timeframe. Otherwise there are not that many goals portrayed onto the employees. In relation to quality, there are no clear goals established. Manager A believes that this depends on the fact that there is no system that supports the extraction of information and statistics that are necessary to be able to set up goals.

The argument that there is no system that supports the extraction of information and statistics is not solid. This information can be extracted by managers and employees based on daily reports summarizing for example the performance, problems and solutions that are encountered. Keeping records should be internally motivated and a demand by upper management. If no records are kept, what can be learned and what can be achieved? The implementation guidelines of a QMS entail that employees should have knowledge about the organization and specifically its goals and objectives. As stated earlier in the thesis, striving for quality within the entire organization needs to be acknowledged by employees and they should know what quality policies and objectives the organization has. Dale *et al.* (2007) stated that employees on all levels need to understand quality and if so, it will generate positive attitudes and behaviors towards a QMS, and resulting in a high employee commitment.

Manager A states that it might be hard to establish goals, but believes that it is important that goals are in fact established so that employees can see what they are doing and how they are performing as it would most certainly increase their motivation to do a good job. Manager E also believes that goals established by ourselves could be beneficial. "If employees were to know what was required of them during a period of time it would probably make them more motivated to achieve those requirements." (Manager E). However as it is today, Manager E believes that the efforts to plan, establish, follow up and achieve the goals are too high. "I am afraid that we would create too much work with too many goals that would not be followed up properly." (Manager E).

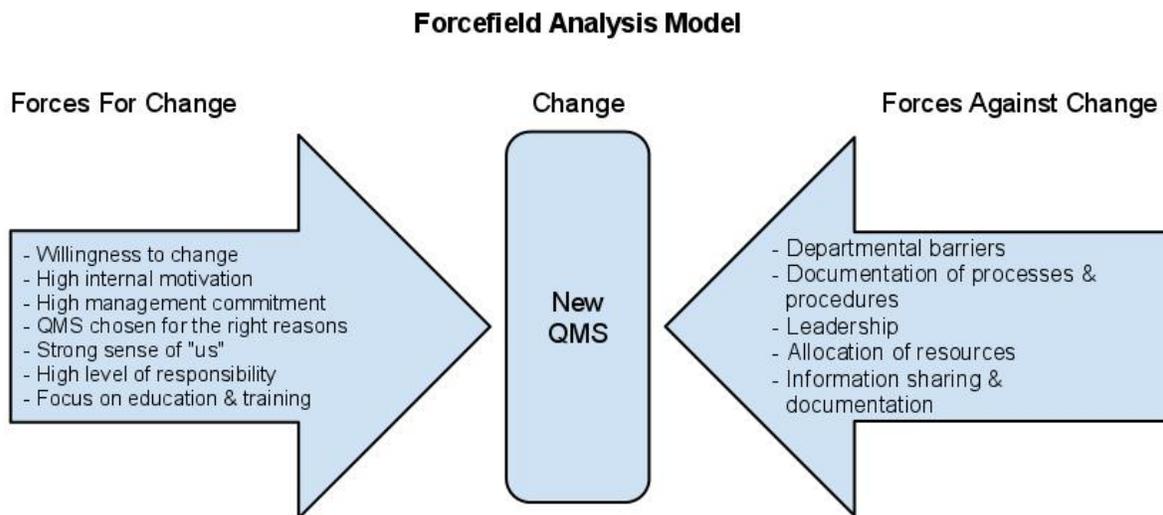
Manager A and E are both convinced that the establishment of goals could be beneficial, but believes that the effort is too great. What is alarming is that there seems to be a lack of motivation among some of the managers. Establishing goals is only one of many tasks that a manager should work with and if it is not managers, who else should do it? A new QMS (when pursued) will demand that the managers work towards achieving goals inherent with the system and that efforts are made to introduce the employees to the system. If managers are not capable of establishing goals today, how will they be able to when it really matters?

# 7 Conclusions & Recommendations

*In chapter seven we will conclude our analysis in line with our purpose and problem statement and show the reader what conclusions we can draw from our case organization in and also provide general recommendations for other organizations and also specific recommendations to our case organization.*

As the purpose of our report is to pre-assess the situation for organizations and how they can prepare to overcome the barriers inherent with the introduction of a QMS, we conclude, with our empirical findings, the likelihood of barriers inhibiting the work towards quality, using the results and analysis from our case organization as the foundation.

Using the forcefield model we can determine which forces will act as drivers for change, i.e. positive influences to the potential quality management system. It will also show the forces which may inhibit the introduction of a quality management system, i.e. the barriers of introducing a quality management system. The EFQM model that shows the enablers for successful implementation of a quality management system, and it can be directly connected with the forces for driving change in the model below.



**Figure 6 - Summary of the Forcefield Analysis**

The model shown above will serve as the foundation of our conclusion and recommendations. We will ascertain the barriers that the case organization needs to address and which forces/factors that will help overcoming the barriers of a future quality management system. We identified that some of the parts and elements of the analysis and empirical findings could be not labeled as forces for or against change, as they are yet to be defined and determined within the organization, such as the quality department, and

policies and goals. These two elements cannot yet be forecasted as factors for or against change/barrier towards QMS, and needs to be considered independently.

In the analysis we found that there is a strong willingness from management to embrace change and a high level of motivation towards quality improvements. From the managers' perspectives change has in the past been accepted and conformed quite easily and therefore we do not see any immediate obstacles with adopting a quality management system. A new quality management system implies a lot of different organizational changes and clearly the managers' interviewed value these changes as necessary and positive to the whole organization. With their strong commitment of driving a quality management system we believe that even though problems may arise in the process of introducing a QMS, the managers are committed to solve any upcoming problems to achieve a successful implementation. In the theoretical chapter it was presented that it was important that managers stayed committed throughout the process of working towards quality. Although we believe that the managers will be committed to the implementation of a QMS, we are concerned that the commitment can be negatively affected, as stated the managers, by too little time for activities. It is important that managers are given both time and resources alongside their daily tasks so that they can focus on working towards quality as well. The signs of strong commitment from management, evident from the interviews, shows that there is an internal motivation to adopt a QMS and not an external requirement put on them by business clients. Their work towards quality started with the requirements put forth by VISA International and MasterCard International, however no ISO, Six Sigma, or other quality certification is a demand from their external macro-environment. The internal motivation to exceed customer expectations and to create quality organization, and ultimately increase their competitiveness, shows that their work towards quality is chosen for the right reasons.

From interviewing the managers at EDB Card Services it seems as if the organizational culture at EDB Card Services is characterized by a strong sense of team-work, informal communication and interaction between employees, and motivated and driven to excel in their daily tasks. However it is also clear from the empirical findings that the "sense of team-work" is not common across departments. Also, the interaction between employees seems to be restricted within the separate departments and not so much across departments.

Managers also saw the need for better routines for educating and training employees and with a new QMS it is necessary to provide this throughout the organization. Training and educating the employees is key when trying to get the QMS accepted and understood throughout the organization. By educating the workforce at EDB Card Services about a future QMS they will be met with less resistance and employees are more likely to embrace the changes and tasks implied.

### **Forces against change / Barriers towards a QMS**

From our analysis we identified forces that will act as inhibitors to change, in other words, barriers towards change, which in this case is the implementation of a quality management system. As stated earlier, change has in the past been fairly accepted and welcomed in the organization, however as in the case of the PCI and CQM requirement put forth by VISA and MasterCard, resources has been reluctantly allocated. As in any organization, resources

are not abundant and proper allocation of available resources is always an issue regardless of organization. It is very important that EDB Card Services allocate the required resources to facilitate the strive for quality and a future QMS. If they are not able or willing to provide the required resources, they will have difficulties of successfully pursuing quality improvements and ultimately a QMS. This issue was identified by some of the managers as a problem not only related to the PCI and CQM certification but to the whole organization. If managers see a need for more resources in certain departments or for certain tasks, it must be possible to allocate such resources. This is considered to be a major concern and if ignored, not much progress can be expected in the pursuit of quality. Time has also been identified as an issue for managers who wish to have more if they are to cope with the changes required. Unless management is given the time necessary to introduce and follow a QMS alongside their daily operations and obligations, one or the other will suffer.

As stated earlier in this chapter, the organizational culture of EDB Card Services suggests that a quality management system will be embraced and accepted by employees and managers. However, as identified by the managers, there are departmental barriers, which need to be attended to. From the analysis we recognized the fact that departments do not share any significant amounts of knowledge of other departments, which we have identified as a problem when introducing a QMS. As sharing knowledge is key in a QMS it is obvious that the organization will have to work with this, and a QMS may be a tool for solving this issue. Not sharing knowledge and expertise may cause quality losses between departments, as they need to collaborate and communicate in a qualitative manner. It is important for the departments to be connected and inter-dependent to be able to mutually strive towards the same quality goals as it is implied in a QMS. Departments should not feel separate from one another but part of something whole, namely EDB Card Services. To ascertain that quality improvements occur there has to be a mutual collaboration regardless of which department employees belong to. The sense of "us vs. them" is not a desired feeling between departments and as stressed by the managers, it has to be dealt with and ultimately eliminated. Also, understanding each other's work regardless of department will improve the culture within EDB Card Services. However, we acknowledge that EDB Card Services have very strict security routines and cannot allow "open-door" policies between departments, but knowledge that can be shared, should be shared. If EDB Card Services wants to be a learning organization, and in the end a quality organization, they need to make sure that departments are learning from each other and develop an understanding of the entire organization.

What we have understood from our interviews and discussed in our analysis, is that communication can be seen as a minor barrier. EDB Card Services has significantly improved their communication thanks to the work with CQM and PCI requirements. If they maintain and continuously improve communication channels, especially between departments, we estimate that this barrier against change can become a force for change and successful implementation of a QMS. What is evident from our analysis is that EDB Card Services have some problems of communicating and distributing information retrieved from the mutual databases. Hence, this is the reason why we consider communication to be a small barrier towards introducing a quality management system. When decided upon a quality management system it is required to have more standardized routines for communication within the organization. Also communication is key in

convincing and motivating the employees in the process of change and will aid the organization to successfully implement a QMS.

A matter that is related somewhat to communication is the sharing and documentation of information. This is something that we consider to be a significant barrier, as it will be closely connected to a new QMS. SharePoint is the system that is used today in which they share news and information and also serves as a database for documentation. Managers believe that there is a lack of expertise and knowledge of how to properly utilize the system. There is no clear framework for templates and documents to be used in specific cases nor does it provide any guidance for where and to whom the information is intended. If the system lacks purpose and directions it may only serve as a storage facility. We feel that this issue needs to be addressed as it in the future, when implementing a QMS, will be required to have proper documentation procedures, purposes and guidance. Inconsistent procedures and lack of purpose and direction will severely hamper the introduction and successful implementation of a QMS. In a quality management system there should be reference points that ensures that each process in the organization is performed using the same information, methods and controls in a systematic way. However, the current system for this purpose is yet to be fulfilled. To do so, employees and management needs to be educated and supported when using such a system to eliminate confusion and inconsistency. However, as stated by some of the managers, the IT support is currently overwhelmed and cannot allocate sufficient amount of time on this task. Regardless of quality initiative EDB Card Services chooses to implement, a proper system for sharing and handling information and documentation is a necessity provided that the users of the system is sufficiently educated and trained.

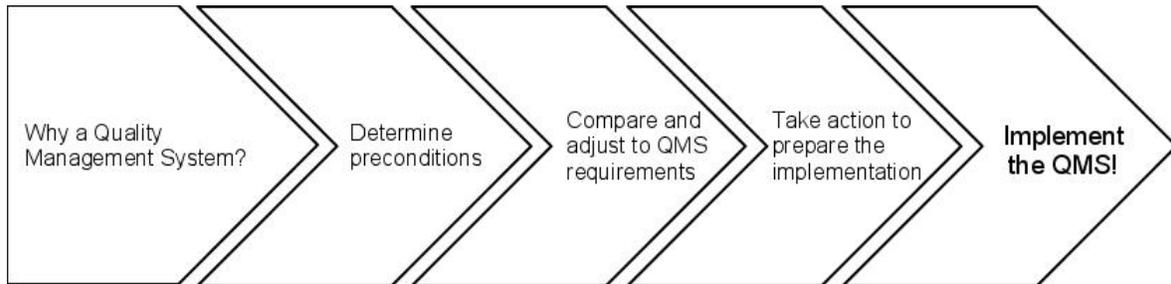
The final barrier, even though it is considered by us to be a minor barrier, is leadership and whether or not they have the right leaders to drive and facilitate the pursuit towards quality. Some managers were concerned about not having the right leaders to drive such a project as a quality management system, which is also something that we found in our theoretical research. Not having the right leaders may harm the progress of quality improvements if they are incapable of motivating, communicating, and distributing responsibilities to his/her employees. This is a concern as a QMS implies increased workload and if some managers cannot “manage” the change processes and procedures, then perhaps they are not suppose to. Since managers are, in essence, the drivers behind change and has a key role in the implementation and maintenance of a QMS, it is of our concern that EDB Card Services has the right leaders for the task. However, currently they are in the process of educating and training managers to become the “right” type of leaders, which is a step in the right direction. There has been a tendency at EDB Card Services to recruit new managers internally, rather than externally which of course is both positive and negative as stated in the analysis. But the question remains if they have the management skills required to be drivers of change, as it is needed to successfully implement a QMS.

### **7.3 Recommendations**

In this section we will provide both general recommendations for organizations that are considering implementing a QMS and recommendations aimed to our case organization.

### 7.3.1 General recommendations

The general recommendations for organizations considering implementing a QMS are based upon the research that we have performed, more specifically on how we have conducted our research on the case organization. These recommendations are given with the assumption that the adopting organization is considering or is about to implement ISO 9001.



**Figure 7 - Illustration of pre-assessment steps for organizations in general**

The main recommendation that we can give to organizations considering implementing a QMS is to make a pre-assessment of their organization. This pre-assessment should determine the capabilities, strength and weaknesses of the organization through internal scrutiny. The pre-assessment should be performed in accordance to the methods that we have used in this thesis. First and foremost the organization needs to consider why the QMS should be implemented. This step is vital as the QMS must be implemented for the right reasons. The organization needs to stipulate the reasons for implementing a QMS along with the intended and desired benefits. It is important to, at this first stage, activate and engage the complete management team and obtain their valuable views and opinions and decide on the purpose, vision and what the desired results are. A simple cost vs. benefit analysis can be made where these are compared to determine whether or not a QMS is worth pursuing. The organization should examine different possible systems and/or programs that are in line with their purpose and vision of the change initiative. When the organization has established that a specific type of QMS is worth pursuing, the next step can be taken. The second step is to determine the preconditions of the organization to determine whether it has the capabilities to adopt a QMS.

The preconditions of the organization are determined through internal scrutiny. The recommendation is to follow the themes that we have used in our interview guide for this thesis. Most of the questions that we have used for this thesis should be used but of course additional or more tailored questions can be included to determine the preconditions of the organization. Preferably an external interviewer should be appointed to conduct the interviews as to avoid bias and glorifying of the organization. The individuals being interviewed should be kept anonymous as to give them the opportunity to speak freely and answer as truthful and honest as they can. The main idea is that strengths and weaknesses should be clearly defined so that “all cards are on the table”. Failing to do so can result in a dishonest and over glorified results that shows a false picture of the organization and what needs to be improved or fixed. At this stage the problem areas and the success areas for the change initiative will be identified, using for example the Forcefield analysis or other types

of risk assessment-, or internal scrutiny tool. Finding the barriers, obstacles, or processes which may jeopardize the implementation has been one of the key aspects throughout this paper and its importance cannot be stressed enough. Also in the second phase when determining the pre-conditions it is necessary to start educating the ones in charge of the change initiative, i.e the managers throughout the organization. It is important that those driving the change know the “in’s” and “out’s” of the change initiative, namely the framework of the program/system, the principals which they will adapt, the fundamental steps, and the nomenclature of the system. Managers are not expected to have all the answers at this stage but in order to determine the pre-conditions they need to know what to look for and how it is connected to the QMS about to be implemented.

When preconditions are determined, a comparison should be made to the requirements of the specific QMS that is to be implemented. This will further determine whether an implementation will go smoothly or if changes are needed to avoid future problems. Furthermore, if the organization is determined to implement ISO 9001, it is our recommendation that the barriers identified in this study regarding ISO 9001 are critically reviewed so to see if these may occur and how they can be overcome or avoided.

By taking these measures, the adopting organization can determine what barriers might occur and how these can be avoided or overcome. The next step is to establish what needs to be done so that the organization is ready and properly prepared to implement the QMS. Also part of this stage is the proper allocation of resources and time to those parts of the organization, which needs it the most. Thinking that the problems identified can be easily solved may cause a serious setback in terms of time and significantly added costs that could be avoided. An example is the problem within our case organization and their departmental barriers, which should be given the time necessary to minimize the barrier. As it is one of their biggest problems, time and effort must be allocated to eliminate this problem.

These steps are vital and possible for any organization to perform in order to determine how the organization can prepare to overcome the barriers when implementing a QMS. However, the barriers are more or less specific regarding the type of QMS and how well the organization fulfills the requirements of the desired QMS. Hence it is hard for this study to determine the specific barriers that will occur for the specific organization and therefore no such recommendation can be given regarding what barriers are likely to occur and how it should be dealt with except for the barriers identified in this study for the case organization that has been studied.

### **7.3.2 Recommendations for EDB Card Services AS**

Our recommendations for EDB Card Services are based upon the theoretical research in combination with our analysis of the organization and the findings from our forcefield analysis. In this chapter we will put forth our ideas for how EDB Card Services can prepare the organization for an introduction of a QMS and how to overcome the barriers inherent to it. This chapter can be seen as an action-plan proposal but it should be noted that it is purely based on the findings and research in this report.

To overcome the barriers inherent to quality, we have some general recommendations based on the barriers in our theoretical findings and specific recommendations based on our empirical findings.

In general EDB Card Services need to start educating and train the ones that are going to be in charge of the introduction of the QMS to the organization. The manager related to quality at EDB Card Services should have the responsibility to make sure that all managers have knowledge of the impending QMS and that they are properly educated and informed of what is expected from them and how they should work with the system. Managers also need to be provided with guidelines and quality policies necessary to understand the elements of the QMS and what is expected from the entire organization. Establishing clear goals of what is to be achieved with the system also needs to be defined. This will help the managers to realize why the system is needed. If managers are convinced about the positive effects that the system can bring then they will be more able to convince their employees. Communication is key when implementing a QMS.

A second recommendation that we can give EDB Card Services is that they should develop and establish a quality steering group or council. Carlsson & Carlsson (1994) recommends that a quality department should not be set up when implementing ISO 9001. However it should be noted, to avoid confusion, that a quality steering group or council is not comparable to a quality department. The notion of a quality steering group or council is similar to the one presented by Dale *et al.* (2007) where the purpose is to achieve cross-functional support and to help ensure the smoothest development and continuity of the program (Dale *et al.*, 2007, p. 51). A quality steering group or council should be independent and make sure that the QMS can be implemented alongside the everyday operations. Trying to implement a QMS alongside the everyday operations can be a time consuming and overwhelming task for managers and it is therefore we recommend EDB Card Services to create a steering group or council that can somewhat relieve the managers of this task. The advantage of having a steering group or council that is independent to the everyday operations is that it can devote full attention to the preparation work and the implementation of a QMS and also the future control and development of it. Another important aspect of the steering group or council is that it needs to be independent to the other departments and have the authority to intervene in work related to quality. By giving the steering group or council the authority to intervene it will become easier to control and make sure that quality is pursued and achieved in the whole organization.

As a more specific recommendation, EDB Card Services need to start looking at their specific barriers to the implementation of a QMS. Throughout this thesis we have argued that it is important that organizations prepare for the implementation of a QMS. We assert that identifying the specific barriers to an organization according to the methods which has been used in this thesis is the way to go. By determining the barriers that are most likely to occur, an organization can, before it is too late, manage and overcome these barriers and effectively be prepared for the implementation of a QMS.

The barriers specific to EDB Card Services that we have identified are:

- Departments (No substantial knowledge and/or information sharing between departments)
- Documentation of processes and procedures (Not sufficient enough)
- Leadership (EDB Card Services needs to consider whether they have the right type of leaders to drive change and the future work towards quality)
- Resources (Can enough resources be allocated to succeed with a future QMS)
- Information sharing and documentation (Not working properly)

What we concluded in the beginning of this chapter is that there is no substantial sharing of knowledge and information between departments at EDB Card Services. We believe that this barrier can be overcome through the introduction of a “Sharing” program. In this program employees from each department can go and work as a trainee in departments which they usually would not work in or have access to. Showing what is done in the other departments and how these are connected gives invaluable knowledge and experience to the employees. After the completion of the program, employees can return with a better understanding of the interrelation between the departments and bring new ideas and experiences to improve their own work and department.

A second barrier that we identified was the lack of proper documentation of processes and procedures. It is our view that the documentation of processes and procedures at EDB Card Services is not sufficient enough. EDB Card Services need to start documenting what they are doing for each and every process and continuously add new items as processes and procedures change. A key document that needs to be established is a training program with step-by-step learning procedures for what every employee should accomplish/be able to perform after a specific period. This could include being introduced to and learned specific computer systems in a week’s time or being introduced to and learned a new phone service in a period of two weeks. Regardless, procedures need to be documented properly and executed accordingly whenever a new employee begins, or a new task/process is introduced.

In our study we found that leadership is very important when introducing and driving change forward. We believe that EDB Card Services needs to assert that managers have the required leadership skills necessary to realize the implementation of a QMS. Managers recruited internally should undergo leadership training if it is recognized necessary by upper-management. If leadership training is not sufficient to acquire desired results, it is our recommendation to consider whether a replacement or an external recruitment should be made. We cannot stress enough the importance of having managers with the right set of leadership skills when implementing a QMS. The ability to successfully implement a QMS is dependent on the motivation and capabilities of the managers involved. Therefore we believe that this is a matter that must be attended to.

The lack of resources has been identified as a potential barrier by the majority of managers interviewed. It was stressed that more resources would be necessary as EDB Card Services initiate the work towards quality. What has become evident from the work with the CQM and PCI requirements by VISA and MasterCard is that EDB Card Services needs to think and act differently which will also be required by a new QMS. It is vital that upper-management recognizes that time, money and staff will be a requirement when

implementing a QMS in order to facilitate the work with it and the continuous pursuit of quality.

The final barrier that we have identified is information sharing and documentation. In order for the QMS policies and routines to permeate and affect the entire organization it is not enough just to share information and documents in a database. The information and documents that are shared must have a purpose and a receiver that can make use of what is shared. If the information that is collected and documented can be shared and directed to other departments and/or individuals it will become more useful and serve a better purpose. The purpose that information sharing and documentation should fulfill is that departments and/or individuals can learn from each other (the mistakes and accomplishments) and mutually correct and alter processes and procedures for the better i.e. what is being done in Production & Personalization could be transferred to Support & Services. Of course there are some restrictions to what information that can be shared due to security issues but this is already regulated.

If EDB Card Services can attend to and manage the abovementioned barriers prior to the implementation of a QMS we are certain that they are sufficiently prepared to implement the QMS, and continuously improve and maintain the QMS.

## **7.4 Future Research**

The aim of this study has been to determine how organizations can prepare themselves to overcome the barriers when implementing a quality management system. We have used a case organization to determine how an organization should prepare for the implementation. The conclusion that we have drawn is that an organization should identify what barriers are likely to occur in order to sufficiently prepare themselves for an implementation of a QMS. This study covers only the preparation stage of the implementation of a QMS and consequently a study in the same case organization should be made to determine how the implementation of the QMS turned out and whether this study provided sufficient preparation for the case organization. If such a study can be made it might give a more conclusive picture of what is needed to avoid or overcome the barriers inherent with a QMS.

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## **Personal Communication**

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# Appendix 1 - Interview Guide

## Interview guide for degree thesis

The aim with these interviews is to gain an understanding of EDB's conditions and capabilities prior to the implementation of a QMS. We also want to identify the managerial expectations of a QMS and specifically the perceived benefits and problems which may arise from following it. Hopefully the answers from each interview will provide us with information that can help EDB to prepare themselves prior to the implementation of a QMS. By knowing beforehand which problems a QMS implementation may face, EDB can take proper measures to promote a successful implementation.

The interview guide consists of a number of themes based on our theoretical framework. The themes that have been chosen for discussion are: reasons behind choosing to implement a QMS, QMSs in general, expectations, previous experiences of organizational change, leadership and roles, and organizational culture.

**Note:** The questions below are merely guidelines to direct the discussion and the respondent should feel free to express his/her thoughts and opinions within the themes of the interview in a descriptive manner. By accepting to be interviewed the respondent approves that the interview is recorded and transcribed. The respondent will be given a copy of the transcribed material for proof reading and scrutiny. Respondents have the opportunity and the right to correct, add and change any misinterpreted answers. **The names of the respondents' will be treated anonymously and the results presented in the study will only show that he/she is working at a managerial level.**

We thank you for your participation!

### General Information

Date and Time:

Location:

Name

Position

Job description

Education

## **Interview Themes & Questions**

### **Reasons behind a QMS**

- Why have EDB chosen to pursue a QMS?
- A collaborate or single decision?
- What is the goal with the QMS? What do you plan to achieve?
- What benefits do you think you'll achieve?
- How was the decision made, by whom?
- Is it a necessity or just a tool for improvement and development?

### **Quality management systems in general**

- Do you have any previous experience of quality systems?
- What do you consider quality to be?
- What do you expect from a QMS in terms of quality/leadership?
- How much time of your everyday work are you willing to spare on assuring the QMS requirements?
- Do you believe external consultants would be a benefit to the implementation?
- Do you see any specific success factors for EDB?
- What would be the best way to educate the organization? And who/whom should educate them?
- Do you see any risks with a QMS?
- Do you see any problems with current processes/procedures being integrated with a QMS?

### **Expectations for a successful implementation**

- Do you believe that EDB has the resources and capabilities for implementing a QMS?
- Do you think the implementation will hinder or compliment the everyday operations?
- How would you describe EDB's need for flexibility towards customer requirements?
- Do you see any specific problems that may occur during the implementation process?

### **Historical changes**

- What are your previous experiences of organizational changes?
- Any problems/barriers occurred with regard to previous organizational changes?
- Was it a forced change or a mutual decision for improvement?
- How was the time allocated? What was the deadline, did you meet it?
- How did it work with normal operations? Hinder or enabler?
- How were the changes accepted by the organization? (departments, managers, employees)

### **Leadership/Roles/Responsibilities**

- Are you, as a manager, willing to embrace a QMS and continuously work with it?
- Do you expect to have more or less responsibilities?
- Is a quality department needed and should they take the lead in implementing a QMS?

### **Organizational culture**

- How would you describe your organizational culture?
- How does the decision making process look like?
- How is the communication between managers-employees and vice versa

# Appendix 2 - E-mail Correspondence

28<sup>th</sup> February 2010

- E-mail concerning the company background of EDB Card Services, attachments not included

## **Title: Historien om TAG/EDB (with additional attachements)**

Hei

Jeg sender noe bakgrunnsinformasjon. Dere ser hva dere kan bruke og hva dere eventuelt trenger mer av.

Fra gründerbedrift til industribedrift

Selskapet TAG Systems ble stiftet februar 1991 av gründer Ståle Lønnum og tre ansatte. Selskapet var eid av ansatte frem til at EDB Business Partner kjøpte selskapet i januar 2006, den gang 100 ansatte. Navnebyttet skjedde i mars 2010. Da endret datterselskapet navn til EDB Card Services AS.

Navnet TAG Systems AS kommer av TAG, som betyr merkelapp. Gründeren fikk forretningsideen på en flyplass, på en av sine mange reiser. Han så behov for et system for sikkerhetsmerking av bagasje. Ideèn ble imidlertid ikke realisert.

I forkant av stiftelsen fikk prosjektet tildelt økonomiske midler fra NT-programmet, Nyskappings- og Teknologiprogrammet i Nord-Norge som skal bidra til økt nyskaping i eksisterende og nye teknologibedrifter i Nord-Norge. Arbeidsmarkedskurs i tilknytning til tjenesten StopService ble holdt. StopService er en tjeneste hvor kundene registrerer sine kort, konti og andre eiendeler i en database. Ved tap av en eller flere av disse eiendelene ringer kunden ETT telefonnummer og StopService sperrer kort og konti og hjelper kunden med administrasjon og veiledning i forbindelse med tapet.

I dag består EDB Card Services av tre forretningsenheter:  
Service & Support - Telefontjenester siden 1991  
Card Personalisation - Bankkort personalisering siden 1993  
Fraud Prevention - Transaksjonsovervåkning side 1997

Selskapet omsatte for ca kr 238 mill i 2010, 159 ansatte.

Vennlig hilsen

Björg Rodahl Kristensen

14<sup>th</sup> April 2010

- E-mail concerning the date of interviews and making appointments for these.

**Title: Intervjuer för Examensarbete**

Hej allihopa!

Vi har kommit så pass långt i vårt arbete att det börjar bli dags för intervjuer med avdelningsledare och chefer. Vi hade tänkt att komma upp till Mo tisdagen den 26 april för att göra intervjuer under dagen samt under onsdagen den 27 april. Vi undrar nu hur många av er som är tillgängliga för en intervju på 1-1,5 timme under dessa 2 dagar?

De vi vill prata med är avdelningsledarna för varje avdelning, dvs Card Personalisation, Service & Support, och Fraud Prevention. Vi kan även prata med säkerhetsansvarig, kvalitetsledare och andra som känner sig mest berörda av ett kvalitetssystem. Vi hoppas att vi kan intervjuar alla som var med på vårt möte på Mo och de som inte kunde närvara men som skulle ha varit där.

Så frågan till alla är, vilka tider passar det under 25-26 april att ställa upp för en intervju? Ifall dessa datum inte passar så kan vi alltid utföra en telefonintervju med de personer som önskar det.

Vi kommer att skicka ut intervjumallen till er i mitten på nästa vecka så ni vet upplägget på intervjuerna.

Tacksam för snabbt svar så vi kan planera vårt besök.

Med vänliga hälsningar

Marcus och David

20<sup>th</sup> April 2010

- E-mail preceding the scheduled interviews to all managers selected to participate.

**Title: Preliminär Intervjumall**

Hej allesammans!

Som ni säkert redan vet kommer jag och Marcus upp på besök mellan den 26-27 april för att genomföra intervjuer med er. I detta mail har jag bifogat en preliminär mall som vi kommer att följa när vi genomför intervjuerna. Vi ber er att kolla igenom denna mall så att ni har en aning om de frågor vi kommer att ställa samt att ni kan så smått förbereda er inför intervjun.

Vi önskar er alla en trevlig påsk och ser framemot att träffa er alla i Mo i Rana!

Mvh

David Sandström & Marcus Svanberg